

# Changing the Paradigm

Can the Emergency Medical Services Evolve to  
Meet the Needs of Today?

# Changing the Paradigm

Can the Emergency Medical Services Evolve to Meet the Needs of Today?

**Michael F. Schadone**  
B.S. Health Studies Program

# Changing the Paradigm

Can the Emergency Medical Services Evolve to Meet the Needs of Today?

What is EMS?

# Changing the Paradigm

Can the Emergency Medical Services Evolve to Meet the Needs of Today?

## What is EMS?

The Emergency Medical Service is a combined function of governments (local, county, state, and federal) in combination with private industry to provide medical care outside of a hospital for life-threatening illnesses and injuries as well as transportation of these illnesses and injuries to a hospital or between hospitals for definitive care.

# History of EMS

- Historical uses of EMS:
  - Good Samaritan
  - Roman legions
  - Medieval hospitalers
  - Napoleonic
  - U.S. Civil War
- 1966 – Contemporary design documented by NRC
- 1966 – Passage of Nat'l Traffic and Motor Vehicle Safety Act
  - Purview of EMS assigned to DOT

# History of EMS

Throughout the 1970s, EMS underwent significant change to what we know today

# EMS Today

## Vision of the Future of EMS:

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 will be integrated with other health care providers and public health and public safety agencies. It will improve community health and result in more appropriate use of acute health care resources. EMS will remain the public's emergency medical safety net.

Department of Transportation, National Highway Traffic Safety Administration. (1996). *Emergency medical services: agenda for the future* (DOT HS 808441 - NTS-42). Retrieved from <http://www.nremt.org/nremt/downloads/EMS%20Agenda%20for%20the%20Future.pdf>

# Hampered Efforts

- EMS is expensive to operate
- EMS is a limited resource
- EMS is increasingly used for non-emergent conditions and problems
- EMS is increasing in scope (broad mission):
  - Tactical & disaster medicine (SWAT Teams)
  - Fireground rehabilitation (Fire Department)
  - Content expertise (Hazardous Material Teams)
  - Interfacility transport (Critical Care / “returns”)



# Hampered Efforts

Most prominent problem:

Lack of reimbursement for services delivered

# Financial Impact

As EMS strives to improve delivery methods and profits, the industry is suffering from provider retention

# Wage Disparities

- Public Safety

- EMS

- \$12.54 / hr

- Police

- \$22.25 / hr

- Fire

- \$26.82 / hr

- Health care

- EMS

- \$12.54 / hr

- LVN/LPN

- \$16.94 / hr

- Respiratory Tx

- \$21.70 / hr

- RN

- \$26.28 / hr

# Wage Disparities

- EMS is viewed as a “stepping stone”
  - Low wages
  - Poor working conditions
  - *Burnout*
  - High attrition rates
  - No career ladder or specialization
    - EMT
    - AEMT
    - Paramedic

# Financial Impact

**It is evident that transport-based reimbursement policies are directly responsible for the unusually low profit margin in EMS**

Department of Transportation, National Highway Traffic Safety Administration. (2008). EMS workforce for the 21st century: a national assessment. Retrieved from <http://secure.naemse.org/services/EMSWorkforceReport.pdf>  
Heightman, A. J. & McCallion, T. (2011). Management lessons from Pinnacle: Key messages given to EMS leaders at the 2011 conference. *Journal of EMS*, 36(10), 50-54.

# Opportunities & Solutions

- Improve traditional role
  - High-performance model (inefficient)
- Expand role
  - Public health centered model
  - Community-based care
  - Preventative medicine
- Expand advanced paramedic certification
  - Critical care
  - Community care

# Goals

- Increase wages respective to responsibility
- Increase overall job satisfaction
- Decrease overall attrition
- Decrease *burnout*
- Utilize EMS effectively to fill health care gaps
  - Decrease disparities
  - Increase access to care
  - Effect timeliness and appropriateness of care

# References

- Committee on Trauma & Committee on Shock, Division of Medical Sciences, National Academy of Sciences, National Research Council. (1966). *Accidental Death and Disability: The Neglected Disease of Modern Society*. Washington, D.C.: Author.
- Department of Transportation, National Highway Traffic Safety Administration. (n.d.). *A leadership guide to quality improvement for emergency medical services (EMS) systems* (Contract DTNH 22-95-C-05107). Retrieved from <http://www.nhtsa.gov/people/injury/ems/Leaderguide/index.html>
- Department of Transportation, National Highway Traffic Safety Administration. (1996). *Emergency medical services: agenda for the future* (DOT HS 808441 - NTS-42). Retrieved from <http://www.nremt.org/nremt/downloads/EMS%20Agenda%20for%20the%20Future.pdf>
- Department of Transportation, National Highway Traffic Safety Administration. (2008). *EMS workforce for the 21st century: a national assessment*. Retrieved from <http://secure.naemse.org/services/EMSWorkforceReport.pdf>
- Hawkins, E. R., Brice, J. H., & Overby, B. A. (2007). Welcome to the World: Findings from an emergency medical services pediatric injury prevention program. *Pediatric Emergency Care*, 23(11), 790-795. doi:10.1097/PEC.0b013e318159ffd9
- Heightman, A. J. & McCallion, T. (2011). Management lessons from Pinnacle: Key messages given to EMS leaders at the 2011 conference. *Journal of EMS*, 36(10), 50-54.
- Kellermann, A. L. (2006). Crisis in the emergency department. *New England Journal of Medicine*, 355(13), 1300-1303. doi:10.1056/NEJMp068194
- Lerner, E. B., Fernandez, A. R., & Shah, M. N. (2009). Do emergency medical services professionals think they should participate in disease prevention? *Prehospital Emergency Care*, 13(1), 64-70. doi:10.1080/10903120802471915



# References (con't)

- Mason, S., Wardrope, J., & Perrin, J. (2003). Developing a community paramedic practitioner intermediate care support scheme for older people with minor conditions. *Emergency Medicine Journal*, 20(2), 196-198. doi:10.1136/emj.20.2.196
- Mayer, J. D. (1980). Response time and its significance in in medical emergencies. *Geographical Review*, 70(1), 79-87. Retrieved from <http://www.ircp.info/Portals/22/Downloads/Performance/Response%20Time%20and%20Its%20Significance%20in%20Medical%20Emergencies.pdf>
- National Traffic and Motor Vehicle Safety Act of 1966, Pub. L. No. 89-563, 80 Stat. 718 (1966).
- O'Meara, P., Walker, J., Stirling, C., Pedler, D., Tourle, V., Davis, K., ... Wray, D. (2006, March). *The rural and regional paramedic: moving beyond emergency response* (Report to The Council of Ambulance Authorities, Inc.). Retrieved from <http://www.ircp.info/Portals/22/Downloads/Expanded%20Role/The%20Rural%20and%20Regional%20Paramedic%20Moving%20Beyond%20Emergency%20Response.pdf>
- Washko, J. D. (2012). Rethinking delivery models: EMS industry may shift deployment methods. *Journal of EMS*, 37(7), 32-36.
- Wingrove, G. & Laine, D. (2008). Community paramedic: A new expanded EMS model. *Domain3*, 32-37. Retrieved from <http://www.ircp.info/Portals/22/Downloads/Expanded%20Role/NAEMSE%20Community%20Paramedic%20Article.pdf>