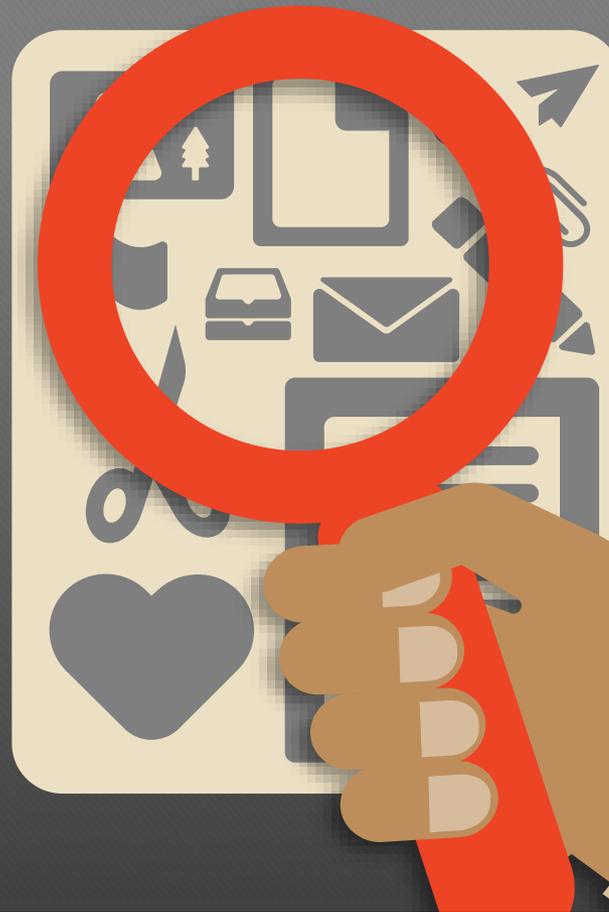




# Does EMS do a good job?

- Ambulance rates are out of control!
- Paramedic models are not effective.
- ALS skills should not be performed in the field.
- EMTs lack the training and knowledge to make life saving decisions.
- Nurses are better trained. Paramedics should be driving nurses to emergency calls.



Are you worth the money you think you deserve?

What rates should we charge and how should the money be allocated?

Do we have the right tools for the job?

Do we actually help anyone?

What really is our job?

Is this all we can do?

How do you know?

# Is research useful to EMS



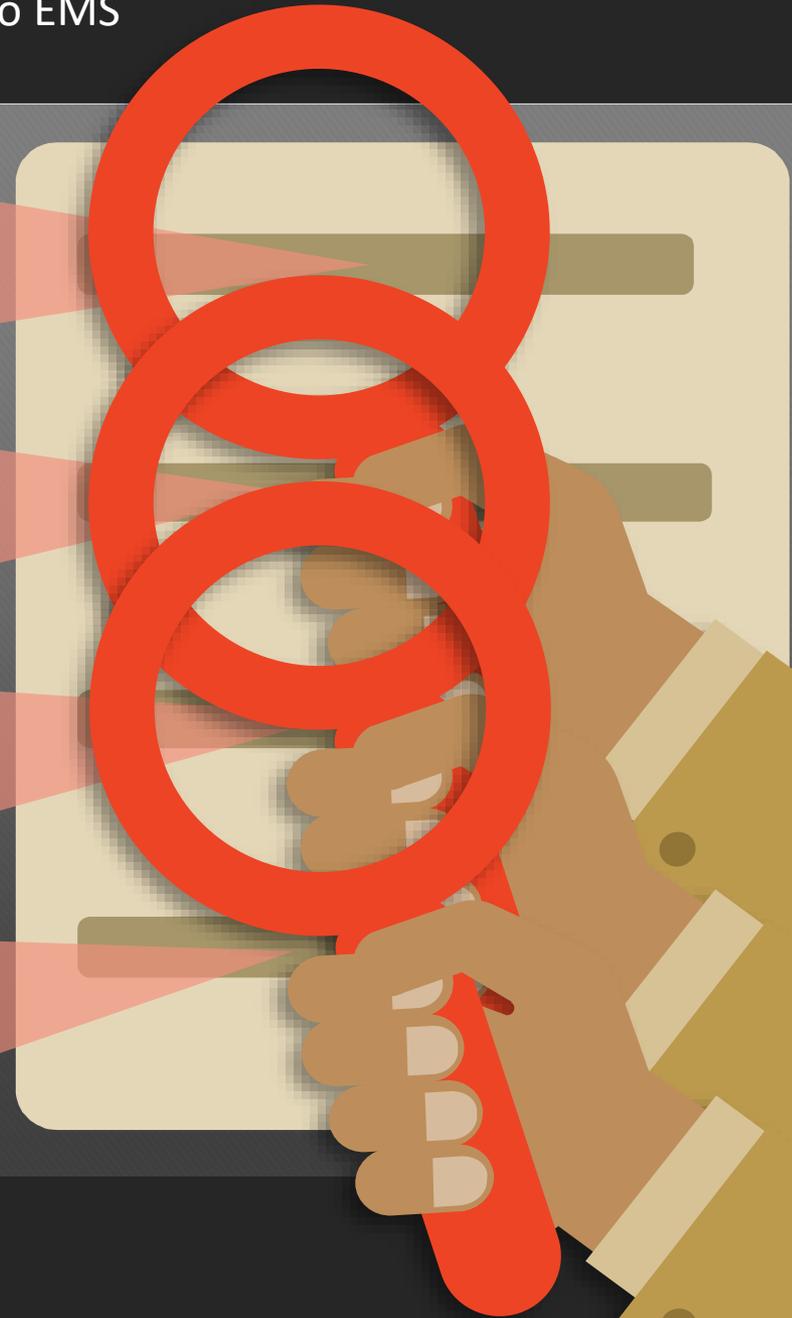
I mean, who cares anyway? I just want a paycheck!

Ensures that care provided will glean the best, safest possible results and patient outcomes.

Demonstrates value of EMS care with reportable outcomes.

Improves working conditions and safety for crews and patients.

Encourages accurate and complete documentation (Research, litigation, reimbursement)



## System Inputs

Prehospital components of externally developed guidelines, e.g., AHA, NAESP, BTF, NICE, NZGG  
Protocols from existing EMS systems, e.g., State EMS protocols, Nova Scotia protocols  
External evidence synthesis processes, e.g., Cochrane systematic reviews, EPCs  
Individual researchers, EMS organizations, medical directors, & EMS personnel

## Guideline Initiation: EMS Evidence Accumulation & Evaluation

Review proposals for guideline development, adaptation, or adoption  
Identify existing systematic reviews  
Recommend need for (or conduct) systematic review  
Assemble advisory panel with expertise in topic, guideline development, library science, etc.  
Document conflicts of interest for all participants

## Evaluation of Effectiveness, Outcomes, Clinical Research, Quality Improvement Evaluations

Guideline/protocol pilot testing & feasibility studies (may occur during development process)  
Monitor local quality improvement benchmarks & indicators, quality improvement processes at all levels  
Apply NEMESIS data in evaluation process  
Outcomes research: EMSOP - local, regional, statewide, national  
Clinical research of specific questions  
Systems research (See EMSOP II & IV)  
Cost effectiveness, cost-utility, cost-benefit analysis (See EMSCAP papers)  
Implementation research - analysis of barriers & facilitators to implementation

## Establish Priorities for Guideline Development

Evaluate quality of evidence or guideline, e.g., GRADE, AGREE  
Recommend topics for further guideline development  
Archive material not selected for future use

## Guideline Development

Document risks & benefits of intervention - First do no harm  
Develop strength of recommendation, e.g., GRADE  
Document & disseminate rationale for "no recommendation"  
EMS "contextualization"  
Write, adapt, or endorse guideline  
Provide feedback to originating institution or organization

## EMS Protocol Development

EMS "contextualization"  
Clinical implications of strength of recommendation

## Implementation

Link to national EMS provider certification & recertification  
Link to national EMS agency accreditation  
Develop guideline implementation "tool kits," webinars, manuals, integration into local protocols  
Partner with national orgs. To facilitate interpretation, application & medical direction  
Potentially link to funding and reimbursement, e.g., CMS, 3rd party  
Develop health informatics & clinical decision support software  
Develop quality improvement measures & tools - local, regional, state & tribal

pre-existing protocols

## Dissemination of Guidelines/Protocols

Link to EMS Education Agenda for the Future → Core Content → Scope of Practice Model → National EMS Education Standards  
Link to National EMS Education Program Accreditation  
Publications: peer-reviewed journals, trade press, textbooks, government reports  
New products: education materials, quality improvement materials  
Target stakeholder organizations  
Multimedia approach: ems.gov, podcasts, etc.

# National Prehospital Evidence-based Guideline Model Process

Approved by the Federal Interagency Committee on EMS and the National EMS Advisory Council

AGREE - Appraisal of Guidelines Research and Evaluation  
AHA - American Heart Association  
BTF - Brain Trauma Foundation

**Abbreviations**  
CMS - Center for Medicare and Medicaid Services  
EMSCAP - Emergency Medical Services Cost Evaluation Project  
EMSOP - Emergency Medical Services Outcomes Project

NAEMSP - National Association of EMS Physicians  
NEMESIS - National EMS Information System  
NICE - National Institute for Health and Clinical Excellence  
NZGG - New Zealand Guidelines Group



# Explored and Research



How would you complete an Evidence Based  
Guideline?



High Quality  
Patient Care



Standardized and  
consistent  
approach



Tested through  
industry experts.  
Like you!



Proven through  
clinical evidence.



Endless  
possibilities and  
new directions.