2014: A New Day in EMS Education

The Progress Continues

National Association of State EMS Officials

Education Agenda Implementation Team
NASEMSO I-Team

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Objectives

- Review the structural components of the EMS Education Agenda for the Future: A Systems Approach
- Describe the timeline of implementation steps achieved to date and the timeline for remaining work to be done.
- Describe the resources available to educators, employers, medical directors and other stakeholders to facilitate implementation of the Education Agenda for the Future
What is the Problem?

- We have no national “system” of EMS education
- Nomenclature is variable
- Quality of education is widely variable
- EMS personnel mobility is sometimes difficult
- The public really does not know what to expect
Is EMS Education Really Broken?

- Quick answer - Yes (but progress is being made to fix it)
- EMS practice was historically driven by the National Standard Curriculum
- In every other allied health profession
  - Practice is defined as the first step
  - Education is designed to prepare people to be competent in the practice
  - Candidates graduate from accredited programs and demonstrate competency through national certification
What is the solution?

- An approach that parallels other allied health disciplines
- A “single, nationally recognized accreditation agency” for EMS educational programs
- National consistency in preparing EMS professionals
- EMS is the only licensed health care profession that does not require graduation from a nationally accredited educational program.
Education Agenda Goals

- Promote **quality and consistency** among all EMS education programs
- Establish common **entry level requirements** for the licensure of various levels of EMS providers
- An established national EMS education system would **align EMS with other health professions**
- Enhance the **professional credibility and mobility** of EMS practitioners
Where did the Education Agenda Originate?

It was requested by NASEMSO based on observations that the historic approach to EMS education was not a system

- Curricula was driving practice
- Updates to the curricula were tedious
- Practice was not evidence-based
- Inconsistent approaches to assuring the competency of persons entering EMS
- “Training” has not established EMS as a “profession”
The non-federal partners who are helping to implement the EMS Education Agenda for the Future

- AAA
- AAP
- AAEM
- AAMS
- ACEP
- CoAEMSP
- ENA
- EMS Publishers
- IAFC
- IAFF
- IAFP
- NAEMSE
- NAEMT
- NAEMSP
- NREMT
- NVFC
Recommendations

- 4.1: State governments should adopt a common scope of practice for EMS personnel
- 4.2: States should require national accreditation for paramedic education programs
- 4.3: States should accept national certification as a prerequisite for state licensure and local credentialing of EMS providers.
The EMS Education Agenda for the Future: A Systems Approach

The Universe of EMS Knowledge and Skills

Delineation of provider practice levels

Replaces the current National Standard Curricula

National EMS Core Content

National EMS Scope of Practice

National EMS Education Standards

National EMS Certification

National EMS Education Program Accreditation
National EMS Core Content

- Defines the “domain” of EMS
- Addresses knowledge content globally
- Medically directed
- Completed by NAEMSP in 2004
National EMS Scope of Practice

- Defines the national licensure levels of EMS personnel
- Is a model for states to follow in defining what EMS professionals can do
- Developed by the NASEMSO
- Released in 2007
National EMS Education Standards

- Defines the content and context of educational programs leading to EMS credentialing
- Development led by NAEMSE. Completed in Jan 2009
What Is the Difference Between Education Standards and Curriculum?

- **Standards** - minimal terminal objectives for each provider level
- **Curriculum** - prescriptive units of instruction and individual lesson plans
Increasing Depth and Breadth

- Paramedic Level
- AEMT Level
- EMT Level
- EMR Level
National EMS Education Standards

- **Breadth** - refers to the number of topics a student needs to know about the content area

- **Depth** - is the amount of detail a student needs to know about a particular topic
  - Simple - fundamental - complex
  - Simple - foundational - comprehensive
Four National Levels of EMS Personnel:

- Emergency Medical Responder (EMR)
- Emergency Medical Technician (EMT)
- Advanced EMT (AEMT)
- Paramedic
Emergency Medical Responder (EMR)

- Similar to today’s First Responder
- Focus: **immediate lifesaving** care to **critical patients** who access the emergency medical system, while awaiting additional EMS response
- Skills: Oxygen, BVM, suction, oral airways, AED.
Emergency Medical Technician (EMT)

- Similar to today’s EMT-Basic
- Focus: basic emergency medical care and transportation for critical and emergent patients who access EMS.
- Skills: pulse ox, assisted meds, oral glucose, ASA.
The Level *Between* EMT and Paramedic

- An EMT plus not a Paramedic minus
- Includes skills between the I 85 and I 99
- Intended to use high benefit / low risk interventions
- High value for a modest additional investment in time and cost beyond the EMT level
- NOT intended to replace paramedics
Advanced EMT (AEMT)

- **Focus:** basic and *limited* advanced care and transportation for critical and emergent patients who access EMS
- **Skills:** Supraglottic airways, IV/IO, NTG, Epi 1:1000, glucagon, D50, $\beta_2$ agonists, naloxone, N$_2$O
Paramedic

Similar to today’s EMT-Paramedic

Focus: advanced emergency medical care and transportation for critical and emergent patients who access EMS.

Skills: BiPAP/CPAP, Capnography, 12 Lead interpretation, etc.
What The Education Agenda Says About National Certification

“National EMS Certification will be conducted by a single independent national agency under the leadership of a board of directors with multi-disciplinary representation.”
National EMS Certification

- NREMT meets the definition
- Verifying competency at a predetermined level of proficiency
- Serves as the basis for state EMS licensure.
What The Education Agenda Says About National EMS Education Program Accreditation

► Where we want to be in 2010- “A single, nationally recognized accreditation agency will be created and will establish standards and guidelines for each level of EMS education.”

► How to get there- “A single national accreditation agency will be identified and accepted by state regulatory offices. This accrediting agency will have a board of directors with representation from a broad range of EMS organizations.”
National EMS Education Program Accreditation

- Single, national, independent agency.
- A non-governmental collegial process of self and peer assessment
- Defines standards and evaluates programs relative to those standards
Where’s the Evidence for Program Accreditation?

“Students who completed an accredited paramedic program were more likely to pass the national paramedic examination. National accreditation should be required for all EMT-Paramedic education programs.”

Prehospital Emergency Care; 2006:224-228
Further supported by……

“The significant model parameters, in descending order of significance, included; Institutional accreditation, student’s high schools class rank, students highest level of education, instructor credentials, students gender, and race.”

Oral presentation at 2007 NAEMSE Annual Symposium
Published in March 2008 Academic Emergency Medicine.
In November 2007, the NREMT Board of Directors voted to require that paramedic applicants graduate from a nationally accredited paramedic program effective January 1, 2013.
Today- all structural components of the Education Agenda for the Future are finalized

2010 AHA Guidelines Update have been integrated in national certification exams

New text and education support materials are currently available

NREMT exams reflect content from the current National EMS Education Standards

84% of states currently require national EMS program accreditation by CAAHEP at the paramedic level
Full Transition to the NEMSES Is Currently In Progress

- It is proposed that the national transition for existing personnel will occur by 2018.
- There will be a transition for each level
  - States determine their “gap” content
  - Educators have to be oriented to the new Education Standards
  - Refocus on competency and skill verification
  - “Toolkit” has been developed by NASEMSO.
TRANSITION: Emergency Medical Responder (EMR)

- First Responder transition to EMR to be completed by 9/30/16
- Level not licensed in all states
- How much content is new?
  - Oxygen administration (nasal cannula, non-rebreather mask, BVM)
  - Nasopharyngeal airway
  - Manual BP
  - AED
  - Autoinjectors for self or peer rescue
  - Hemorrhage control (direct pressure)
  - Eye irrigation
TRANSITION: Emergency Medical Technician (EMT)

- EMT-Basic to EMT transition to be completed by 3/31/16
- Level licensed in all states
- How much content is new?
  - Pulse oximetry
  - ATV
  - Humidified oxygen
  - Partial rebreather mask, simple face mask, Venturi mask, tracheostomy mask
  - Mechanical CPR device
  - Hemorrhage control (direct pressure & tourniquet)
  - Oral aspirin
  - Assisting patients in taking their own prescribed medications
    - Inhaled bronchodilators, epi autoinjector, NTG
Advanced Emergency Medical Technician (AEMT)

- EMT-Intermediate (85 or 99) no longer certified at the national level
- AEMT Level not licensed in all states
- National EMS Certification exam for AEMT now available
TRANSITION: Intermediate 85 to AEMT

- I-85 to AEMT Transition to be completed by 3/31/15
- I-85 no longer certified at the national level
- Must complete transition course and pass AEMT cognitive and practical exams
How much content is new?

- Extraglottic airways – not intended for insertion into the trachea
- Humidified oxygen
- Partial rebreather mask, simple face mask, Venturi mask, tracheostomy mask
- Tracheobronchial suctioning of an already intubated patient
- ATV
- Mechanical CPR device
- Mechanical patient restraint
- Blood glucose monitoring
- IO access in peds
- Aspirin
- NTG
- Epinephrine for anaphylaxis (IM)
- Glucagon
- Dextrose 50%
- Autoinjector for self or peer care
- Inhaled beta agonists for wheezing
- Naloxone
- Nitrous oxide (self-administered for pain)
- Pharmacology
- Still only AED
I-99 to Paramedic Transition to be completed by 3/31/18
Must complete transition course and pass AEMT cognitive exams
Transition from I-99 to Paramedic

How much content is new?
- ECG interpretation, including 12-lead ECG
- BiPAP, CPAP, PEEP
- Chest tube monitoring
- ETCO₂ monitoring
- NG/OG tube
- Access indwelling catheters and implanted central IV ports
- Morgan lens
- Administer state/physician-approved meds
EMT-P to Paramedic Transition to be completed by 3/31/17

How much content is new?

- BiPAP, CPAP, PEEP
- Chest tube monitoring
- ETCO₂ monitoring
- NG/OG tube
- Access indwelling catheters and implanted central IV ports
- Morgan lens
- Administer state/physician-approved meds
Desired Components of the National EMS Certification Exams:

- NCCA-accredited process
- Contemporary Practice Analysis
- Gap analysis to identify item pool content:
  - Current content includes 1200 calibrated items and 400 pilot items
- Calibrated, stable Scale of Difficulty
- Appropriately prepared candidates
- Approved Test Plan
- Approved Passing Standard
- Secure, accessible, cost-effective delivery mechanism
In accordance with APA/AERA standards for certification examinations, NREMT exams are based on **Practice** not solely on a curriculum, education standards or instructional guidelines.
NREMT Exams Reflect Practice

- Practice Analysis completed every 5 years to develop a clear and accurate picture of the current job
- Practicing EMS professionals rate various tasks they are required to perform
  - Frequency (1/3)
  - Potential of Harm (2/3)
- Revised analysis to advise test plans is pending
Where does NREMT get those $#*$&! questions?

- AHA Guidelines
- Textbooks
- Recent Literature
- Etc.
Improving the Quality of EMS Education

- CAAHEP/CoAEMSP Accreditation Update and Evaluating Student Competency Workshops
- NAEMSE Instructor Courses
- Implementation of National EMS Education Standards Workshop
- www.naemse.org
Where do I get more information?

- www.nasemso.org
- www.naemse.org
- www.coaemsp.org
- www.nremt.org
- www.ems.gov
“There are many ways of going forward, but only one way of standing still.”

Franklin D. Roosevelt