The Future of EMS

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Interfacility Transports

Usually we focus on “911” responses
Traditional pre-hospital care
Growth of Regional Acute Stroke Systems of Care in the United States in the First Decade of the 21st Century

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BACKGROUND AND PURPOSE— States and counties in the US began implementing regional systems of acute stroke care in the first decade of the 21st century, whereby emergency medical services systems preferentially route acute stroke patients directly to primary stroke centers. The pace, geographic range, and population reach of regional stroke system implementation has not been previously delineated.

METHODS— We performed a review of legislative archives, internet and media reports, consultation with American Heart Association/American Stroke Association and Centers for Disease Control staff, and phone interviews with state public health and emergency medical services officials for a sample of the 50 states.
Interfacility Transports

Planning frequently focuses on initial EMS transport and destination decision making. What is less visible are the transports between hospitals.

In Virginia:

- 60% of air medical transports are interfacility
- 40% of ground transports are interfacility
Interfacility Transports

The “spoke and hub” model

Acute Stroke Patient → Community Hospital → Ground Transport → Urban Medical Center

- Door-to-Balloon Time <1h Stroke Team (Telemedicine Support)
- Transfer Only as Needed
- Neurocritical Care Stroke Rehabilitation
Interfacility Transports

Bypass closest for the most appropriate?

- Works when there are facilities with a higher level of care relatively close
- Doesn’t work with long transport times
- What if the patient gets “marooned”? 
Interfacility Transports

- Blood Inlet Area
- Catheter Diameter: 9 Fr
  Flow rate: up to 5.0 L/min
- Blood Outlet Area
- 21 Fr Pump Motor
Interfacility Transports
Interfacility Transports

Who does these transports?

Typically EMS providers

May be supplemented with other providers

Nurses, Respiratory Therapists, Perfusionists

Agencies

Air medical, Hospital based, Commercial, local 911
Interfacility Transports

What confronts transferring physicians?

- Resource availability
- Timeliness
  - Time windows for stroke, STEMI
- Capabilities
- Understanding the system
  - Not all transfers come from the ED
- Is anything acceptable in a pinch?
Interfacility Transports

Air medical services have filled the gap in many instances

- High quality care, well supported
- Limited resource
- Not always the most appropriate resource
- Cost issues
- Some concerns about risk
Interfacility Transports

So where do we go from here?

EMS really owns this

Part of the big world of out-of-hospital care

The interfacility portion of the patient’s care needs to be an integral part of the plan

Shared responsibility between referring and receiving hospitals
Interfacility Transports

Is it time for a nationally accepted certification for “critical care”?

There is good training out there but not a standardized certification
Interfacility Transports

States need to work toward describing a scope of practice for providers, a credentialing pathway, and endorsements for agencies.
The Profession of EMS

What is the next step for EMS as a profession?

Should a degree be required for Paramedic certification?
EMS Agenda 2050

“In today’s terms, one might see this as a large network of trained emergency medical responders and emergency medical technicians, with the basic tools and training to stabilize an incident, supported by degreed paramedics, with more extensive education equipping them to work hand-in-hand with other medical professionals, including EMS physicians.”
EMS National Scope of Practice Model

The Expert Panel considers this topic as a subject worthy of further national debate and exploration. While the group clearly recognizes education as the foundation of any profession’s scope of practice, the difficulty of considering transitional variables such as grandfathering existing personnel and programs, workforce recruitment and retention, etc., were beyond the scope of this project.
The Profession of EMS

What are the pros?

- Relationship with the Big House of Medicine
- Recognition of the complexity of the care provided
- Enhanced career paths
- Enhanced compensation
The Profession of EMS

What are the cons?

Time
Cost
ROI

College costs increasing faster than inflation, or salaries

Benefit of a college degree generally

Limiting the pool of interested candidates
COVID

What have we learned?
What is going to stick after the pandemic?
COVID

Similar concerns with planning for previous infectious diseases

Pan-flu/H1N1
  Pan-flu didn’t really materialize (yet)

Ebola virus disease (EVD)
  Very scary disease
  There essentially wasn’t any EVD in the US
  Ebola fatigue
COVID

Workforce preservation

Availability of PPE
What is the right PPE?
Would the PPE work?

Limitation of individual freedoms

We can’t lower our guard
What we did seemed to work pretty well
COVID

Medical Education

How do we continue training programs?

- Limited classroom opportunities
- Limited or no clinical experiences
- Increased attention to agency level credentialing

How do we look at providers graduating during the epidemic?

- Provisional certification
COVID

How did public perceptions of the EMS system change?

Where did the emergencies go?
Lots of reasons, but did some people decide they didn’t need/want an ambulance?
Did it change the threshold for calling 911?
COVID

Alternate transport destinations
  Comfort level with alternate care facilities increased

Alternate dispatch/response/transport strategies
  Stay-at-home
  Leave-at-home
COVID

Community Paramedicine

Many of the challenges and solutions fit CP like a glove

- Stay-at-home/Leave-at-home
- Follow-up visits
- Testing strategies
- Interface with high risk populations
- “strike teams”
Volunteer EMS

What is the future of volunteer EMS?
Volunteer EMS
Volunteer EMS

Still part of the foundation of EMS

Particularly in rural and frontier regions
Volunteer EMS

Challenges

- Time required for certification and re-certification
- Time available to volunteer
- Skills maintenance
Volunteer EMS

Answers

Collaboration and flexibility in the design of “hybrid” EMS systems

Financial support of volunteers

Reasonable training goals

Is Paramedic certification a reasonable goal for most volunteers?

Does Advanced EMT offer the greatest benefit for the investment?

Flexibility in certification and CE scheduling