Challenges & Best Practices: A Systems Approach...

A Prehospital Perspective

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ACCIDENTAL DEATH AND DISABILITY: THE NEGLECTED DISEASE OF MODERN SOCIETY

DIVISION OF MEDICAL SCIENCES
NATIONAL ACADEMY OF SCIENCES
NATIONAL RESEARCH COUNCIL

Accidental Death and Disability: The Neglected Disease of Modern Society

- 29 recommendations
- 11 related directly to emergency medical services
Active exploration of the feasibility of designating a single nationwide telephone number to summon an ambulance.

Accidental Death and Disability: The Neglected Disease of Modern Society, 1966
NG 911
Next Generation 911

- Multi-media input
- Technology driven
- Better information
  - Improves response
  - Improves safety
Initiation of pilot programs to evaluate automotive and helicopter ambulance services in sparsely populated areas and in regions where many communities lack hospital facilities adequate to care for seriously injured persons...

Accidental Death and Disability: The Neglected Disease of Modern Society, 1966
Implementation of recent traffic safety legislation, to ensure completely adequate standards for ambulance design and construction, for ambulance equipment and supplies, and for the qualifications and supervision of ambulance personnel.
You can lead a horse to water and sometimes the horse will crap in it.

Roger Ellerton
Author “Win-Win Influence”
renewal.ca
EMS & Prehospital Care:

- Team Sport
- Heterogeneity (def.)
Where we’ve been

Where we are!

Where we want to go!!

Figure 1: EMS: Part of the Health Care System

Figure 3: EMS Evaluation and Research: Supported by Information Systems

EVALUATION
Structures, Processes, Outcomes

Essential Activity; Results
Protected

New Questions

RESEARCH
Efficacy, Effectiveness, Cost-Effectiveness

Desirable Activity; Results
Disseminated

System Changes

Effects of Changes Assessed

Enhanced Knowledge

Community Input

We understand the chain of survival for cardiac arrest victims... and we provide feedback.
POSITION PAPER

USE OF THE PNEUMATIC ANTI-SHOCK GARMENT (PASG)

Robert M. Demeister, MD, Robert E. O’Connor, MD, Theodore R. Delbridge, MD, MPH

Richard C. Hunt, MD

SYNOPSIS

Since first used in emergency care during the 1960s, the PASG for military, non-shock trauma—MAST, has become one of the most widely studied and intensely deliberated devices in EMS. The PASG has alter

ed or changed widespread support and the basis for many guidelines and recommendations. The purpose of this paper is to present our work to the medical community and to elicit feedback from the medical community. The National Association of EMS Physicians (NAEMSP) recognizes the need for a decision regarding the use of PASG. Therefore, this position paper is intended to provide guidance on the use of PASG and to elicit feedback from the medical community. The purpose of this paper is to present our work to the medical community and to elicit feedback from the medical community.
Even the Gold is in Question...

Revisiting the “Golden Hour”: An Evaluation of Out-of-Hospital Time in Shock and Traumatic Brain Injury

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Has the Gold Lost Its Luster?

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Where we’ve been

Where we are!

Where we want to go!!
EMS Agenda 2050

Envision the Future

http://emsagenda2050.org/
Guidelines for Field Triage of Injured Patients
Recommendations of the National Expert Panel on Field Triage

INSIDE: Continuing Education Examination
Since publication of the *Field Triage Decision Scheme* (FTDS), has there been consideration to updating your system’s trauma triage protocol?

- **20%** No
- **27%** Yes, but no changes
- **23%** Yes; changes unrelated to FTDS
- **16%** Yes; parts of FTDS adapted
- **8%** Yes; FTDS adapted with modification
- **6%** Yes; FTDS adapted
National guidelines are:

- Very Unhelpful: 2%
- Unhelpful: 6%
- No Opinion: 6%
- Helpful: 34%
- Very Helpful: 52%
The Paradox of EMS

• The least “sophisticated” workforce is not in metropolitan areas
  • i.e., immediate proximity to a trauma center
  • Engaged medical direction

• The most opportunity for EMS to make a difference is proportionate to the length of exposure to a critical patient
  • The personnel with the most opportunity have the least likelihood of expertise
• [EMS personnel are boxed in their ambulances]

• Little integration with other health care workers

• Undervalue of potential roles in health care delivery
Outliers
The Story of Success
Malcolm Gladwell
Author of The Tipping Point and Blink
Systems of Care

- Overlook inherent heterogeneity
- Neglect dynamic resource availability
- Mandate local adaptation (or a free-for-all), depending on how they are structured
< 60 Minutes to a Trauma Center:
In many cases, EMS resources are like automobile passive restraints...once the first impact occurs, the system is spent!
Take-Aways:

- EMS
  - A Team Sport
  - Heterogeneous; a fact of life
- Competing and complementary priorities
  - Seek synergy
- Engage as partners
  - Information is power (as it always has been!)
  - Share (bi-directional)