The Importance of Selective Recruiting

Finding the Most Qualified Applicants
Raymond L. Fowler, M.D., FACEP
Associate Professor of Emergency Medicine, Surgery, and Allied Health
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 Objective Questions:

1. The complexity of EMS and the medical risks of bad hiring practices.

2. What risks are borne by EMS agencies and providers?

3. The growing funding dilemma

4. Give examples of recruitment and retention best practices
# The Now Issues

<table>
<thead>
<tr>
<th>Clinical</th>
<th>Administrative</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Patient Assessment</td>
<td>• Finding Staff</td>
</tr>
<tr>
<td>• Airway</td>
<td>• NEMSIS</td>
</tr>
<tr>
<td>• ET Intubation</td>
<td>• Credentialing Online</td>
</tr>
<tr>
<td>• The &quot;Smart Bag&quot;</td>
<td>• ePCR</td>
</tr>
<tr>
<td>• The &quot;rescue airway“</td>
<td>• Non-transport</td>
</tr>
<tr>
<td>• Capnography</td>
<td>• Statewide Protocol Set</td>
</tr>
<tr>
<td>• Avoiding overventilation</td>
<td>• Standard Treatment List</td>
</tr>
<tr>
<td>• CPAP</td>
<td>• Holding the wall</td>
</tr>
<tr>
<td>• ResQ Pod??</td>
<td>• Diversion</td>
</tr>
<tr>
<td>• Intraosseous</td>
<td>• House call?</td>
</tr>
<tr>
<td>• 12 Lead ECG</td>
<td>• Research</td>
</tr>
<tr>
<td>• ECG Transmission?</td>
<td>• Distributive learning</td>
</tr>
<tr>
<td>• Hypertonic Saline</td>
<td>• Preparedness</td>
</tr>
</tbody>
</table>
The three great risks

Airway Management
Safe Driving
Non-Transport
The acutely ill patient is a helpless example of the lives that we have sworn to serve.
...and remember...

...medics take an oath, on their honor...
An immediate response is required to problems found in the primary and secondary survey.
For example, an obstructed airway can bring death in a matter of a couple of minutes.
As we assess patients, we must quickly determine fundamental parameters of their respiratory and circulatory status using standardized examination practices.
The medical and ethical performance of EM professionals has never been more important than it is today.
This is a profession and a specialty:

Emergency Medical Services
The End of the Beginning

• Innocence is over
• They are COMPLETELY accountable for what they do
• Becoming a professional requires them to always be able to explain their actions
• EMS is ONLY and ALWAYS about patient care
Part of professional excellence is performing superior medical histories and physical exams.
Approaching the Patient
“See what you see!"

“People look, but they don’t see”

...A. Fowler, Jr.
Alertness?  
Level of distress?  
Noises?  
Respirations?  
The pulse rate?  
Skin?  
Obvious things (bleeding)
The “art” of medicine is missing from so many practitioners...

...are they not looking, or have they lost interest?
History Taking:

This seems to be a "lost black art" for so many medical providers — what happened? — when? — LOC? — major system symptoms? — co-morbid conditions?

Above all: RISK???
Duck!
Thoracic Aneurysm
Medics, by and large, are not necessarily good "assessors" of risk to the patient, to themselves, and to the service.

They've never been sued before.
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
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, and extremities

Reveals threats to Basic Physiology

. . . the vital elements of the Primary Survey
Possible airway problem?
Short of Breath
Ruptured Diaphragm
Shock
Blood pressure = Cardiac output \times Peripheral resistance
Blood pressure =

Pump x fluids x pipes
What does a low blood pressure mean?

Either...

Or a combination of any of these:

• Loss of volume
• Low cardiac output
• Increased vascular space
Signs of Shock

Early

Weak, thirsty, lightheaded
Pale, then sweaty
Tachycardia
Tachypnea
Diminished urinary output

Late

Hypotension
Altered LOC
Cardiac arrest
Death
Shock

Cardiogenic
- Rapid pulse
- Distended neck veins
- Cyanosis

Volume Loss
- Rapid pulse
- Flat neck veins
- Pale

Vasodilatory
- Variable pulse
- Flat neck veins
- Pale or pink
Central Cyanosis
What all could be wrong?
Capnography and EMS
Oxygen -> lungs -> alveoli -> blood

breath

CO₂

lungs

CO₂

blood

energy

Oxygen + Glucose

cells

muscles + organs

Oxygen

Physiology
Capnography is the window into preventing overventilation.
Do YOUR medics make a judgment as to how fast to bag your patients who are critically ill?
Non-transport decisions:

One of the great risks
EMS No Load
Paint Gun
When the patient is not transported, all control is lost.
Seat Belts Save Lives
A public health opportunity
The increasing menace of terrorism and the need for continued preparedness
Selection of personnel based upon skill sets
6.4 Million Patients (USA)

Patients that need IVs = 11,850,000

- Easy: 8,058,000 (67.4%)
- Difficult: 2,014,000 (17%)
- Impossible: 1,778,000 (15%)

IV Problems = 3,792,000 Patients
So, we can now get vascular access on almost anybody... at a price, though.
Airway Management

Ruminating on a tough subject
How do we find providers who can manage such a condition? Especially if they never had any OR training under the guidance of a skilled intubator? Is mannequin training enough?
What are the problems?

1. The Unprepped Airway
2. Never got good initial training
3. Deteriorating Skills
4. Patient Criticality
5. The Physiology of the Positioning of the Head
What did Wang find?

Intubation in the hands of many EMS professionals:

1. Over-manipulates the airway,
2. Causes aspiration
3. Causes prolonged hypoxia
4. Is a route for overventilation
5. Increases mortality 30% in TBI Patients
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. Vealy, 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):

- **Presence of clenched jaw/trismus**
  
  (9.718; 95% CI = 4.594 to 20.558; p < 0.0001);

- **Inability to pass the endotracheal tube through the vocal cords**
  
  (7.653; 95% CI = 3.561 to 16.447; p < 0.0001);

- **Inability to visualize the vocal cords**
  
  (7.638; 95% CI = 3.966 to 14.707; p < 0.0001);

- **Intact gag reflex**
  
  (7.060; 95% CI = 3.552 to 14.033; p < 0.0001);

- **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).
Airway

The King LTS-D
Something New In Prehospital Care

Paramedics and flight nurses have begun using portable ultrasound machines. These machines allow detection of blood in the abdomen of trauma patients, evaluation of cardiac motion in critical patients, and detection of pregnancy.

Learn the basics of ultrasound and find out how these devices can be used in the field and in the emergency room.

About the Author

BRINGING ULTRASOUND TO EMS

EMS Ultrasound
Second Edition
by Dave Spear, M.D., F.A.C.E.P.
ISBN# 0-9707677-2-2
Internal Jugular Vein
Paramedics not always the saviors of cardiac-arrest patients

By Robert Davis, USA TODAY

JENKS, Okla. — At first, the regulars in the Homestead Diner thought Bill Twilley was joking when he hit the floor after taking his seat. It was, after all, April Fools Day. And it was, after all, Bill.

Some EMS systems are finding that more paramedics don’t necessarily equate to better survival for cardiac arrest patients.

By Jack Gruber, USA TODAY
What, can't handle a little head trauma?

SUZUKI
## Suspension of Diverts 01:25

Status as of: 21 Feb 2005 21:41:50

<table>
<thead>
<tr>
<th>Region</th>
<th>Resource</th>
<th>Last Update</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>East Trauma Centers</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baylor University MC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children's Medical Center Dallas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methodist Dallas MC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parkland</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>East Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baylor Garland</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baylor Irving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dallas VA Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor's Hospital of Dallas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Las Colinas MC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC Mesquite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC Terrell</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical City Dallas Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mesquite Community Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presbyterian Hospital of Dallas</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presbyterian Hospital of Greenville</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presbyterian Hospital of Kaufman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RHJD Memorial MC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Saint Paul University Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>South Region</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baylor Medical Center of Waxahachie</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ennis Regional Medical Center</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lake Pointe MC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC Lancaster</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC Plano</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Center of McKinney</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Methodist Charlton MC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navarro Regional Hospital</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presbyterian Hospital of Allen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presbyterian Hospital of Plano</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richardson Regional MC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Resource Alerts

- **Open**
- **Close**
- **Out of Service**
- **Expected Return**
- **Full 4 Med/Surg Beds Available**
- **No ICU Med/Surg Beds Available**
- **Tele Alert**
- **Med/Surg Alert**
- **ICU Alert**
- **Telemetry Bed Alert**
- **No Neuro Coverage** (for CVA's, seizures, altered mental status of undetermined cause)
- **Alert**

### Resource Status

- No Med/Surg beds available
- No ICU beds available
- Tele Alert
- Med/Surg Alert
- ICU Alert
- Telemetry Bed Alert
- No Neuro Coverage

### Emergency Dept Status

- Open
- Reserve
- Close
- Expected Return
- Out of Service
Train hits ambulance, killing 3 paramedics

Sunday, February 20, 2005 Posted: 7:46 AM EST (1246 GMT)

LITTLE ROCK, Arkansas (AP) -- A train slammed into an ambulance that apparently tried to get out of its path, but stopped at a rail crossing, killing all three paramedics on board. The patient in the vehicle survived, officials said.

Paramedics Jeff Ferrand, 37, and John Rock, 23, died at the scene Saturday after the Union Pacific train hit the front end of the ambulance, spinning it around and ejecting the emergency workers.

A third paramedic, Christopher Klingan, also 23, was taken to a hospital but later died, officials said.

"Perhaps the driver saw the train coming and tried to get back, because a matter of two or three feet and there would not be an accident," Arkansas State Police Cpl. Darren Neal said.

Neal said the driver apparently decided he couldn't make it across the county road crossing in rural Fulton, backed up and came only a few feet from getting out of the train's path.

The ambulance was carrying a woman, Charlene Gayton, who had suffered a heart attack or a stroke. She was not hurt in the wreck, and remained in stable condition.
U.S.

Ex-husband suspect in killing of emergency crew

Paramedic's former husband committed suicide

Sunday, April 4, 2004 Posted: 10:40 AM EDT (1440 GMT)

EDWARDSVILLE, Kansas (AP) - An emergency medical technician and a paramedic were shot to death early Saturday in an apparent ambush, authorities said. The paramedic's ex-husband, who was a suspect in the murders, apparently committed suicide later, authorities said.

Authorities found the two medics -- Tye Brown, 31, and Katherine Malone, 30 -- dead at a fire station shortly after midnight, said Eric Dooley, a spokesman for Metropolitan Ambulance Service Trust, an ambulance service for the two-state Kansas City area.

The pair, who lived together, had been shot multiple times, said Kansas City, Kansas, police Capt. John Gosgrove said.
Though the modern EMS system was instituted and funded in large part by the federal government through the Highway Safety Act of 1966 and the EMS Act of 1973, federal support for EMS agencies declined precipitously in the early 1980s.

Since that time, states and localities have taken more prominent roles in financing and designing EMS programs. The result has been considerable fragmentation of EMS care and wide variability in the type of care that is offered from state to state and region to region.

Institute of Medicine Report on EMS 2007
# The Now Issues

## Clinical
- Patient Assessment
- Airway
- ET Intubation
- The "Smart Bag"
- The "rescue airway"
- Capnography
- Avoiding overventilation
- CPAP
- ResQ Pod???
- Intraosseous
- 12 Lead ECG
- ECG Transmission?
- Hypertonic Saline

## Administrative
- Finding Staff
- NEMSIS
- Credentialing Online
- ePCR
- Non-transport
- Statewide Protocol Set
- Standard Treatment List
- Holding the wall
- Diversion
- House call?
- Research
- Distributive learning
- Preparedness
Six minutes to live or die

Only strong leaders can overhaul EMS

By Robert Davis, USA TODAY

BOSTON — When Bobby Lie’s heart stopped and he fell to the floor of his downtown high-rise office, Mayor Thomas Menino saved his life.

The mayor didn’t rush to his side; a security guard did that. But emergency medical officials say Menino’s leadership and his efforts to involve the community in saving lives changed the way Boston responds to such situations. Those changes saved Lie (pronounced LEE) and about 200 others over the past decade.

Powerful, proactive city leadership can turn a sluggish emergency medical system into a highly effective one, a USA TODAY study shows. The 18-month investigation, which included a survey of medical directors in the nation’s 50 biggest cities, database analyses and extensive interviews and site visits, shows most big-city EMS systems are fragmented and slow, and as a result they lose about 1,000 lives a year that could be saved.

But even an old city with complex problems can have a top-performing emergency medical system if city officials are forceful and committed. Boston is a case in point.
Ambulance service funding comes from five major sources:

- Medicare reimbursement
- Insurance coverage
- Private- or self-pay
- Medical Assistance
- Contract services.

Medicare is the largest of these, representing about forty percent of ambulance service revenue.
Medicare has since its creation in 1965 been the American government's second-largest social program – trailing closely behind Social Security.

The origin of the system can be traced back to the 1960s, when President Lyndon B. Johnson declared the nation's "War on Poverty".

http://www.janhoo.com/skole/university/medicare.html
“In 1965, Medicare was predicted to cost $26 billion in 2003; the actual cost that year was $245 billion. Medicare’s unfunded liability currently hovers around $40 trillion.”
The trustees estimate the fund for hospital bills in the Medicare program will run dry by 2019, seven years sooner than predicted last year, largely thanks to the new Medicare bill.

*Medicare has begun dipping into its trust fund for the first time*

http://www.janhoo.com/skole/university/medicare.html
"Medicare's own trustees have confirmed what taxpayer advocates warned about all along."

John Berthoud, President, National Taxpayers Union
"A 35 percent increase in the drug plan's 10-year cost estimate, mounting evidence that employers will dump seniors' private coverage, and now [the] trustees' report all add up to an economic doomsday scenario that thoughtful policymakers can't ignore any longer."

John Berthoud, President, National Taxpayers Union
“Medicare's finances have ‘taken a major turn for the worse,’ according to the (Medicare) trustees' report (2004).

The seven-year adjustment is the largest lurch toward projected insolvency in the program's 39-year history. “

“Congressional efforts to reduce health care costs are failing miserably, meaning higher premiums for Medicare patients in the near future.”

Moreover:

Most experts agree that there appears to be a national trend toward decreasing volunteerism and an increase in EMS personnel seeking paid 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!!!

To make a direct appeal to Pennsylvanians, asking them to consider EMS as a career choice.
The Minnesota Study

http://www.health.state.mn.us/divs/chs/rhpc/cah/rasstudy.htm
59% volunteers
25% are full-time paid
BLS avg 20, mostly volunteer
ALS avg 39, ¾ paid
Rural 77% volunteer
Urban 54% paid

2/3 medics male
41% female in rural EMS
20% female in urban #MS
18 – 70+ years
Most 20 – 50
Rural more likely >40 yo
Paid staff less time on job
Rural staff more time on job
Recruitment and Retention of Personnel: State of Minnesota, 2001 to present

EMTs and paramedics were asked why they volunteer, how they view their work, as well as future involvement

* 36 percent wanted to help people or their community

* 32 percent expressed a previous or current interest in medicine.

* A sense of community pride and civic responsibility were clear.

* Ninety-one percent of case study respondents agreed that being on the ambulance service was a good use of their time.
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
Recruitment and Retention of Personnel:
State of Minnesota, 2001 to present

Quality of Ambulances / Facilities

* Air Quality
* Training facilities
* Sleeping quarters
* Hazards
Recruitment and Retention of Personnel:
State of Minnesota, 2001 to present

Hazards

* Methamphetamine labs
* Blood borne pathogens
* Lack of protective clothing and equipment
* “Antique” PPE
* Chemicals carried by trucks and trains
3. *August 07, Monterey County–Herald (CA)* — **Gas line puncture forces evacuation.** A construction crew trying to replace a power pole Monday, August 6, in Salinas, CA, instead struck a gas line that forced the evacuation of residents from a nearby apartment complex. A three–person crew from Baron Construction of Atascadero punctured the three–inch gas line when a worker tried to drill a hole to replace the pole near 16 Natividad Road. Officers knocked on the doors of about 15 apartments to evacuate the residents while the gas spewed. Homes on Natividad between Bernal and Sorentini drives were also evacuated. Traffic in the area of Natividad Road was diverted to other streets while PG&E fixed the leak.  

4. *August 06, KULR–8 TV (MT)* — **Chemical fire causes evacuations.** A truck carrying hazardous material prompted an evacuation Monday, August 6, in downtown Billings, MT. The Billings Fire Department says a truck carrying the highly flammable chemical xylene caught fire. That fire was put out, but not before many residents were forced to leave their homes. The evacuation was done by using a reverse 911 method. Any structure within a quarter mile of the blaze was alerted of the threat and told to quickly evacuate.  
PYOTE, Texas (AP) -- A medical helicopter crashed early Sunday en route to a hospital and killed four people, including the 3-month-old patient and his mother, both of whom were Mexican.

A nurse was critically injured in the crash near Pyote, said CeCe Wilmes, head of emergency services at Medical Center Hospital in Odessa, where the helicopter was based. The crash site is about 40 miles (64 kilometers) southwest of Odessa.

The baby was having trouble breathing and was being taken from a hospital in Alpine in southwest Texas to University Medical Center in Lubbock, Wilmes said.
Ambulance crew members shot dead in Kansas

Saturday, April 3, 2004 Posted: 12:03 PM EST (1703 GMT)

(CNN) -- An emergency medical technician and paramedic were shot dead early Saturday in Kansas, just outside of Kansas City, police said.

"We did have a double homicide in Edwardsville, male and female," said Angela Carrillo, a dispatcher for the Kansas City Police Department. She said the two were shot at 12:20 a.m. as they were sitting at their staging post at the fire station in Edwardsville, awaiting calls.

A suspect has been identified but is not in custody, police said.

The victims, a 30-year-old woman and a 33-year-old man, were employees of the Metropolitan Ambulance Services Trust and lived in Shawnee, Kansas.

Their identities have not been released.
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.
Our planning, as recruiters and staffers, is to realize that this fact must not be treated as a weakness but rather as a strength.
“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
Where will we find them?
High Schools
Churches
Volunteer groups
Colleges
Vocational Technical Schools
Public call to service
Fire agencies
Other municipal firms
The Entry Level Process
Aptitude
Question: Should someone be recruited to EMS in the absence of aptitude?
EMS is, after all, a great deal about critical care medicine.
Given the topics discussed, how indeed do we determine aptitude?
...given a high school education, and a modest number of additional hours?
Just how much professionalism can we expect from a minimum wage or volunteer provider?
Not honor....
McKinney firefighter charged in morphine theft

12:11 AM CST on Thursday, January 12, 2006

By STEVE STOLER / WFAA-TV

A McKinney firefighter accused of stealing morphine and a sedative out of ambulances and replacing them with water was placed under arrest and fired Wednesday after police said he confessed to the crime.

Fire administrators sent vials and syringes to a lab to be tested after they found 49 had their tampered proof seals broken into. Initial results showed that nine out of ten of the vials and syringes tested had had their medicinal contents exchanged with saline or water.

"They realized immediately they had a problem," said Randy Roland, with the McKinney Police Department.

The McKinney Police Department was contacted after the discovery and the Federal Drug Enforcement Agency and Texas Rangers helped investigate the case.

Police said Mark Hemphill, a firefighter paramedic, confessed to the theft and his own personal use of drugs.

"He indeed replaced the morphine...with water and had used the morphine on himself," Roland said.

Authorities said there is no evidence that patients received water instead of medicine.

"If a patient was to receive water instead of morphine that could certainly enhance the crime," Roland said.
A Plea for Background Checks
Medics can’t just start working!
The credentialing process is very similar to that in hospitals.
A Model of Hiring Excellence
MedStar Ambulance Service

Fort Worth, TX
MedStar Ambulance Service
A Novel Service
Staffing:

- Basic EMT
- EMT-I
- Secondary Medic
- Lead Secondary Medic
- Primary Medic
- Initial Examination
- Passes off to Interviews
- Orientation
- Clearing for Medical Director
- Medical Director Test
- Field Internship
MedStar Problems

• QA still not perfect
• Errors still happen
• Human nature
• 20% below full staffing
MedStar
ET Intubation Success Rates
2004 - 2006

Intubation Success Rate

% of Patients Successfully Inbutated  2 per. Mov. Avg. (% of Patients Successfully Inbutated)
15. IF ETT Intubation is unsuccessful after ONE attempt, insert a Combitube.
ETT Intubations
July 2005 – December 2006

Intubation Success Rate Of Patients Intubated - % Intubated on First Attempt

ETT Intubations
July 2005 – December 2006
Results

• 10% decrease in calls with advanced airway attempted
• 15% decrease in ETT attempts
• 113% increase in number of patients with Combitube attempted
• 146% increase in number of patients with Combitube attempt first
NHTSA releases report on national re-registration

By Gregg Margolis, PhD. - Associate Director
Posted 07/18/2006

Continuing its commitment to EMS, NHTSA funded a project to study the role of national re-registration in the continued competence of paramedics. The lead author for the project is Keith Holtermann, Dr.P.H. from George Washington University. Participants in the study received a criterion referenced competency exam and an achievement exam at two year intervals following initial certification. There was no significant difference in the performance of individuals who re-registered compared to those who did not re-register two years after initial certification; however, there was a difference at four and six year intervals. The report concluded that "there was a statistically significant difference in the pass rate on the comprehensive cognitive exam between re-registered and non-re-registered groups" four and six years after initial certification. Also, at four and six years post initial certification, "the re-registered groups were approximately two times more likely to pass [the competency exam] than the non-re-registered group." The entire report is available at http://www.nhtsa.dot.gov/people/injury/ems/EMT_NatiRegistry/index.htm or contact the NREMT for an electronic or hard copy.
National Registry of Emergency Medical Technicians (NREMT) holds Standard Setting meeting for New Test Bank Items

By Heidi Erb
Community Relations Coordinator
Posted 04/10/2006

The National Registry of Emergency Medical Technicians recently hosted Standard Setting Meetings on March 26-27, 2006 for the Basic and Paramedic levels, following the EMS Today conference in Baltimore, MD.

One of the most important elements of item development is the Standard Setting process. After new questions have been developed for item banks, they are processed through a Standard Setting Committee. The Standard Setting Committee reviews the items for accuracy and rates their difficulty to establish the criterion for passing based on the Angoff Standard Setting Process.
The NREMT Announces Plan to Incorporate the Revised AHA Guidelines on NREMT Exams

By Gregg S Margolis, PhD.
Posted 02/22/2006

The NREMT recognizes that the EMS community is in a transition period as medical directors, EMS agencies, EMS educational programs, and States implement the 2005 American Heart Association Guidelines for CPR and Emergency Cardiovascular Care. In conjunction with this transition, the NREMT will be revising examinations as follows:

- After June 1, 2006 the NREMT will publish interim pencil-and-paper EMT-Basic and First Responder Exams. After September 1, 2006 the NREMT will publish interim Paramedic, EMT-Intermediate (85 and 99) Exams. The interim examinations will be constructed so that candidates will not be penalized for being trained over either 2000 or 2005 AHA Guidelines for CPR and Emergency
Specific Recommendations

• Tax credits or exemptions for ambulance volunteers

• Avoid training for “training’s sake”
  Used skills-based testing and training (see Texas CCMP Program)

• Seek more efficient training methods such as Internet and incorporate specialized training into basic refresher courses
• Build in longevity awards, especially for volunteer services

• Build in incentives for retaining paid personnel

• Pay an hourly training stipend
Strengthen involvement of medical directors through all appropriate groups:

* NAEMSP
* ACEP
* Family Physicians
* Surgeons
- Make exceptions (variances) for staff members with children, such as assisting with day care issues
- Include ambulance personnel in health legislation analysis
- Support Federal EMS Legislation
- Support grant and loan programs especially for rural EMS agencies
Consider Fee and Tax-related strategies to assist EMS agencies in need, especially to cover salaries:

*Lottery or tax refund monies, for example*
Regional and State agencies should:

• Help standardize accounting
• Help with training
• Help support struggling agencies
• Help support health care facilities to support EMS agencies
• Work with regional communications
• Centralized ambulance repair support
What a week this has been...
For many reasons, EMS is under great pressure to strive for excellence during a period of critical evolution.
The potential for public health disasters has never been worse.
An influenza pandemic would place strains upon EMS systems never faced in the history of modern prehospital medicine.
The aging of the population will only increase the demand for in-home evaluation and transport.
Advancing public health opportunities will require EMS providers to be prepared as never before.
EMS is the LAST available emergency house call.
The ability to get help when it is needed.
The professionalism of Emergency Medical Services Continues to Grow
The scope and breadth of our practice will be limited only by our imagination.