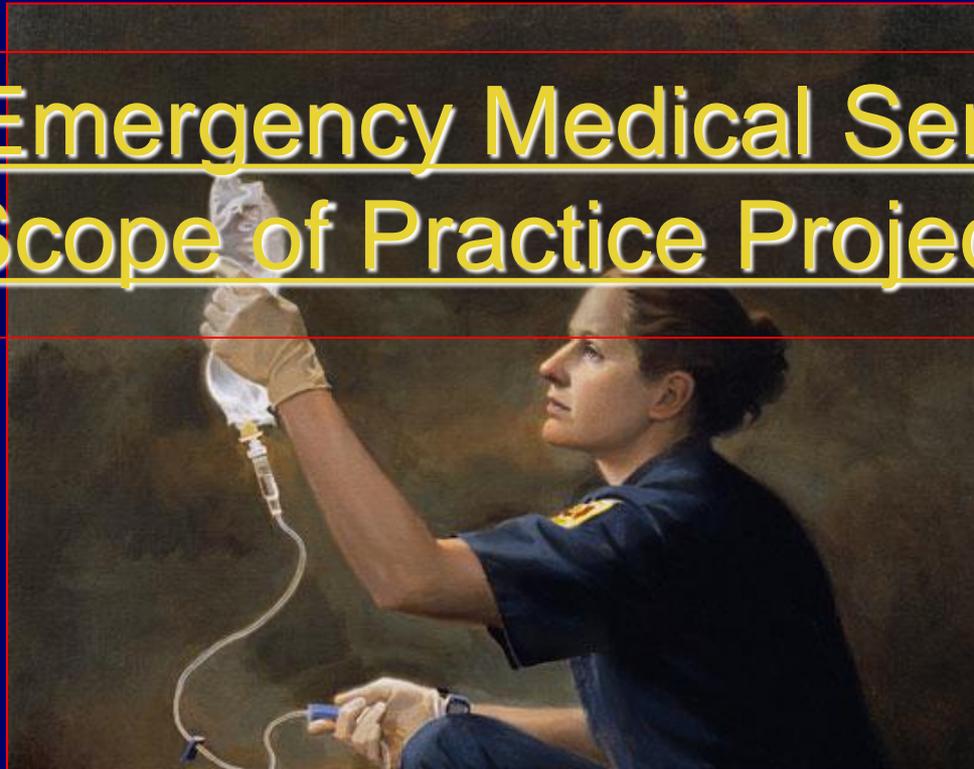


The Emergency Medical Services
Scope of Practice Project



*Improving Emergency Department
Patient Flow through
Prehospital System Design*



A Brief History of Modern EM and EMS

Mid-20th Century – Impact of Trauma

09/16/60 – CPR Described

1966 – NAS Report

1966 – DOT Curricula

1973 – EMS Systems Act

1980 – First ABEM Certifications

1984 – NAEMSP formed

09/22/89 – ABEM primary board status

1996 – EMS Agenda for the Future

Early 2000's - NEMESIS

09/22/10 – EMS subspecialty

The Haddon Matrix

	Human	Vehicle/Equipment	Physical Environment	Social/Economic
Pre-Crash	Poor vision or reaction time, alcohol, speeding, risk taking	Failed brakes, missing lights, lack of warning systems	Narrow shoulders, ill-timed signals	Cultural norms permitting speeding, red light running, DUI
Crash	Failure to wear seat belt	Malfunctioning seat belts, poorly engineered air bags	Poorly designed guardrails	Lack of vehicle design regulation
Post-Crash	High susceptibility, alcohol	Poorly designed fuel tanks	Poor emergency communication systems	Lack of support for EMS and trauma systems



Your Invitation
to the
OCEAN CITY MEETING
(Semiannual Meeting)
of the
MEDICAL AND CHIRURGICAL FACULTY

FRIDAY, SEPTEMBER 16, 1960—OCEAN CITY, MARYLAND

A program of interest and educational value has been planned by the Committee on Scientific Work and Arrangements, William E. Grose, M.D., Chairman.

HEADQUARTERS — COMMANDER HOTEL

SCIENTIFIC SESSION—12:30 P.M., Friday, September 16.

RECENT ADVANCES IN EMERGENCY RESUSCITATION

A symposium to be conducted by **Donald W. Benson, M.D.**, Professor of Anesthesiology, The Johns Hopkins University School of Medicine.

1. EXTERNAL CARDIAC MASSAGE AND DEFIBRILLATION.

William B. Kouwenhoven, M.D., Ph.D. Eng., Professor Emeritus of Electrical Engineering, and Lecturer in Surgery, The Johns Hopkins University.

James R. Jude, M.D., Resident Surgeon, The Johns Hopkins Hospital.

2. MODERN METHODS OF ARTIFICIAL RESPIRATION.

Paul R. Hockett, M.D., Associate Professor of Anesthesiology, University of Maryland School of Medicine.

Peter Safar, M.D., Chief of Anesthesiology, Baltimore City Hospitals, and Associate Professor of Anesthesiology, University of Maryland School of Medicine.





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Specialties & Subspecialties



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IPIP: Improving
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Dermatopathology
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Emergency Medicine

Hospice and Palliative Medicine
Medical Toxicology
Pediatric Emergency Medicine
Sports Medicine
Undersea and Hyperbaric Medicine



American Board of Emergency Medicine

Emergency Medicine

Hospice and Palliative Medicine

Medical Toxicology

Pediatric Emergency Medicine

Sports Medicine

Undersea and Hyperbaric Medicine



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**NATIONAL
EMS SCOPE
OF
PRACTICE
MODEL**

THE NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

The National EMS

Scope of Practice Model is a continuation of the commitment of the National Highway Traffic Safety Administration and the Health Resources and Services Administration to the implementation of the EMS Agenda for the Future

The National EMS Scope of Practice Model defines and describes four levels of EMS licensure:

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

*Essentially,
with a thousand hours of training,
we produce a prehospital
CRITICAL CARE TECHNICIAN
who is expected to be able
to evaluate and manage
every medical emergency
known to humans*

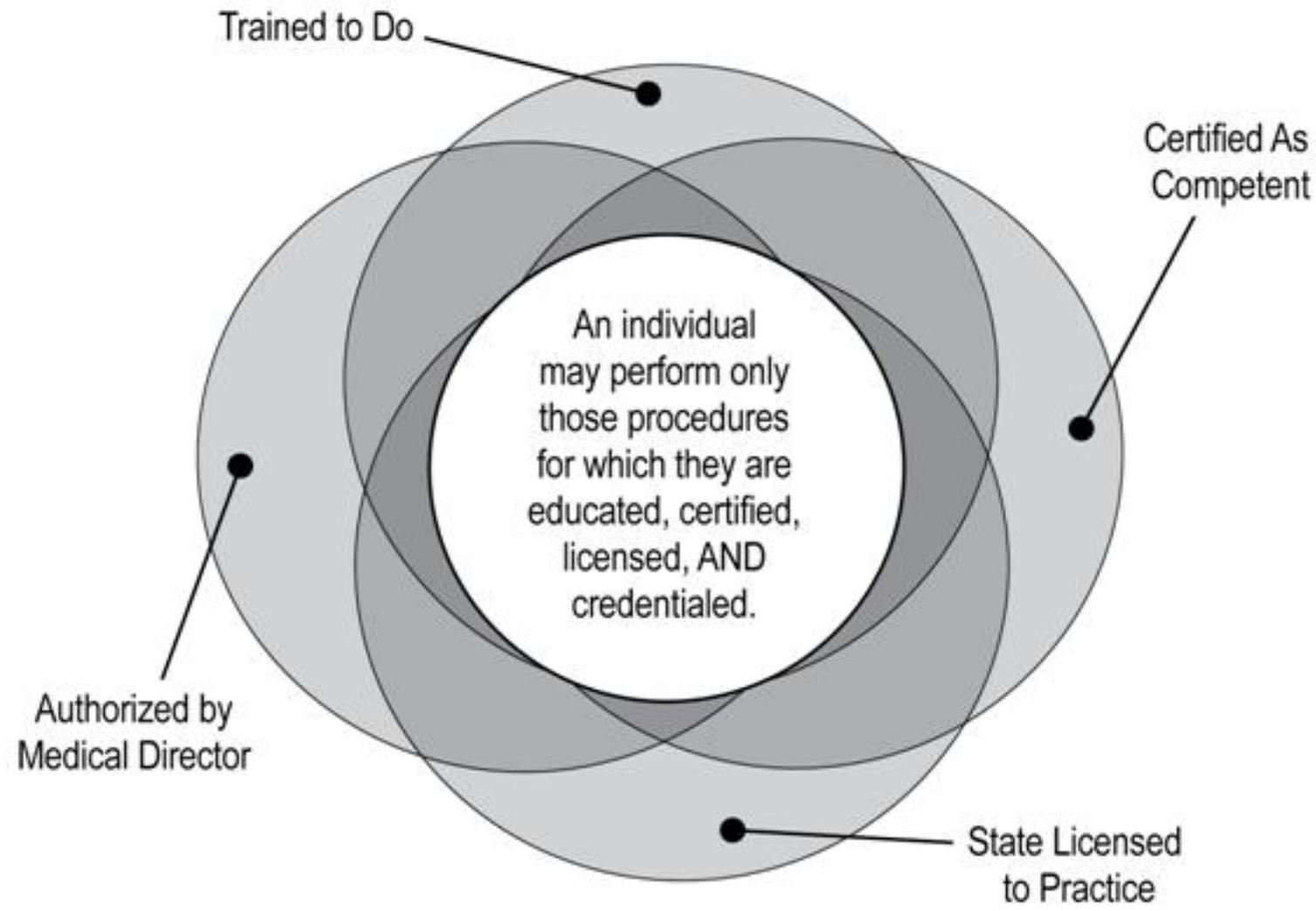
“Emergency Medical Services (EMS) of the future will be community-based health management that is fully integrated with the overall health care system.

It will have the ability to identify and modify illness and injury risks, provide acute illness and injury care and follow-up, and contribute to treatment of chronic conditions and community health monitoring.”

“This new entity will be developed from redistribution of existing health care resources and it will be integrated with other health care providers and public health and safety agencies.

It will improve community health and result in a more appropriate use of acute health care resources.

EMS will remain the public’s emergency medical safety net.”



Opportunities for
Improving ED Patient Management
through Innovative
EMS Best Practices:

- Treatment of Emergency Conditions
 - Alternative Patient Destinations
 - The Impact of NEMSIS 3.0

Treat

•Cont

ons:

ssure



Treatment of Emergency Conditions:

- Continuous Positive Airway Pressure

- DFR recurring cost for 1,200 annual uses is approximately \$60,000
- If this prevents 200 people from being intubated: >\$20 million in savings?
- Not to mention reducing morbidity and mortality....and returning taxpayers home

Treatment of Emergency Conditions:



Treatment of Emergency Conditions:

- Cardiac Arrest Management Systems

➤ “I think we should give \$50 to everyone who performs Citizen CPR or uses an automated external defibrillator.”

A.J. Heightman, Editor

Journal of Emergency Medical Services

Gathering of Eagles, 2010

Get Mail Delete Junk Reply Reply All Forward New Message Note To Do

MAILBOXES

- Inbox **2629**
- Outbox
- Drafts **5**
- Sent
- Trash
- Junk **597**
- REMINDERS
- To Do **1**
- SMART MAILBOXES
- ON MY MAC
- ecg
- friends **68**
- snerd **2**
- RSS
- Apple ... **160**

From	Subject	Date Received	Mailbox
LIFENET Notification...	LIFENET System: Alert: Report received	7/28/10 7:38 AM	Inbox - Earthlink
LIFENET Notification...	LIFENET System: Alert: Report received	7/27/10 6:34 PM	Inbox - Earthlink
LIFENET Notification...	LIFENET System: Alert: Report received	7/27/10 6:34 AM	Inbox - Earthlink
LIFENET Notification...	LIFENET System: Alert: Report received	7/25/10 12:48 PM	Inbox - Earthlink
LIFENET Notification...	LIFENET System: Alert: Report received	7/25/10 2:08 AM	Inbox - Earthlink
LIFENET Notification...	LIFENET System: Alert: Report received	7/23/10 5:02 PM	Inbox - Earthlink
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LIFENET Notification...	LIFENET System: Alert: Report received	7/23/10 4:54 AM	Inbox - Earthlink
LIFENET Notification...	LIFENET System: Alert: Report received	7/22/10 5:51 PM	Inbox - Earthlink
LIFENET Notification...	LIFENET System: Alert: Report received	7/21/10 8:12 PM	Inbox - Earthlink
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LIFENET Notification...	LIFENET System: Alert: Report received	7/10/10 8:40 PM	Inbox - Earthlink
LIFENET Notification...	LIFENET System: Alert: Report received	7/10/10 7:54 PM	Inbox - Earthlink

Name ID: Patie Incid Age:

x1.0 Phys

Alternative Destinations:

- “Get the right patient to the right place”
 - Severely over-burdened EM resources
 - Vast study resource regarding patient outcomes vs. field assessment
 - “No Apparent Life-Threatening Event” Policy (NALTE)
 - Clinics, Physician Offices
 - Alternate Transport Methods?

The Impact of NEMIC 2.0:

CARDIAC ARREST

E11_01

Data [combo] single-choice

National Element

Definition

Indication of the presence of a cardiac arrest at any time associated with the EMS event.

XSD Data Type *xs:integer* **XSD Domain (Simple Type)** *CardiacArrest*
Multiple Entry Configuration No **Accepts Null Values** Yes
Required in XSD Yes

Field Values

-25 Not Applicable	-20 Not Recorded
-15 Not Reporting	-10 Not Known
-5 Not Available	0 No
2240 Yes, Prior to EMS Arrival	2245 Yes, After EMS Arrival

Additional Information

- If answered YES, all other data points in the Situation/CPR should be addressed

Uses

- A component of the EMS Medical Record: Patient Care Report
- Allows data to be sorted based on the occurrence of a cardiac arrest
- Allows data to describe the number of cardiac arrests within the EMS patient population

Data Collector

- EMS personnel

Other Associated Elements

E00 Common Null Values E01_01 Patient Care Report Number

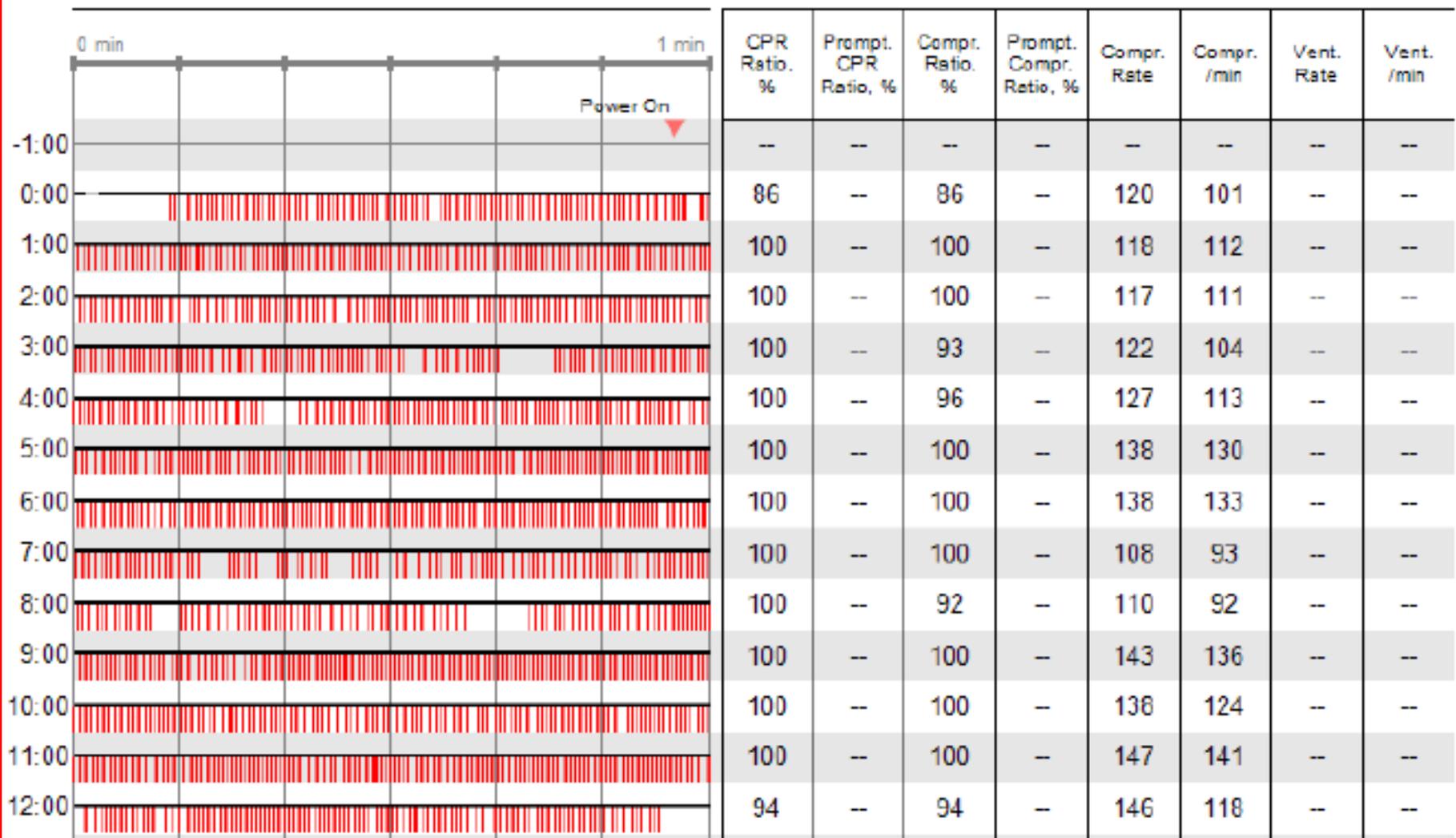
References to Other Databases

- NFIRS 5.0 EMS Module; Title: Cardiac Arrest; Pick-List: Pre-Arrival Arrest = 1, Post-Arrival Arrest = 2
- UTSTEIN Title: Confirmed Cardiac Arrests Considered for Resuscitation

The Impact of NEMSIS 3.0:

CPR QUIK-VIEW

Interval Statistics



The Impact of NEMESIS 3.0:

- Comprehensive Data Management

- Remember the shortest book ever written: “Promises Kept by Software Vendors”

- Much work remains to be done



Summary Ruminations



Summary Thoughts:

- Retooling Emergency Services

- A comprehensive system management strategy
- Targeted toward best practices
- Considering alternative destinations
- Complete data tracking through uniform datasets and electronic linking

