



# **Improving Patient Care Through Evidence Based Performance Measures**

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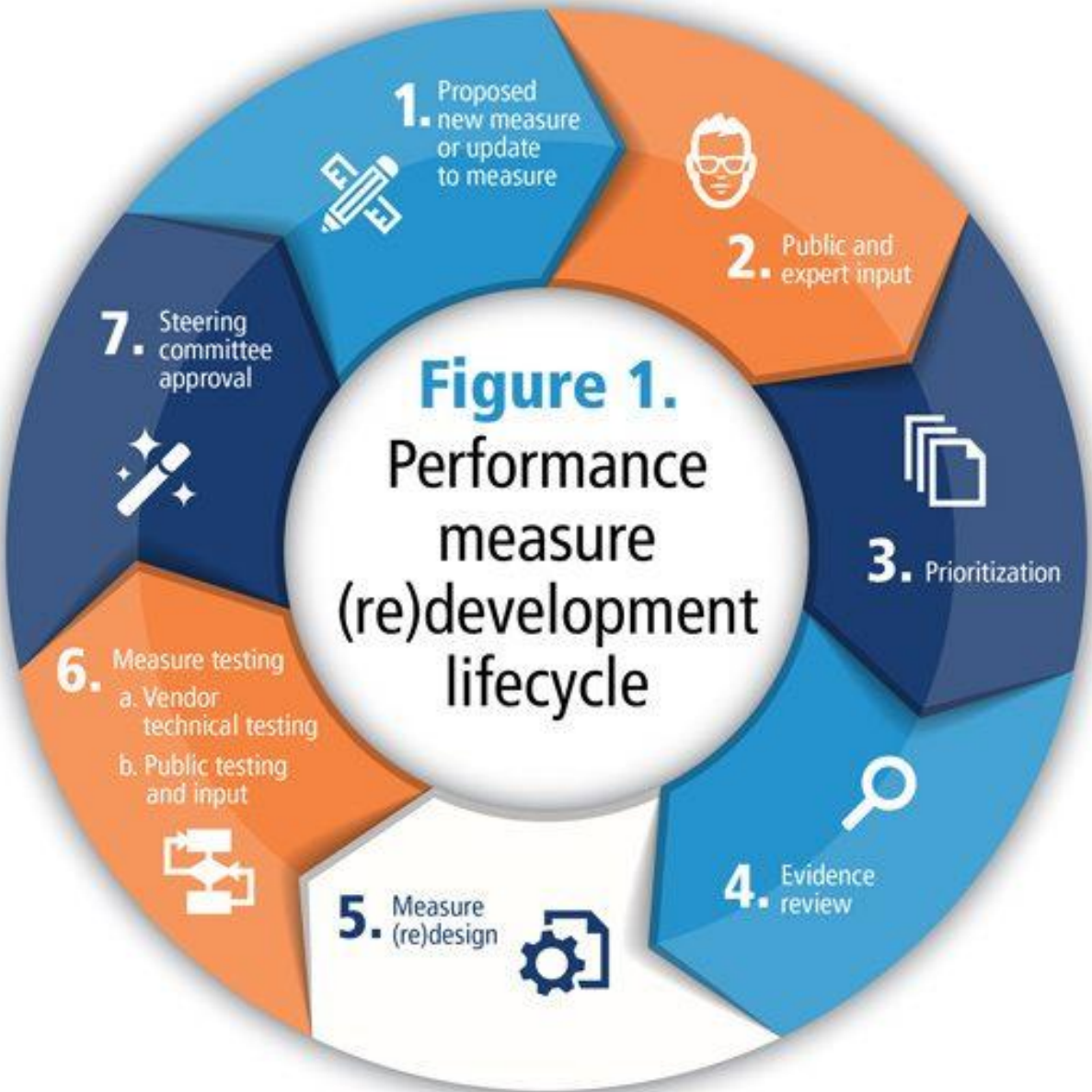
## EMS Compass<sup>®</sup> is:

- An open, collaborative two-year effort, funded by the National Highway Traffic Safety Administration (NHTSA) led by the National Association of State EMS Officials (NASEMSO)
- Define and develop a sustainable process to design EMS performance measures primarily using National Emergency Medical Services Information System (NEMSIS) version 3 data
- Develop a core set (5-7) of evidence based patient care and safety related performance measures for use by all EMS providers to support a *culture* of performance improvement in EMS

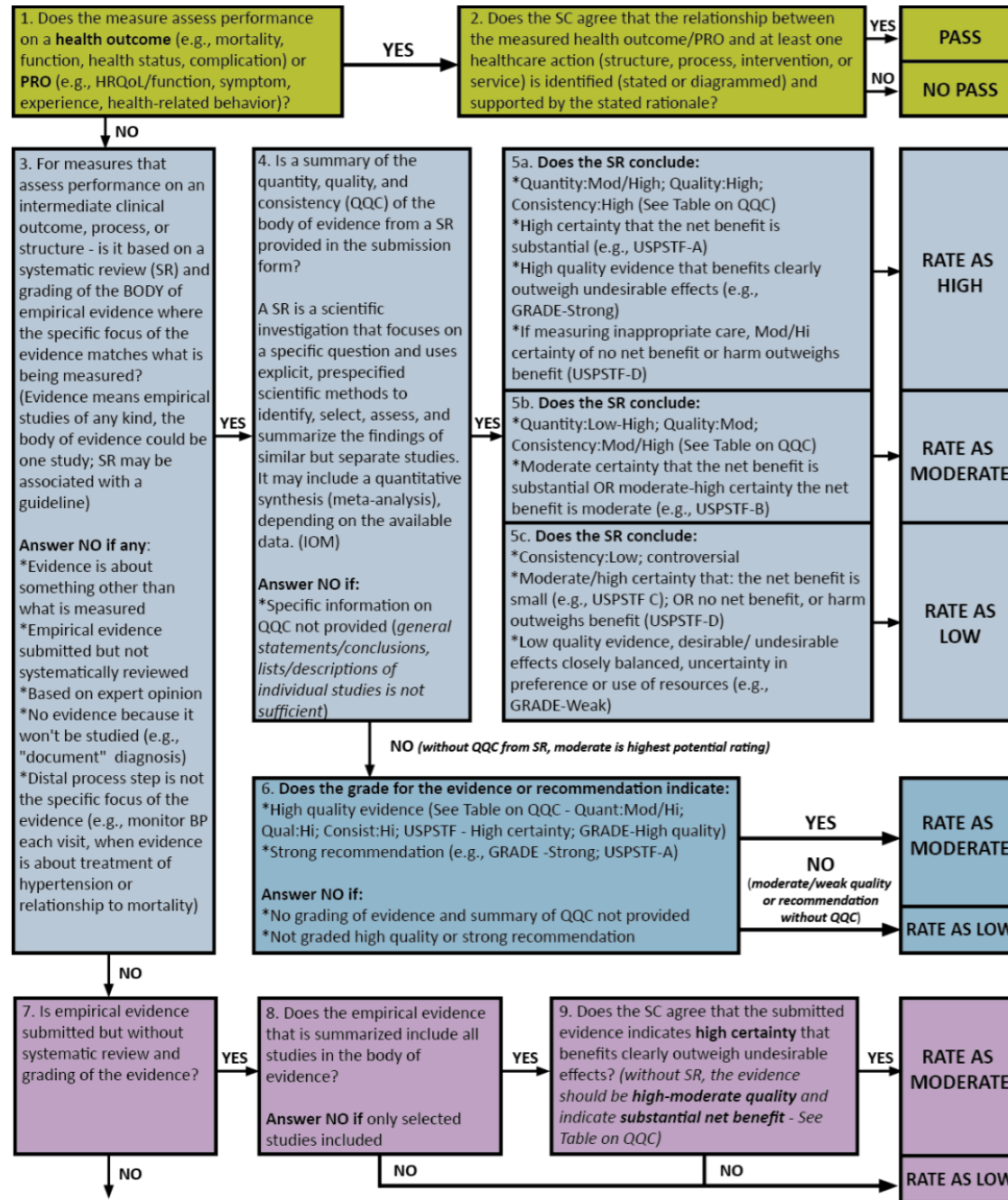
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## EMS Compass<sup>®</sup> is not:

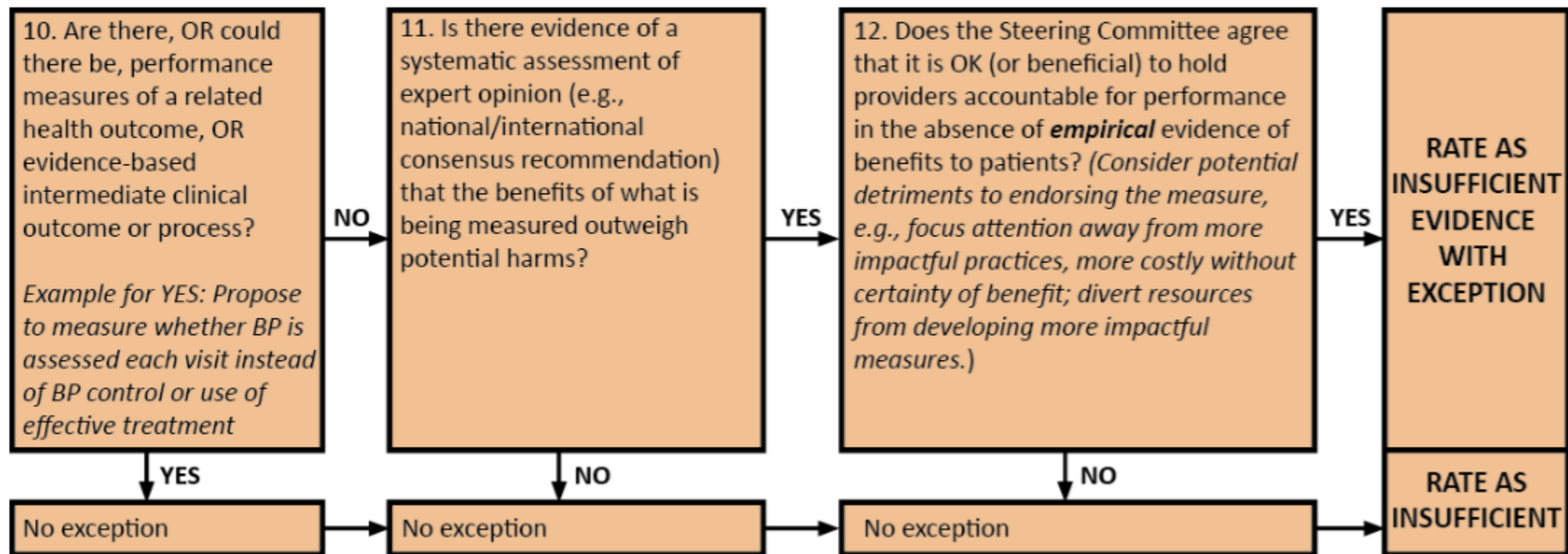
- Developing measures in order to punish “poor performers” or discredit them in their communities
- Submitting measures to the NQF or CMS
- Proposing that measures be used for anything other than improvement of patient care and safety
- Developing a comprehensive list of measures to address every aspect of EMS
- Directing how local, state or federal agencies or payers may choose to utilize the measures once they become available



# Algorithm #1. Guidance for Evaluating the Clinical Evidence



(Continued on Next Page)



National Association of state EMS Officials

# NATIONAL MODEL EMS CLINICAL GUIDELINES PROJECT

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# The Directive

- ▶ *The Future of Emergency Care: Emergency Medical Services at the Crossroads* (Institute of Medicine report released in 2007)
- ▶ “NHTSA, in partnership with professional organizations, should convene a panel of individuals with multidisciplinary expertise to develop evidence-based model prehospital care protocols for the treatment, triage, and transport of patients.”





# GRADE: The Process of Evidence-Based Guideline Development and Initial Implementation

- ▶ Assembly of expert panel and GRADE training
- ▶ Define the EBG content area and establish specific clinical questions to be addressed
- ▶ Literature searches and prioritization of outcomes
- ▶ Creation of evidence profiles (GRADE tables) and summarize work and draft recommendations
- ▶ Vet and endorse GRADE evidence tables and draft recommendations
- ▶ Synthesis of collective wisdom into an EMS protocol and visual algorithm



# NHTSA Evidence-Based Guidelines

Published in *Prehospital Emergency Care* in January 2014

- ▶ Development of Evidence-Based Guidelines Using a GRADE-based Methodology
- ▶ Pediatric Prehospital Seizure Management Using GRADE Methodology
- ▶ Prehospital Analgesia in Trauma
- ▶ Air Medical Transportation of Prehospital Trauma Patients
- ▶ Implementation and Evaluation of an Evidence-Based Statewide Prehospital Pain Management Protocol



# Why the Need for National Model EMS Clinical Guidelines?

- ▶ Enhance patient care with current, evidence-based practices
- ▶ Provide a useful composite of expert-panel based guidelines with EB considerations as placeholders for future EBGs
- ▶ Promote uniformity in prehospital care which, in turn, promotes skilled practice as EMS providers move across healthcare systems
- ▶ Provide ready-to-adopt guidelines for EMS systems



# NASEMSO National Model EMS Clinical Guidelines: Workgroup Members

- ▶ NASEMSO Medical Directors Council  
(seven members, one alternate)
- ▶ Seven EMS medical director stakeholder organizations: AAEM, AAP, ACEP, ACOEP, ACS-COT, AMPA, NAEMSP
- ▶ Subject matter experts and consultations as deemed necessary by the workgroup membership
- ▶ Three EMS physician technical reviewers



# NASEMSO National Model EMS Clinical Guidelines: Chapters

- ▶ Cardiovascular
- ▶ General Medical/Other
- ▶ GI/GU/GYN
- ▶ Pediatric-Specific
- ▶ Respiratory
- ▶ Respiratory
- ▶ Resuscitation
- ▶ Toxins/  
Environmental
- ▶ Trauma
- ▶ Universal Care

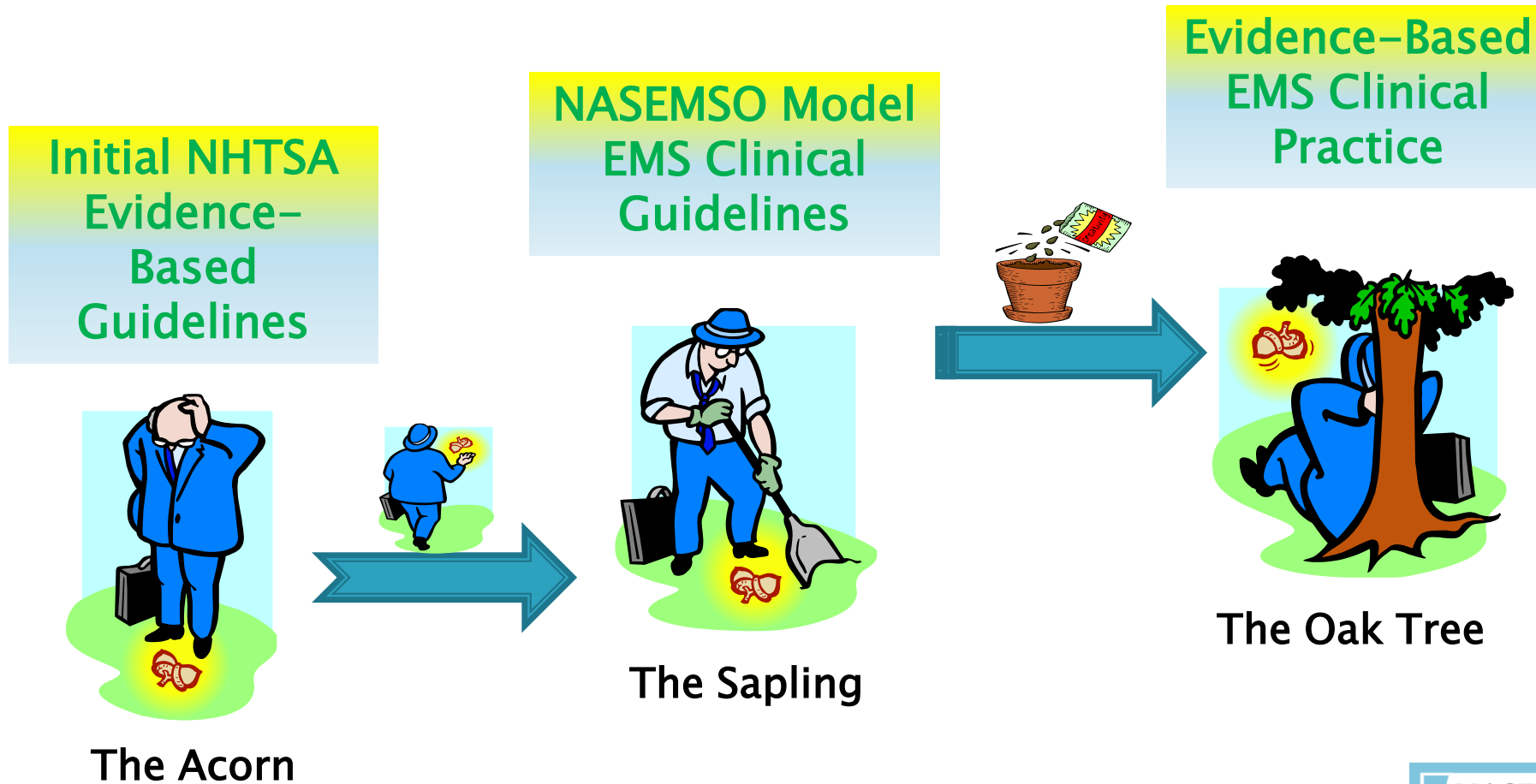


# NASEMSO National Model EMS Clinical Guidelines: Essential Components of Each Guideline

- ▶ Title
- ▶ Patient care goals
- ▶ Patient presentation
- ▶ Patient management
- ▶ Notes/educational goals
- ▶ Quality improvement
- ▶ References



# EMS: Evidence-Based Medicine



# Future Goals on the Path to the Oak Tree

- ▶ Dynamic evolution of the National Model EMS Clinical Guidelines to maintain currency
- ▶ Track utilization or adoption of the document by the EMS community
- ▶ Development of additional core patient care guidelines
- ▶ Improve linkage with NEMESIS
- ▶ Improvement of interoperability between EMS and healthcare systems
- ▶ Encourage quality EMS research






# National Model EMS Clinical Guidelines Document


[www.nasemso.org](http://www.nasemso.org)

## National Association of State EMS Officials



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**EMS COMPASS**  
Improving Systems of Care Through Meaningful Measures

**NATIONAL MODEL EMS CLINICAL GUIDELINES**

**SafeAmbulances.org**  
Ground Ambulance Standards and EMS Safety Resource

**NASEMSO Fall 2016 Meeting & Exhibit**  
Sept. 19-22, 2016  
Albuquerque, New Mexico  
details

**The Washington Update**  
May 2016 (PDF)  
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The National Association of State EMS Officials is the lead national organization for EMS, a respected voice for national EMS policy with comprehensive concern and commitment for the development of effective, integrated, community-based, universal and consistent EMS systems. [Read more...](#)

### NASEMSO News

#### NASEMSO Releases State Model Rules for Regulation of Air Medical Services

(09/21/16) Today at its Fall Meeting, NASEMSO announced the release of "State Model Rules for the Regulation of Air Medical Services" to assist states with regulatory language intended to avoid conflict with the Airlines Deregulation Act (ADA) and the possibility of Federal preemption. These model rules are intended to be applied in a manner that would confine their scope to matters solely related to medical care, and not construed in a way that could constitute regulation of aviation safety or economic matters.

- [Download State Model Rules for the Regulation of Air Medical Services](#)
- [Download press release](#)

NASEMSO is the lead national organization for emergency medical services (EMS) and a respected voice for national EMS policy. Air ambulances are *medical* resources that are used and integrated within EMS systems to provide patient care. In response to "Guidelines for the Use and Availability of Helicopter Emergency Medical Transport (HEMS)" published by the United States Department of Transportation in April 2015, NASEMSO sought to identify opportunities for state regulations that address outcomes related to:

- Quality of emergency medical care provided to patients
- Requirements related to the qualifications and training of air ambulance medical personnel
- Scope of practice and credentialing
- Maintenance of medical records data

### EMS News & Resources

#### NASEMSO Announces New Trauma Monograph at 2016 Fall Meeting

(09/21/16) NASEMSO today announced the release of a new monograph, "Status of State Trauma System Planning and Development: Utilization of the HRSA Model Trauma System Planning and Evaluation Document," at the NASEMSO 2016 Fall Meeting.

- [Download monograph](#) and related [charts and figures](#)
- [Download press release](#)

In this monograph, NASEMSO examined the general status of formal trauma system development in the states, and particularly the utilization of system development tools produced by the Health Resources and Services Administration (HRSA) and the National Highway Traffic Safety Administration (NHTSA.)

Key data included: 82% of respondents indicated their state has enabling legislation or rules to designate trauma centers; 23% of respondents, only 16 percent of all states, have legislative authority to limit the number of trauma centers; 46% of respondents did not receive federal or outside funding for state trauma program administration; In spite of a 16% net loss in the Level I category, there has been a 27 percent increase in trauma centers overall since 2010; and the largest increase in trauma center recognition is occurring at the level III (12%), IV (63%), and V (117%) levels.

#### NASEMSO 2016 Fall Meeting Underway



# Evidenced Based Practice in EMS: *An Australian Perspective*

Shane Lenson  
Paramedicine Professional Practice Lead  
Australian Catholic University  
Canberra, Australia  
*Twitter: @shanelenson*

# EMS in Australia

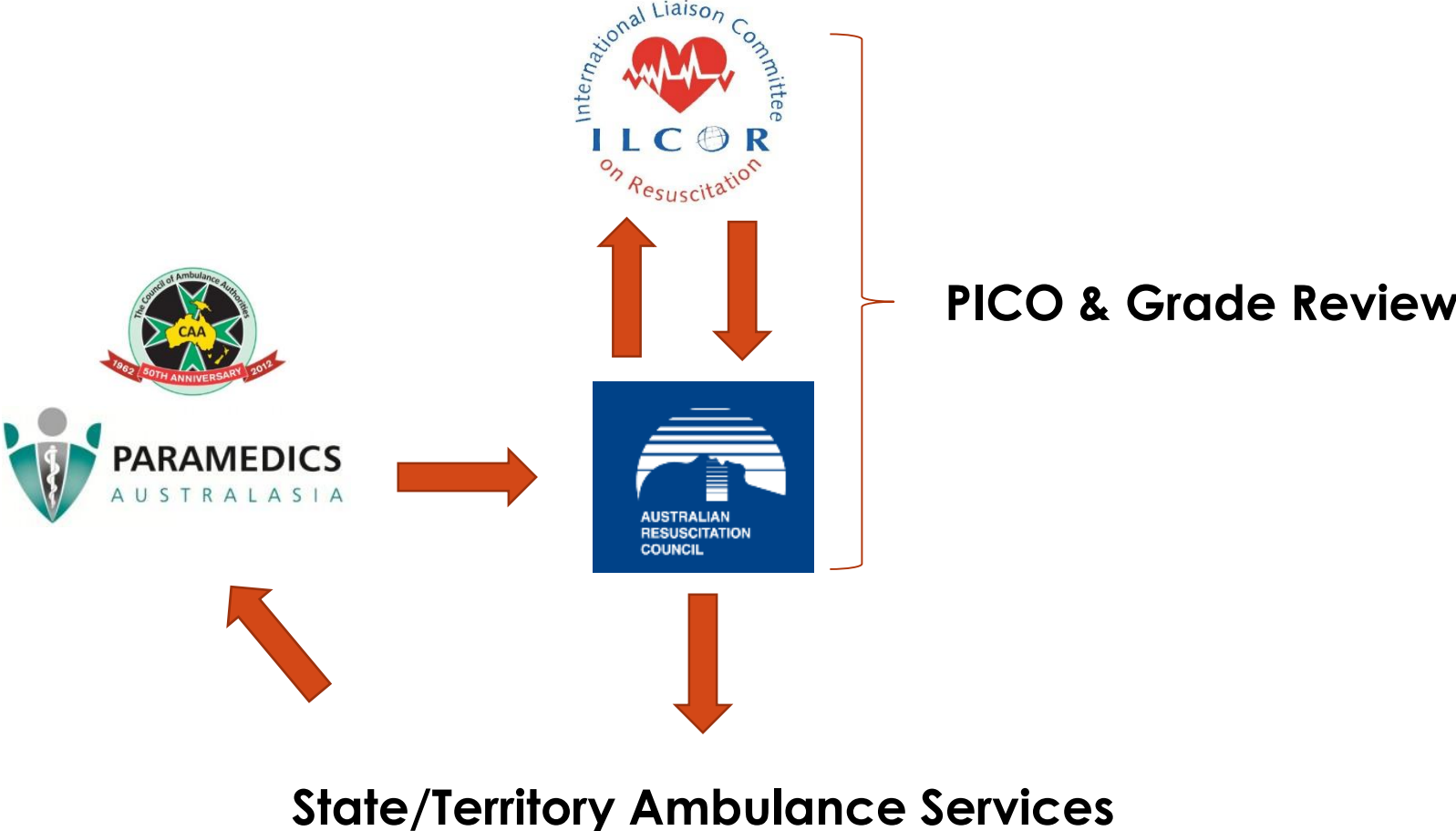
- Population 23 million
- 8 State/Territory based Ambulance Services
- Largely tax payer system



# Paramedicine in Australia

- Employed predominantly as health care professionals into State/Territory based Ambulance Services.
- Three year undergraduate degree in paramedicine, including
  - Research
  - Evidenced Base Practice

# EBP in Paramedicine



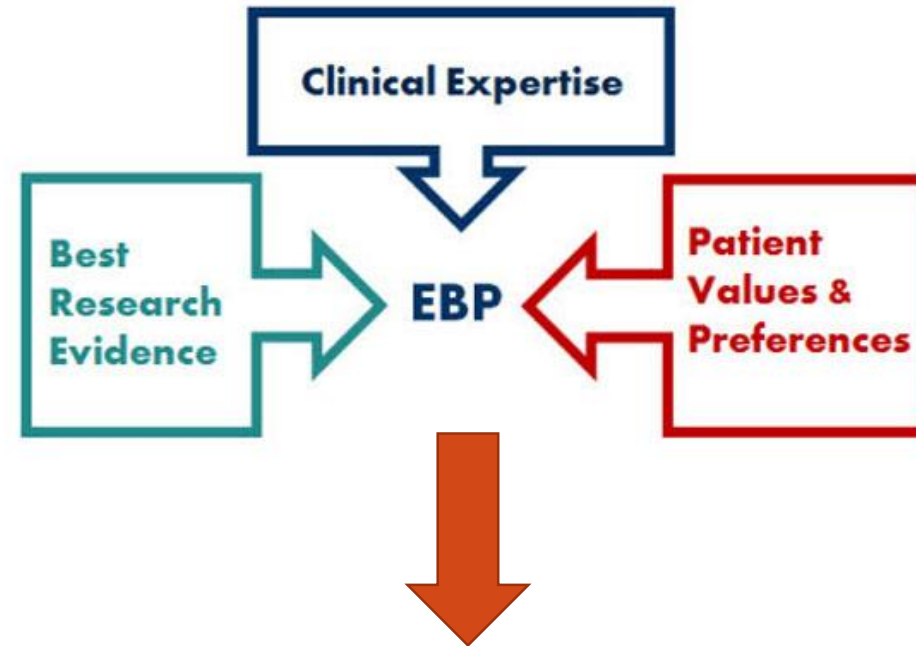
# EBP in Ambulance Services

## **Clinical Advisory Groups:**

Paramedic:

- Clinicians
  - Researchers
  - Academics
  - Leaders/Administrators
- 
- Medicine & Other health care professionals

# EBP in Ambulance Services



**Clinical Practice Guidelines**

# Clinical Advisory Groups

## **Not without Issues....**

- Organisational Culture
- Resourcing
- Professional/Personal Bias
- Community Expectations
- Inconsistently, Inconsistent



# The Future

- Increasing Paramedic lead research focused on pre hospital care
- Extended roles for paramedics
- Post graduate education
- Continued over populated undergraduate degree programs

Thanks!

