



**RECOMMENDATION FOR CONSIDERATION**

Board Meeting Date: December 10, 2014

Subject: EMS Educational System Recommendations Package

VTR#: 1214-03      Committee/Task Force: EMS Education Task Force

Recommended Goal

Recommended Policy Change

Other:

**Recommendation:**

**The Department of Health should further develop the recommendations contained in the attached document as a means to expand upon the strengths of the EMS Educational System to better meet the changing needs of the providers and the EMS System.**

**Rationale [Background]:**

Please see the individual recommendations contained in the attached document for rationale and implementation considerations.

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

**Board Meeting Comments/Concerns:**

No concerns were expressed that related directly to the recommendations presented in this package. However, a general concern was raised over the increasing tuition of Paramedic programs. This package did not address paramedic programs. Education Task Force Chairperson Anthony Deaven noted additional Education Task Force meetings would be held to address issues not covered in this recommendation.

Signed: \_\_\_\_\_  
President

Date \_\_\_\_\_

For PEHSC Use Only – PA Department of Health Response

Accept: \_\_\_\_\_

Table: \_\_\_\_\_

Modify: \_\_\_\_\_

Reject: \_\_\_\_\_

Comments:

Date of Department Response: \_\_\_\_\_

# Pennsylvania Emergency Health Services Council

## Review of the Commonwealth's EMS Education System

December 10, 2014

## The Project

The Pennsylvania Emergency Health Services Council (PEHSC), at the request of the Pennsylvania Department of Health, Bureau of EMS, completed a comprehensive review of the Commonwealth's Emergency Medical Services (EMS) Education System. The Bureau of EMS project request is included with this document as Attachment A.

### Objectives as Outlined by the Bureau of EMS

- Involve a broad range of stakeholders, especially from the rural areas.
- Identify strengths of the existing EMS educational system developing solutions based on system strengths.
- Identify areas of concern and provide at least two possible solutions.
- Identify fiscal impact and potential funding opportunities when possible for all solutions.

### Committee

Twenty-one PEHSC members, representing all areas of the Commonwealth and the education system, were selected based on personal initiative and expertise to provide a comprehensive view of the Commonwealth's EMS educational system.

The task force:

#### Co-Chairs

Robert Shank, EdD, ATC, EMT-B, EMS Instructor  
Anthony Deaven, EMT-P, EMS Instructor

The PEHSC project lead: Travis Woodyard; EMS System Specialist.

The Bureau of EMS representative: John Englert.

Ad hoc committee members: Janette Swade, PEHSC Executive Director and Dave Jones, PEHSC President.

The committee member list is included with this document as Attachment B.

The EMS Education Task Force has worked diligently since May 5, 2014 on the request received from the Bureau of EMS. The task force met regularly in compliance with the deadlines set forth by the Bureau of EMS. In addition to many hours of independent work by the members of the group, the task force met for eight conference calls and two live meetings.. The task force developed the recommendations by first identifying and highlighting the strengths of the Commonwealth's EMS Educational System. The task force then identified areas of concern in the EMS Educational System that are not meeting all of the needs of the providers across the Commonwealth. Draft recommendations were submitted to Director Gibbons prior to the September 30, 2014 deadline. The draft recommendations were accepted, without feedback.

## **Strengths of the System**

The EMS Educational System in the Commonwealth is a robust system, certifying over 3,000 new providers each year and providing continuing education to more than 60,000 providers. The System is comprised of:

- The Bureau of EMS
- 14 Regional Councils
- 72 Educational Institutes
- 1,098 Continuing Education Sponsors

The system could not function without the dedicated individuals who work each day to educate our providers to continually improve the delivery of EMS in the Commonwealth.

The task force identified the following as strengths of the current EMS educational system.

- Web based continuing education – The growth of web based education continues to provide quality and easily accessible education to Commonwealth EMS providers (i.e., PA-Prepared, EMSC webinars).
- Continuing education credit tracking – The Continuing Education Record / EMS Registry System provides tracking for the continuing education status of all Commonwealth EMS providers and is a direct benefit to providers.
- Trauma systems – The involvement of the Commonwealth's trauma system and the Pennsylvania Trauma Systems Foundation provide cutting edge information on pre-hospital trauma care reducing morbidity and mortality.
- Medical centers and medical colleges – Continuing education courses run by medical center and medical college professionals provide state of the art practices ensuring excellence in pre-hospital care, e.g., UPMC, HMC, RHMC.

- Quality training programs – Continuing education courses in the Commonwealth provide accurate and relevant education and training resulting in excellent pre-hospital care across the Commonwealth.
- Quality instructors – EMS instructors in the Commonwealth are educated, knowledgeable, and dedicated to ensuring the highest possible quality of pre-hospital EMS education.
- Testing throughout the Commonwealth – The ability for entry level and existing EMS providers to access a test site throughout the Commonwealth provides support to individuals and the system.
- Continuing Education -- Strong EMS clinical skill education and training is provided frequently by a large number of varied training institutes and continuing education sponsors.

## Areas for Improvement

The task force focused on the following areas of concern: Availability and cost of certification programs, continuing education, and testing.

Within each of the areas of concern, the task force identified areas for improvement and solutions that the department can implement to continue advancing the EMS Educational System. The task force offers the following recommendations as to how the system can expand upon its strengths to build a better educational system for all of our providers. The recommendations are not fully developed solutions, but are intended as blueprints that can be expanded upon to meet the current and future needs of the system. Many of the recommendations work in conjunction with and enhance the other recommendations, but each is designed so that it can be implemented as a standalone recommendation.

### Recommendations

- Availability and cost of certification programs
  - Training Site Identification – Pages 5- 6
  - Leveraging Technology to Provide Initial Certification Classes – Pages 7-8
  - Training Equipment Caches – Page 9
- Continuing education
  - Searchable Continuing Education Calendar – Page 10
  - Core Content - Page 11
  - “Just in Time” Training Exemption Process – Page 12
- Testing
  - Cognitive Testing Sites - Page 13
  - Psychomotor Exam Calendar - Page 14

## Training Site Identification

**Recommendation:** *The Department, with the assistance of the regional councils, should identify a suitable training site in each county to encourage educational institutes to offer initial certification courses.*

**Rationale/Background:** 37 counties in the Commonwealth do not have an EMS training institute nor is one available within a reasonable driving distance. The lack of training institutes in the rural areas of the Commonwealth results in unserved and underserved areas. It is the belief of the task force, that if a suitable training site (i.e., schools, hospital classrooms, etc.) is identified in these counties, it may encourage educational institutes to offer classes in previously unserved or underserved areas.

There is a balance between offering EMS education programs within a reasonable travel distance and assuring the courses are conducted in an environment conducive to learning and providing a quality curriculum. Courses are sometimes delivered in settings not designed as a classroom (fire houses, community centers, conference rooms). These settings may not be conducive as learning environments, nor be suitable for delivering the curriculum adequately. Collaborative partnerships between all stakeholders is important to assure an appropriate balance of efficiency, quality, and convenience in identifying suitable training sites and offering EMS education programs. These stakeholders may include: fire departments, ambulance services, educational institutes, regional councils, and governmental or non-governmental entities. These sites would ideally assure appropriate seating for lecture presentation, adequate space for practical hands-on activities, and instructional technology capable of supporting both face-to-face and distance/distributive education. By establishing locations with educational technology capabilities and additional distance/distributive education capability, more convenient solutions may be explored and implemented.

**Implementation Considerations:** There currently is no standard to define a suitable training site. A guideline defining criteria for a suitable training site needs to be developed. As a first step, the PEHSC Education Task force offers their assistance in establishing training site guidelines.

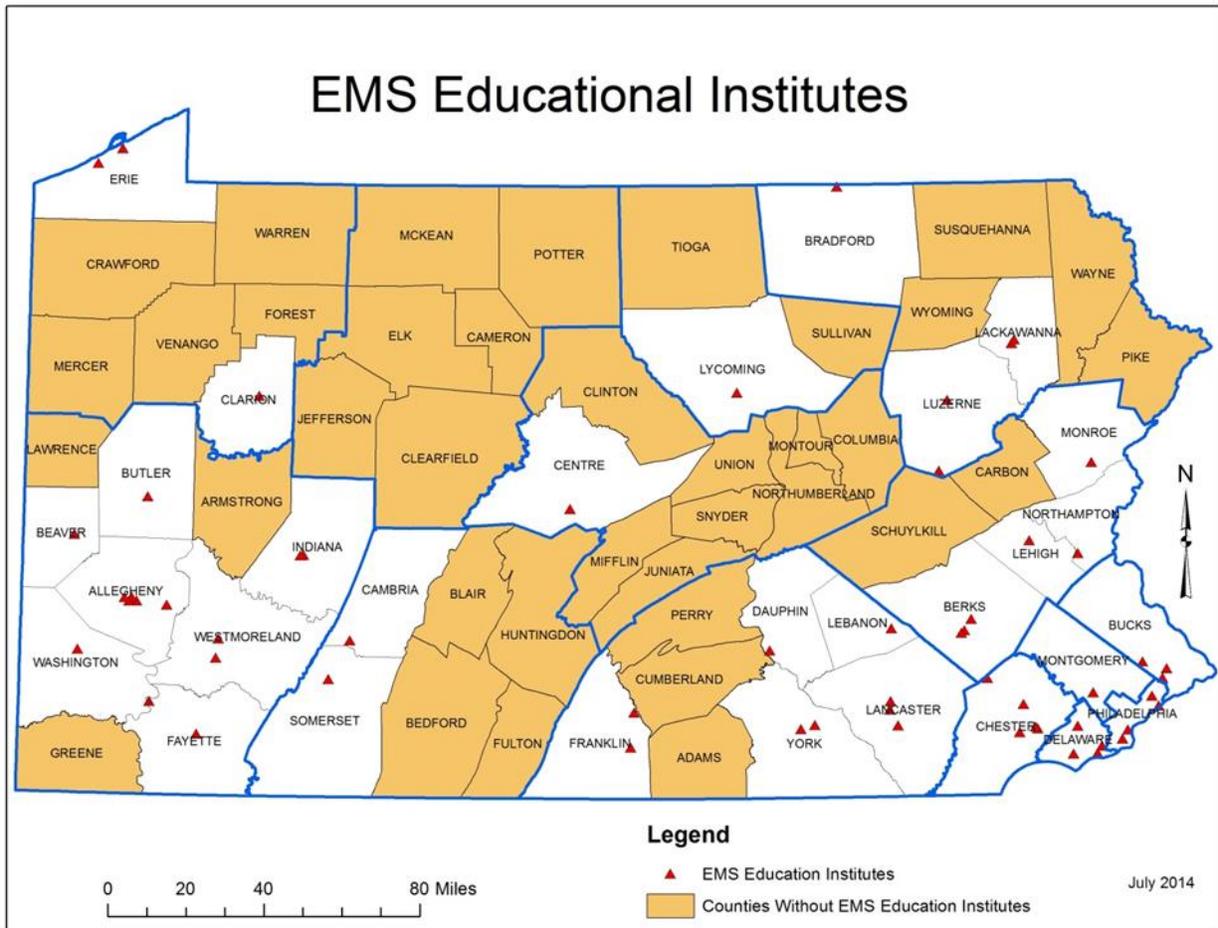
Additionally, a needs assessment of current training sites, educational equipment availability, inventory, and instructional technology capabilities should be completed. Resultant needs and determination of a location of a countywide training site could be constructed into a formal proposal for funding.

There will be a fiscal impact in regards to regional council staff time in conducting stakeholder meetings and working with organizations in the community to identify suitable training sites. In addition, there may be fees associated with the use of community resources as a training site.

Collaborative efforts to identify funding sources and resource-sharing at the state, county, and/or municipal levels should be explored to support a training site suitable for EMS education

within each county. These county-wide training locations could garner support of county and municipal governments in a regionalized approach, rather than at the local level exclusively.

Potential funding avenues may include countywide impact fees from counties with the Marcellus Gas Industry, solicitation of county commissioner financial support, or regionalized emergency services education funding. The Senate Veterans Affairs Committee’s work on emergency services education may serve as a platform to identify funding support for a multi-disciplinary regionalized public safety training center. An overlap already exists in the curriculum of Fire and EMS, programming including Hazardous Materials, Emergency Vehicle Driver Training, Incident Command Systems (ICS)/National Incident Management System (NIMS), and a number of rescue courses. Identifying a regional site may also alleviate fiscal concerns by consolidating training equipment and learning resources to be singular, avoiding duplication of costs and separate funding allocations for similar resources. Government-owned or operated property may be identified, made available, and/or repurposed for an emergency services training site (National Guard, PASSHE universities, PDE Intermediate Units).



## Leveraging Technology to Provide Initial Certification Classes

**Recommendation:** *The Department should develop a plan to facilitate the leveraging of technology by EMS Educational Institutes to offer distance learning options for initial certification classes*

**Rationale/Background:** Rural areas of the Commonwealth have limited access to EMS educational institutes. The attached map of the EMS educational institutes shows that more than half of the counties (37) in the Commonwealth do not have an EMS educational institute. This limited access greatly affects the ability of volunteer EMS agencies in rural areas to recruit and train would be volunteers. It is somewhat unreasonable to expect a person who may be working a full-time day job to drive an hour or more to the nearest class offering. Many classes are offered in the evenings from 6 p.m. to 10 p.m., and this time schedule would result in a student most likely having to leave directly from work to go to class and then not return home until after 11 p.m.

Leveraging technology for initial certification classes would allow education institutes to offer classes to students that live in areas that may not have enough participation to justify a traditional class. In addition to providing more convenient class options, leveraging technology in this manner would allow for a higher student to instructor ratio for lectures and reduce program expenses, and result in potentially reducing the cost to the student.

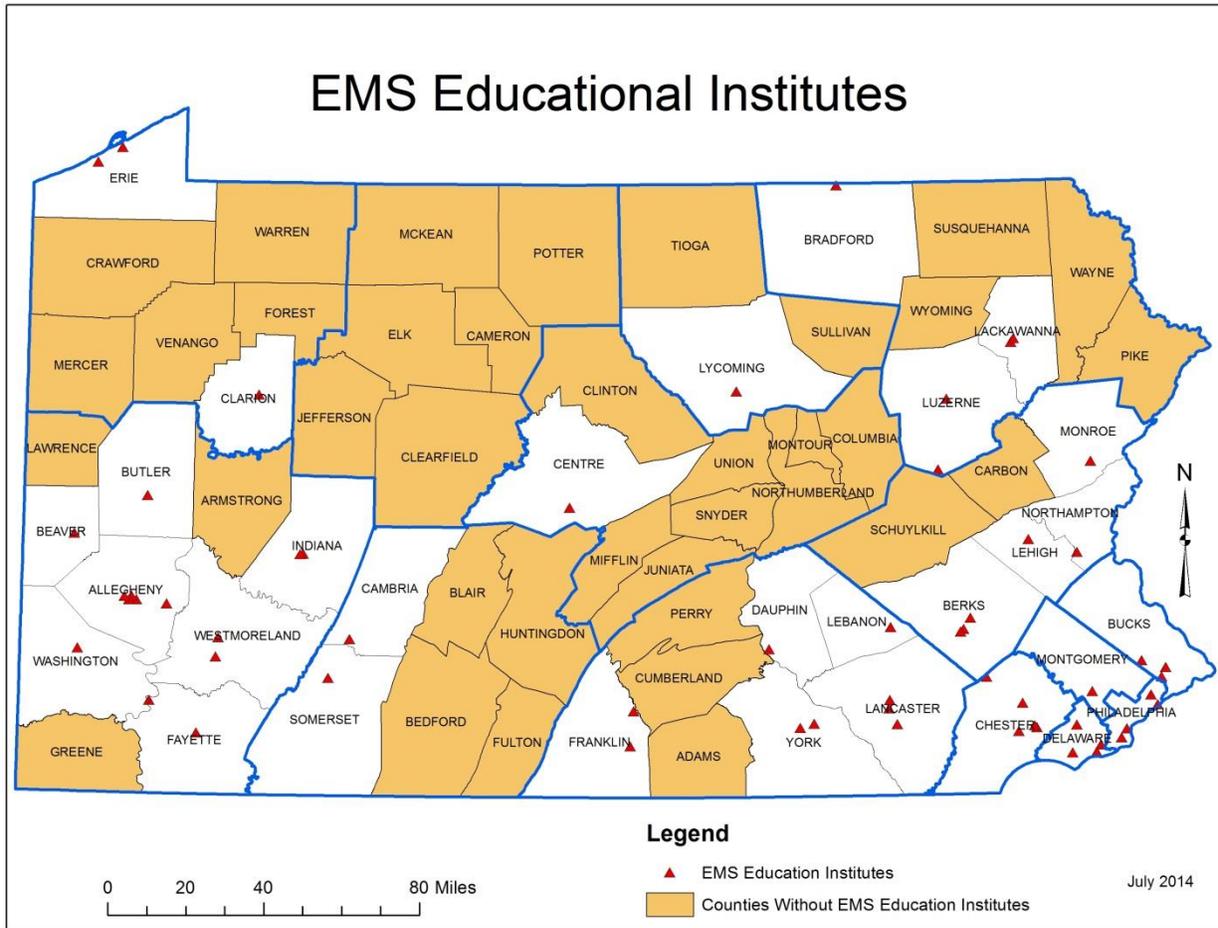
Course management systems (CMS) and learning management systems (LMS) such as *Blackboard, Centrelearn, or Desire2Learn* could be used to bring synchronous online education without geographic travel constraints. Distance learning has been gaining increasing popularity in institutes of higher learning. Babson Survey Research Group conducted a series of surveys polling more than 2,500 colleges and universities. The study reports that the number of higher education students enrolled in at least one online course has exponentially increased in the last decade. Over 7.1 million students were taking at least one online course during the fall 2012 term, which is an increase of 411,000 students over the previous year. (<http://www.babson.edu>)

**Implementation Considerations:** It is without a doubt that technology utilization is a budgetary constraint for many educational institutions. The Department's role may be as simple as becoming an intermediary between educational institutes to facilitate the sharing of technology and expenses, or the Department may find it is most beneficial to the rural areas of the Commonwealth to invest capital funds in a statewide distributive learning software program.

Hardware requirements (laptops, speakers/headphones, microphones, and webcams) and software requirements (LMS/CMS) are often the paradox among educational institutions; these range from low-cost solutions with limited functionality to expensive highly functional solutions. A resource availability survey should be completed to look at the current capabilities of educational institutions. Exploring or accommodating for access to adequate technology for

students, identifying the financial impacts to students, and educational institutions must be included in the initial feasibility analysis.

In addition, due to the nature of EMS education and psychomotor skills, it is not feasible to offer a 100% online program. This recommendation would work well in conjunction with the Training Equipment Caches and the Training Site Identification recommendations.



## Training Equipment Caches

**Recommendation:** *The Department should establish mobile equipment caches in rural areas of the Commonwealth for use by education institutes to encourage the offering of certification classes in underserved areas. The equipment caches will contain the required training site equipment for EMR and EMT certification classes.*

**Rationale/Background:** Certification classes are becoming increasingly difficult to find in rural areas of the Commonwealth. One challenge to offering certification classes in rural areas is the training site equipment requirement. Educational institutes struggle to maintain cost effectiveness with the current training site equipment requirements. The Bureau of EMS requires the current training site equipment list to ensure students have adequate resources to practice skills and develop competency. These needs can be balanced by establishing mobile equipment caches in rural areas.

Establishing a mobile cache of equipment would provide multiple educational institutes with access to the required equipment in a cost effective manner. The Bureau of EMS would be fulfilling their responsibility to new students by ensuring adequate access to equipment allowing them to develop the required skills and competencies needed to enter into the Commonwealths EMS system. The mobile equipment cache would also be available for other EMS educational programs as well.

Mobile equipment caches would reduce the fiscal constraints of educational institutes allowing smaller classes to be conducted in rural areas more cost effectively. Improving the fiscal ability of courses to be offered in rural areas facilitates increased offerings of initial certification courses. EMR's and EMT's are the backbone of the Commonwealths EMS system, and enhancing the accessibility to these initial certification classes will improve the EMS system across the Commonwealth.

**Implementation Considerations:** This seemingly simple recommendation is complex to implement. If the Department sees value and merit in this recommendation, the PEHSC EMS Education Task Force offers to work with the Department and regional councils to develop the recommendation into a workable solution.

Equipment caches should be limited to educational institutes servicing areas identified by the Bureau of EMS as being deficient in certification classes. Equipment would be stored and maintained by regional EMS councils or a regional council partner and available on a first come, first serve basis. Educational institutes would be responsible for arranging for the checking out and checking in of the equipment used. The task force recognizes there is a cost associated with this recommendation. Initial fiscal concerns can be reduced by using equipment currently owned by regional councils. A nominal rental fee could be established to cover the cost of equipment maintenance and replacement.

## Searchable Continuing Education Calendar

**Recommendation:** *The Department should support and maintain a central repository with a searchable calendar of continuing education offerings across the Commonwealth to better meet the needs of providers.*

**Rationale/Background:** The rules and regulations established for Act 37 of 2009 set minimum requirements for continuing education for each certification level in the Commonwealth's EMS System. While the continuing education requirement is not new to providers, the process to recertify once a certification has lapsed has become much more arduous, making it significantly more important that a provider obtain the continuing education required to recertify. An easily searchable calendar of continuing education offerings would make it easier for providers to maintain their certification. The hours required at each certification level are:

EMSVO – 3 hours triennially  
EMR - 16 hours triennially  
(12 in clinical care)

EMT - 24 hours triennially  
(18 in clinical care)  
Paramedic, PHRN, PHPE, PHP  
- 36 hours biennially  
(27 in clinical care)

Providers are responsible for ensuring that they meet the continuing education requirements during their certification cycle in order to recertify. In some areas of the Commonwealth continuing education classes can be difficult to find, particularly in rural areas. In addition, as core content requirements are defined per the rules and regulations, it will become ever more important that providers have ready access to an easily searchable calendar of classes offered to meet their continuing education requirements.

The task force is aware of the current application for searching continuing education class offerings; however, it is the belief of the group that this application is not adequately meeting the needs of the provider. The application is located in a section of the EMS Portal not routinely accessed by providers. It is located under the heading, "Class & Course Applications." Not only is the current application in an obscure area of the portal, the search capabilities are also limited. The application will allow a provider to search by county or region; however, they cannot search by proximity to their location. There is the ability to search by course title, but the application does not have the ability to search by subject or content area, if the provider is in need of a specific topic.

**Implementation Considerations:** The task force recognizes that there is a financial impact regarding Bureau of I.T. staff time. It is the assumption of the task force that the current class search application could be modified to better meet the needs of the providers thus reducing the overall financial expenses incurred. The PEHSC EMS Education Task Force offers their assistance in identifying the functionalities that would be necessary to meet the needs of providers across the Commonwealth as a first step in the process.

## Core Content

**Recommendation:** *The Department should adopt the continuing education core content topic descriptions used by the National Registry to standardize the core content as mentioned in the rules and regulations.*

**Rationale/Background:** The rules and regulations effective as of April 10, 2014 make mention of core content,

*§ 1023.31. Continuing education requirements*

*"...credits shall be in clinical patient care and other core continuing education courses as specified in a notice the Department publishes in the Pennsylvania Bulletin."*

The core continuing education courses have not yet been identified by the Department. This provides the Department with the opportunity to align Pennsylvania nomenclature in regards to core content with the National Registry. When the Commonwealth adopted National Registry examinations for all levels, it greatly increased the number of providers who are, or will become Nationally Registered. Therefore, the Department should exercise its authority and ability to further align with this national certification organization. The current use of classifications as "Med/Trauma" and "Other" make it difficult for those wishing to recertify their National Registry to match the state approved classes with those required by the National Registry.

In addition, as the Commonwealth's EMS Education System continues to improve and mature, aligning with the National Registry nomenclature will allow the Department to take advantage of the research and data collection by the National Registry in establishing minimum continuing education requirements.

**Implementation Considerations:** It is the task forces' understanding that the Department is currently working on an upgrade to the EMS Registry System; as the system is updated, core content categories should be added to align with the National Registry continuing education categories:

- Airway, Breathing and Cardiology
- Medical Emergencies
- Trauma
- Obstetrics and Pediatrics
- Operational

While it is possible that there may be a fiscal impact with this recommendation, the task force is unable to identify any specific costs that would not already be incurred as the registry system is updated and core content is defined.

## **“Just in Time” Training Exemption Process**

**Recommendation:** *The Department should develop an exemption process to reduce the 30 day advance registration requirement for continuing education classes to 10 days to accommodate “Just in Time” training needs.*

**Rationale/Background:** The rules and regulations in effect for Act 37 of 2009 set the following requirements for the registration of continuing education class:

*§ 1025.22. (b) Registration of course. A continuing education sponsor may not offer, for continuing education credit, a course for which it or another continuing education sponsor has received approval to offer as a continuing education course without registering with the Department the location of the class through which it intends to offer that course for continuing education credit at least 30 days before the class is held.*

Prior to Act 37 of 2009, there was no mention of “class registration,” this provided sponsors of continuing education with a greater amount of flexibility in planning and offering continuing education classes. There are two major areas where this 30 day requirement is much less practical when it comes to providing quality continuing education to the EMS providers in Pennsylvania.

1. When continuing education is offered to providers as a part of an ongoing Quality Assurance process, and
2. When current events require that continuing education be made immediately available for the purpose of assuring the safety of the patient and/or provider population (i.e., the current Ebola situation).

Education for either of these situations serves to enhance the experiential and/or skill level of the provider. There are times when providing education in a more expedient manner is beneficial to the safety of the public being served by providers of Emergency Medical Services.

With electronic submission and approval, the task force feels that an exemption process allowing a 10 day advance notice for “Just in Time” training is feasible, and would not create an undue burden on regional council staff.

**Implementation Considerations:** The PEHSC EMS Education Task Force offers their assistance in identifying the scope and limitations of an exemption process that would be necessary to meet the needs of the continuing education sponsors and regional council. The exemption process would also need to identify the consequences of abusing the exemption process. The task force acknowledges there may be a potential for a nominal fiscal impact in regards to staff time in processing class registrations on short notice, but the task force feels this is unlikely to be significant.

## Cognitive Testing Sites

**Recommendation:** *The Department should develop partnerships to expand the availability of Pearson Vue testing sites across the Commonwealth, especially in rural areas.*

**Rationale/Background:** Limited availability of cognitive test sites creates long waiting periods. The greater the length of the time between completion of the course and taking the exam reduces the student's ability to recall critical information resulting in lower overall test scores and impacting the student's success.

Test scores affected by long waiting times have the potential to negatively impact the EMS system because there are fewer certified providers available in the system. Additionally, the Commonwealth's overall performance on the cognitive exam may result in misleading data about the EMS educational system.

The NREMT contracts exclusively with Pearson Vue to administer the cognitive exam, as such cognitive testing is limited to only Pearson Vue test centers. The limited availability of cognitive test sites places the student at a disadvantage when scheduling a cognitive exam. Students are placed at an additional disadvantage due to the limited number of hours the sites are available to provide exams. Travel time further complicates the ability of students to schedule the cognitive exam. The students may have an additional burden if they need to schedule time off from work to take the cognitive exam. These challenges are magnified in rural areas.

**Implementation Considerations:** The task force recognizes that the Department has been making efforts to expand the availability of cognitive testing sites. We put forth this recommendation in support of their efforts and to emphasize the importance of increased access to cognitive testing sites.

The Department should consider partnerships with the Department of Education, Pennsylvania National Guard, Pearson Vue, and the National Registry to identify additional test sites across the Commonwealth. Partnerships may help reduce the cost associated with establishing "Institute" test sites in underserved areas of the Commonwealth. PEHSC offers to provide assistance in facilitating the partnerships through technology and soliciting input from stakeholders across the Commonwealth.

## Psychomotor Exam Calendar

**Recommendation:** *The Department should develop a searchable statewide repository of psychomotor test dates and sites.*

**Rationale/Background:** All EMS certification candidates in the Commonwealth are required to successfully complete a psychomotor examination prior to being certified. These examinations are scheduled and conducted by the individual regional EMS councils across the Commonwealth. There currently is no searchable statewide repository of testing sites, dates, and availabilities. The lack of such a searchable database can make it difficult for candidates to find and register for a psychomotor exam, particularly for retesting purposes. It is an accepted belief among educators that as the amount of time between the course completion date and the testing date increases the likelihood of success decreases as it is with the cognitive test. A searchable database of psychomotor test dates will allow candidates to choose the testing site to best meet their time and location needs.

SAEMS, EMSI, EMMCO East, EMMCO West, and Seven Mountains EMS Councils currently collaborate to maintain a listing of all psychomotor exams offered on the western side of the state. The list is posted on each of their respective websites. The task force recommends that this effort be expanded statewide and developed into a searchable database. Once the database is created, all regional councils, the Bureau of EMS, and PEHSC should post a link to the database on their respective websites.

**Implementation Considerations:** The PEHSC EMS Education Task Force offers their assistance in identifying the functionalities that would be necessary to meet the needs of providers across the Commonwealth as a first step in the process. The task force recognizes that there is a financial impact in regards to Bureau of I.T. staff time. It is the assumption of the task force that a psychomotor examination search application could be modeled after the continuing education search application, thus reducing the overall financial expenses incurred.

## Attachment A



**MEMO**

**To:** Jannette Swade, Executive Director, PEHSC  
**From:** Richard L. Gibbons, Director, BEMS  
**Date:** March 26, 2014  
**RE:** Review of EMS educational system with recommendations

### Scope of the project

Convene a stakeholder work group who will review the existing EMS educational system especially in the rural areas of Pennsylvania and present a solutions based document with recommendations for improvements.

### Project Goals

- 1) Identify strengths of the existing system with strategies for continuing to build upon those.
- 2) Identify areas of concern with at least two possible solutions identified for each area where possible.
- 3) Involve a broad range of stakeholders, especially from rural areas.
- 4) Solutions should include fiscal impact and potential funding opportunities when possible.

### Timeline

Draft document for preliminary review with BEMS director	September 30, 2014
Final recommendations approved by PEHSC Board and to BEMS	December 15, 2014

Along with PEHSC identified stakeholders the following personnel will have lead roles from BEMS:

BEMS Lead – John Englert

Regional Council – To be determined

## Attachment B

### Task Force Members

Anthony Deaven, Co-Chair	First Aid and Safety Patrol of Lebanon
Robert Shank, Co-Chair	Pennsylvania Athletic Trainers Society
Robert Bernini	Harrisburg Area Community College
Charles Bortle	Einstein University
Scott Brokaw	Allentown EMS
Lori Driscoll	Southern Alleghenies EMS Council
Justin Eberly	Silver Spring Ambulance
John Englert	PA DOH, Bureau of EMS
V. Joshua Fremberg	Pennsylvania State University
Joseph Gadoury	Thomas Jefferson University
Donald Holsten, Jr.	Stat MedEvac
David Kirchner	Eastern Lebanon County School District
Juliane Lehr	
William Lillington	Eastern EMS Council
David Lindell	Allegheny Health System
Trevor Pearson	
Henry Rennie	Delta-Cardiff VFC / York Medic-95
Donna Snyder	LTS EMS Council
Michael Stangroom	Rostraver/West Newton EMS
Mark Trueman	Pennsylvania College of Technology
James Weber	
William Wells, Sr.	Good Fellowship Ambulance and EMS Training Institute
Mervin Wertz	Reading Health System
Mark Wolfgang	Seven Mountains EMS Council