

### Raymond L. Fowler, M.D., FACEP

Professor of Emergency Medicine and Surgery Associate Professor of Emergency Medical Education and

Co-Chair of the Section on EMS, Disaster Medicine, and Homeland Security University of Texas Southwestern Medical Center Dallas, Texas

Chief of Operations
The Dallas Metropolitan BioTel System

Past-President
National Association of EMS Physicians

### - The Experience from war



#### SPECIAL CONTRIBUTIONS

HISTORICAL BACKGROUND TO ACCIDENTAL DEATH AND DISABILITY: THE NEGLECTED DISEASE OF MODERN SOCIETY

John M. Howard, MD

- Evolving strategies for severe trauma







- National Academy of Sciences Study
- Publication in 1966 of "Accidental Death and Disability: The Neglected Disease of Modern Society"

ACCIDENTAL DEATH AND DISABILITY: THE NEGLECTED DISEASE OF MODERN SOCIETY

Prepared by the

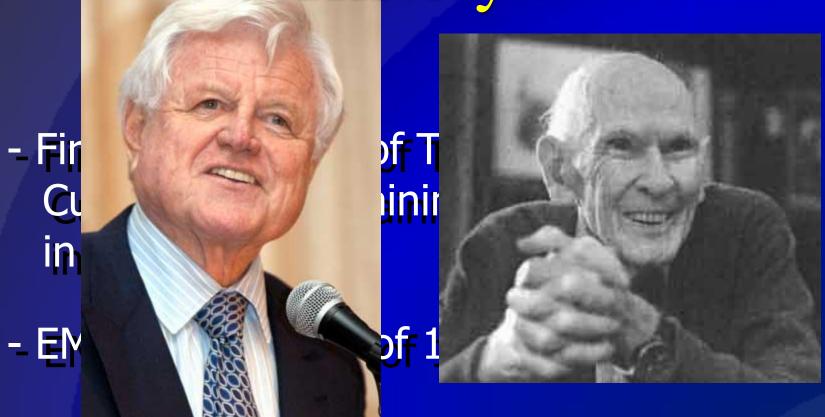
COMMITTEE ON TRAUMA AND COMMITTEE ON SHOCK
DIVISION OF MEDICAL SCIENCES
NATIONAL ACADEMY OF SCIENCES
NATIONAL RESEARCH COUNCIL



# The National Perspective Our EMS History

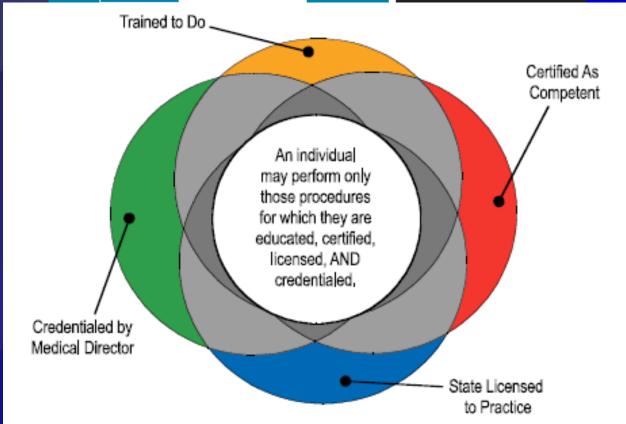


- 1966 First DOT EMS Curricula
- 1973 EMS Systems Act
- 1990's Block Grant Funding
- 1996 EMS Agenda for the Future
- 2000's Scope of Practice Project
- 2007 Ad infinitum
  - Subspecialty Efforts



# "We must stop responding to calls that we can prevent" -M. Zavadsky





INISTRATION



David C. Cone • Robert E. O'Connor • Raymond L. Fowler

#### **EMERGENCY MEDICAL SERVICES**

**Clinical Practice and Systems Oversight** 

Jon Krohmer Ritu Sahni Brian Schwartz Henry E. Wang **EMERGENCY MEDICAL SERVICES** 

Systems Oversity

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**EMERGENCY MEDICAL SERVICES: CLINICAL PRACTICE AND SYSTEMS OVERSIGHT** 

David C. Cone • Robert E. O'Connor • Raymond L. Fowler

#### **EMERGENCY MEDICAL SERVICES**

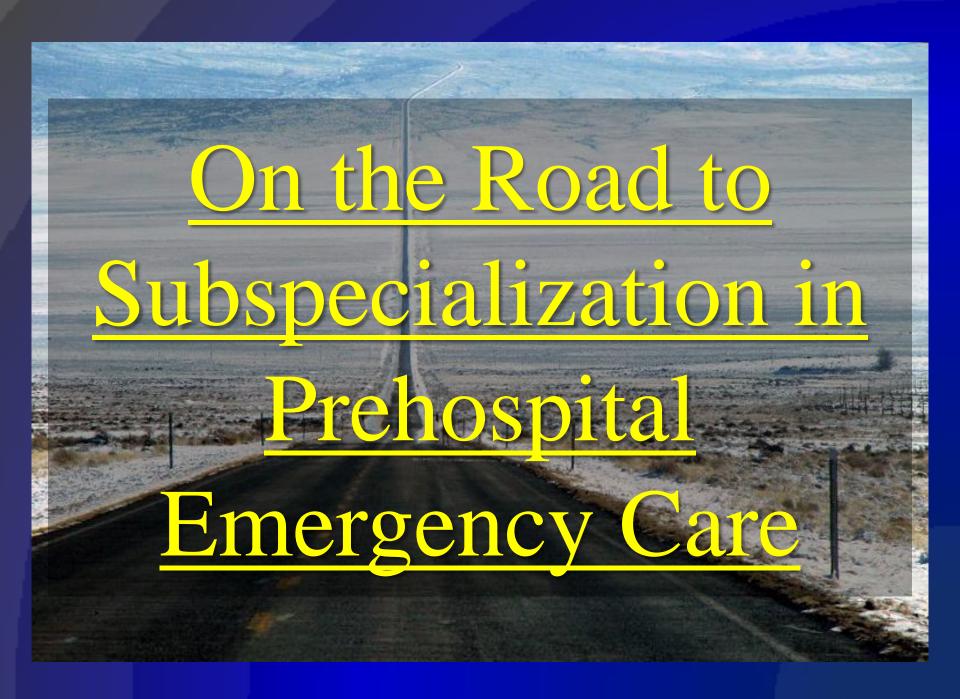
**Clinical Practice and Systems Oversight** 

KENDALL HUNT PROFESSIONAL





Jon Krohmer Ritu Sahni Brian Schwartz Henry E. Wang



General Certificate(s) Subspecialty Certificates American Board of Medical Genetics American Board of Allergy and Immunology Clinical Blochemical Genetics Medical Blochemical Genetics4 Allergy and Immunology Clinical Cytogenetics Molecular Genetic Pathology Clinical Genetics (MD) American Board of Anesthesiology Clinical Molecular Genetics PhD Medical Genetics Anesthesiology Critical Care Medicine Hospice and Palliative Medicine 1 American Board of Neurological Surgery Pain Medicine Neurological Surgery American Board of Colon and Rectal Surgery American Board of Nuclear Medicine Colon and Rectal Surgery American Board of Dermatology American Board Dermatology Clinical and **Immunology** of Medical Specialties Dermatopat Critical Care Medicine Pediatric De Gynecologic Oncology Hospice and Palliative Medicine 1 American Board of Emergency Medicine Maternal and Fetal Medicine Higher standards. Better care.® Reproductive Endocrinology/infertility Emergency Medicine Hospice and Medical Tox Pediatric Emergency Medicine American Board of Ophthalmology Sports Medicine Undersea and Hyperbaric Medicine Ophthalmology American Board of Family Medicine American Board of Orthopaedic Surgery Adolescent Medicine Family Medicine Orthopaedic Surgery Orthopaedio Sports Medicine Surgery of the Hand ABMS Member Boards American Board of Internal Medicine aysicians in more Internal Medicine Ities and subs Dermatopathology Interventional Cardiology Forensic Pathology Medical Oncology Nephrology Hematology Pulmonary Disease Medical Microbiology Rheumatology Molecular Genetic Pathology Sleep Medicine Neuropathology Sports Medicine Pediatric Pathology

Transplant Hepatology

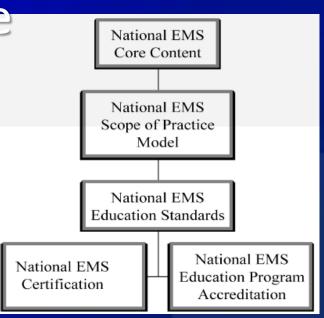
## Subspecialty Update

- PEC editorial July 2005
- Committee in place since at least 2001
- Draft submitted to ABEM in October

Meeting with ABEM here







# Subspecialty Eligibility <u>DRAFT IDEAS</u>

#### Practice Pathway Options —

- Will "sunset" 5 to 7 years after approval

#### What will "EMS practice" be?

- Who will decide if you qualify?

#### Training Pathway

- The only option after practice options sunset
- Completion of an ACGME-accredited fellowship in EMS

## Other Subspecialty Issues

- -Approaching Accreditation Council for Graduate Medical Education (ACGME) regarding credentialing of fellowship programs
- Writing a credible, defensible test
- Funding the test-writing effort
- Maintenance of certification
- ...and many others

### Final Exam!

A sneak peek at some of the questions being formulated for the ABEM exam...

## Question 73: Operations

How many D batteries fit in a full-size Mag-Lite<sup>®</sup>?



## Question 145: History of EMS

- Describe, in twenty words or less, the contributions of each of these EMS giants:
  - Ronald D. Stewart
  - R Adams Cowley
  - Sandy Kuehl



# The Path to Success as a Sub-Specialty

# To overcome barriers, organizations need measures for three purposes:

- 1. Strategic to drive strategies into action and change the organizational culture
- 2. Diagnostic to evaluate the effectiveness of these actions and the extent of change
- 3. Operational to improve continuously

  Castaneda-Mendez



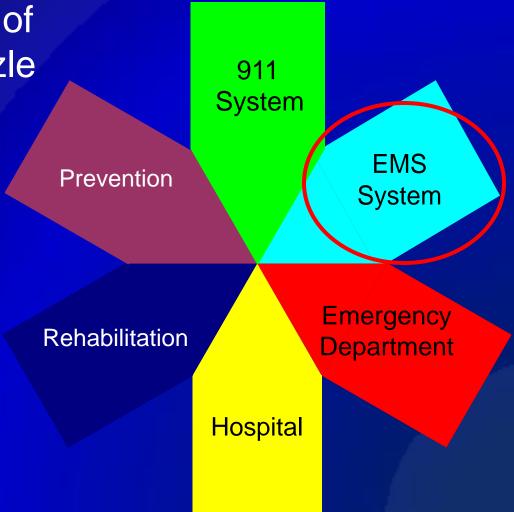


"The external validation of a subspecialty status gives EMS the proper focus."

Jeff Goodloe

## Where We Need to Be

 EMS is one piece of a health care puzzle



"ABMS recognition of EMS as a subspecialty will unlock resources to improve EMS at every level, benefiting EMS providers, researchers, and most of all...patients."

Bob Suter

"EMS delivery requires collaborative efforts of many health care providers. The promotion of science in an environment that requires collaboration is necessary to apply the art of medicine."

Bill Brown

"How much capacity
do you have?
One doctor has enormous
capacity to affect
underserved markets."

Kelly Curry

# "It's much more efficient for SOMEBODY to be an expert on something."

A.J Heightman

# BLS IS ALS

# Basic Life Support

- •AED
- •CPAP?
- •12 Lead transmission
  - •MAD Narcan?
    - •Albuterol?
      - •ASA
      - •NTG
  - •King Airways?

# Or maybe...

# ALS IS BLS

"Now that we're pushing all of these skills to Basic providers, EMS Medical Direction of BLS Systems is more important than ever."

A.J Heightman

# HOUSE

# Manpower Redeployment and Maximization

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"What Brent Myers and Dave Kesig are demonstrating is the future of prehospital medicine, adding to the career rung for so many providers"

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#### 2009 EAGLES PRESENTATION

Development and Perception of an

EMS Social Service Referral Program in an Urban Fire Based EMS System



"It's my dream every cab would have an AED AND give a \$100 bonus to the first person on the chest in a cardiac arrest."

A.J Heightman

expert sellen 1/16/09 Cangleton - bild ilse on? you low Alberten & House -"Ithough it such leaves to want a trito logi love of Orgylle - Money to only emosts > Trint Sin Aguacient! Wo strate round ETA415 Leh Allery and her sel Howell thete Towner, Diot of all 540 DB water, He's Amly Alerty Dyrum, NES, 3+lh B.S. - biltulager BP-140/80 P-110, mg 300 22 Atta, Spi 0550 PMO, SP 140/50, New Lob new Dei- No 1 to clarges order falt byweeds Any pain: No pain Monto 2 lend - ST 2110/ is an syr bie Albited byncho done Tress Capus - 25 (NEPORT? "Low") My injurement? No Whol so

Scene Survey/Mechanism/# pts.

LOC/Airway/Cspine

**Respiratory Rate and Labor** 

Pulses R & Q, N & W
Skin CMT/CRT/External Bleeding

Neck appearance, JVD, Trachea

Chest appearance, BS, HT

Quick survey of abdomen, pelvis, extremities, and back

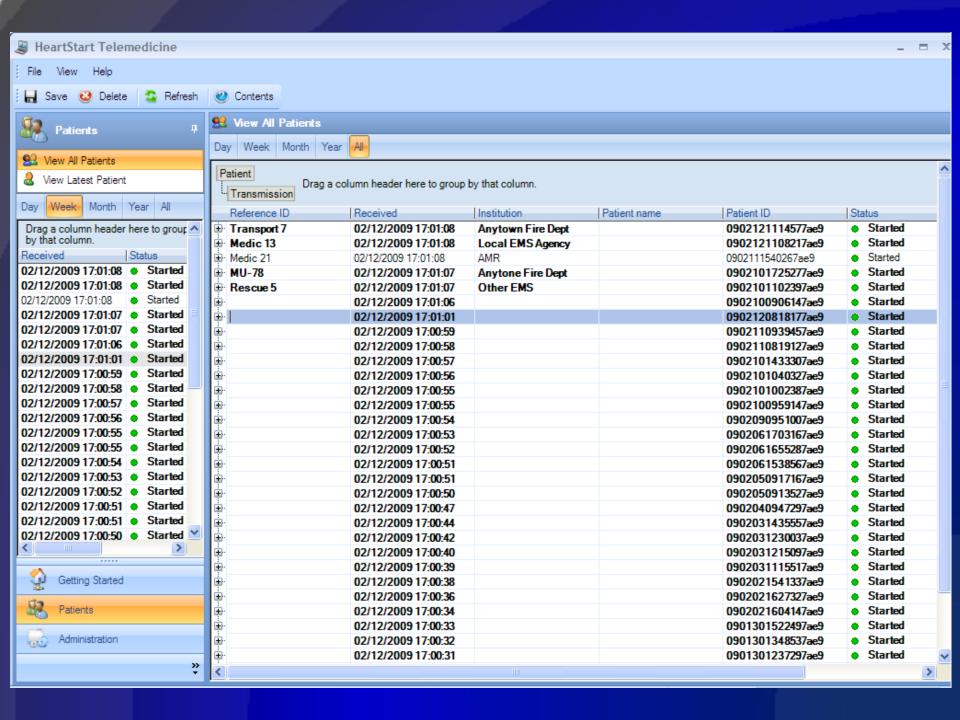
# Central Cyanosis

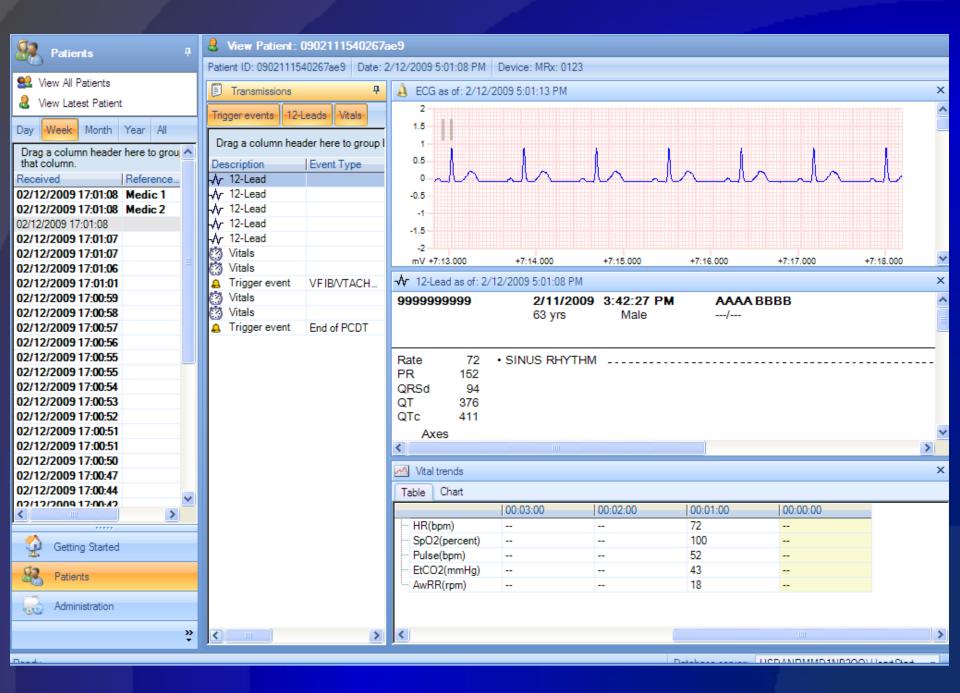




Capnography is the window into preventing overventilation

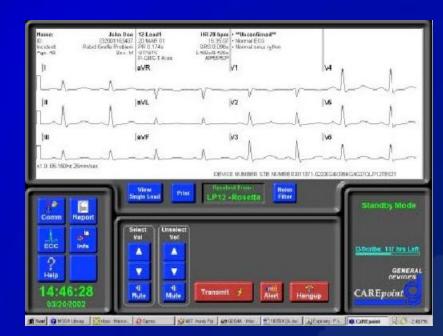




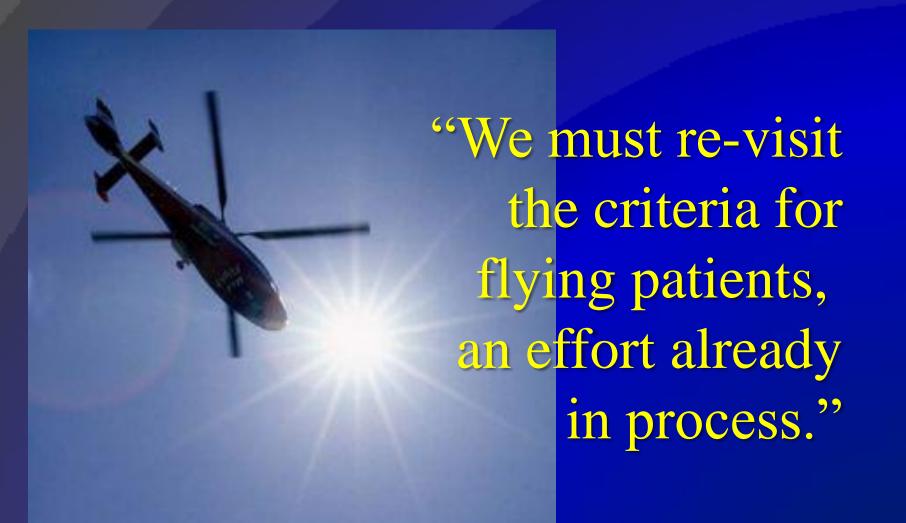












A.J Heightman



#### Multivariate Predictors of Failed Prehospital Endotracheal Intubation

Henry E. Wang, MD, Douglas F. Kupas, MD, Paul M. Paris, MD, Robyn R. Bates, MS, Joseph P. Costantino, DrPH and Donald M. Yealy, MD

From the Department of Emergency Medicine, University of Pittsburgh School of Medicine (HEW, PMP, RRB, DMY), Pittsburgh, PA; the Department of Emergency Medicine, Geisinger Health System (DFK), Danville, PA; and the Department of Biostatistics, Graduate School of Public Health, University of Pittsburgh (JPC), Pittsburgh, PA.

Of 61 factors potentially related to ETI failure, multivariate logistic regression revealed the following significant covariates associated with ETI failure (odds ratio; 95% confidence interval; likelihood ratio p-value):

```
intravenous access established prior to ETI attempt
(3.180; 95% CI = 1.640 to 6.164; p = 0.0005);

increased weight (ordinal scale)
(1.555; 95% CI = 1.242 to 1.947; p = 0.0001);

electrocardiographic monitoring established prior to ETI attempt
```

(0.199; 95% CI = 0.084 to 0.469; p = 0.0003).



"EMS providers in this study were able to place the King LTS-D as a primary airway in RSI patients with a high degree of success." (Recommends larger, multicenter randomized trial)



SEARCH NEMSTS

National EMS Information System (NEMSIS) Helping Unify EMS Data

The Project

**Compliant Software** 

Support

**Software Developers** 

Reference Materials

Home > Support > Dataset Dictionaries

#### **Dataset Dictionaries**

20-Sep-2007



The NEMSIS NHTSA Version 2.2.1 DataDictionary provides

over 400 definitions that

can be implemented by an EMS system.



be collected for the National EMS Database, but additional data elements should be considered for

use at the state and local levels depending on each state or local EMS system's need.





## The National EMS Information System

A Standardized Dataset of over 400 data elements

SEARCH NEMSIS:



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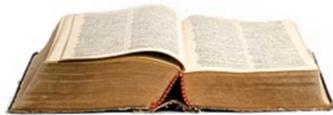
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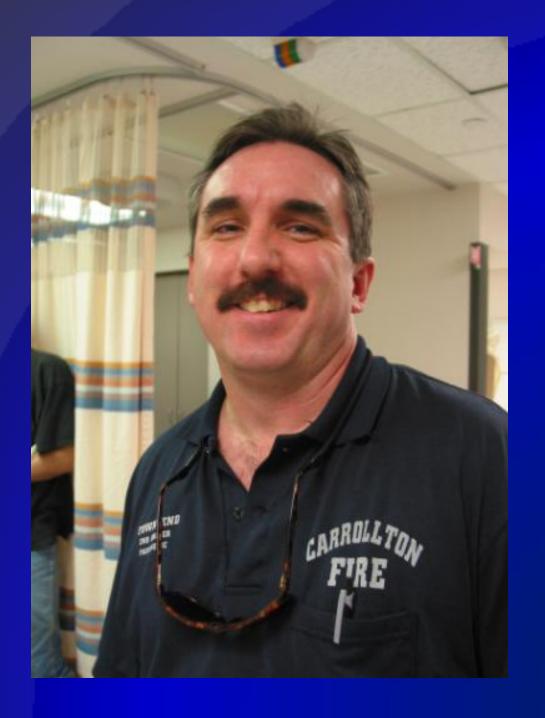
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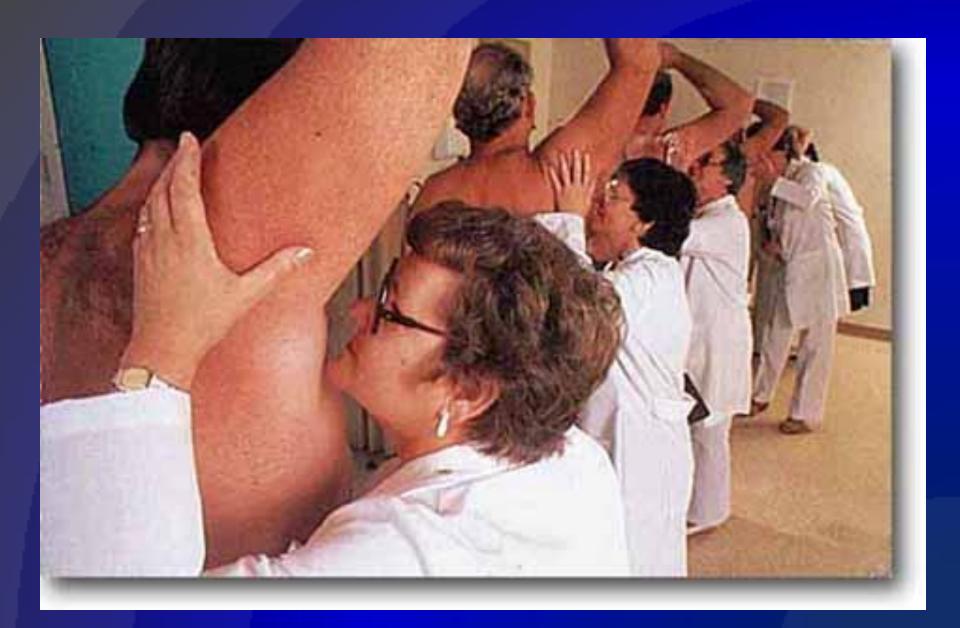
can be implemented by an EMS system.

#### National data elements are defined that should

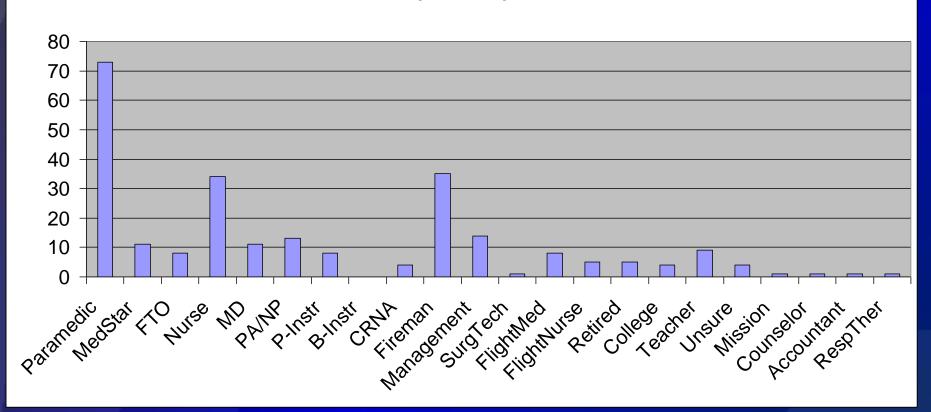
be collected for the National EMS Database, but additional data elements should be considered for use at the state and local levels depending on each state or local EMS system's need.







#### 5 Year Future Plans for MedStar Interviewees (N = 189)



We have to face the fact that medics in many cases, perhaps most cases, will be "passing through" the field enroute to other careers, or parallel careers



Emergency Medical Services (EMS) companies throughout Pennsylvania are severely understaffed, some dangerously close to not being able to quickly respond to 9-1-1 calls!!!

### Recruitment and Retention of Personnel: State of Minnesota, 2001 to present

#### **Barriers to Recruitment and Retention**

- \* Nature of the work
- \* Changing demographics
- \* Selective volunteerism
- \* "Invisibility" (the effects of HIPAA)
- \* Time and training demands (Initial and CE)
- \* Ongoing training ("too much")
- \* High stress and menial tasks
- \* Fear of errors
- \* The need for high quality Medical Direction
- \* Employment concerns
- \* Compensation (no pay to \$20/run to \$12/hour)
- \* Retirement



• • •

Choosing EMS as a Profession



# Where will we find them?



## High Schools Churches Volunteer groups Colleges Vocational Technical Schools Public call to service •Fire agencies Other municipal firms

"I think we should create a whole career track where after five years, the paramedic is guaranteed a slot in medical school, followed by a residency program in emergency medicine. It's career progression."

Bruce Dubin, DO, JD Associate Dean for Academic Affairs University of North Texas Health Science Center

# What do I Think is Our Future?

- Standards for Credentialing
- •National Registry Certification
  - •NEMSIS Data Tracking
  - Progressive State Standards
- •Closer Communication for Progress
  - Certification for EMS Physicians

# Credentialing is the Key to Success

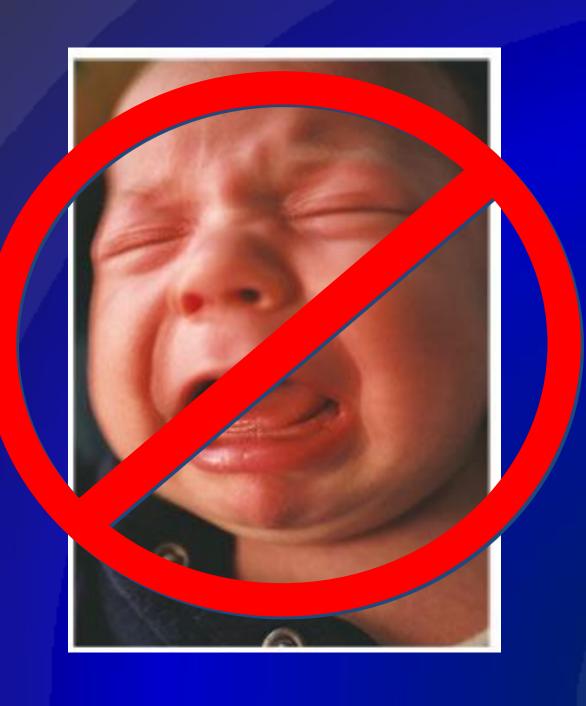






## The End of the Beginning

- •Innocence is over
- •We are COMPLETELY accountable for what they do
- Becoming a subspecialty requires us to maintain a rigorous standard
- •EMS is ONLY and ALWAYS about patient care



## My thoughts for progress...



We must take an oath,
of commitment,
as a group, on our honor





# Thank you for your Kind Attention!

