

The Future of EMS



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Interfacility Transports

Usually we focus on “911” responses

Traditional pre-hospital care





ORIGINAL CONTRIBUTIONS; BRIEF REPORTS

Growth of Regional Acute Stroke Systems of Care in the United States in the First Decade of the 21st Century

Sarah Song, MD, MPH and Jeffrey Saver, MD

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

Interfacility Transports

Planning frequently focuses on initial EMS transport and destination decision making

What is less visible are the transports between hospitals

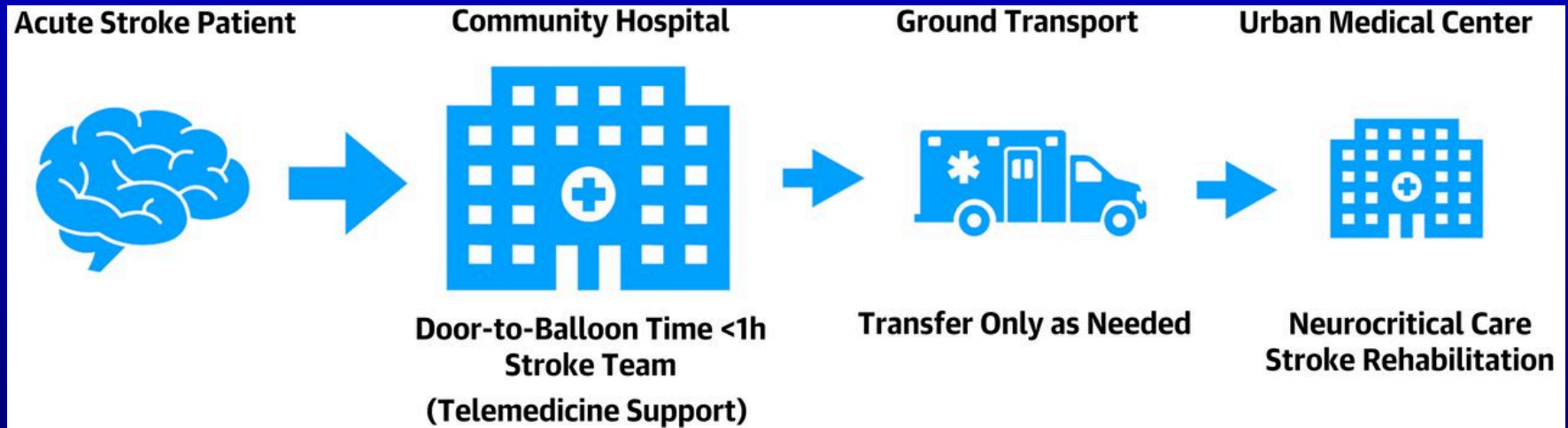
In Virginia

60% of air medical transports are interfacility

40% of ground transports are interfacility

Interfacility Transports

The “spoke and hub” model



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

Propofol
Injectable Solution
500 mg/50 mL
Contains Propofol for IV Anesthesia
500 mg/50 mL, 50 mL, 50 mL
Propofol
Propofol for Anesthesia
Propofol for Anesthesia
Propofol for Anesthesia

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

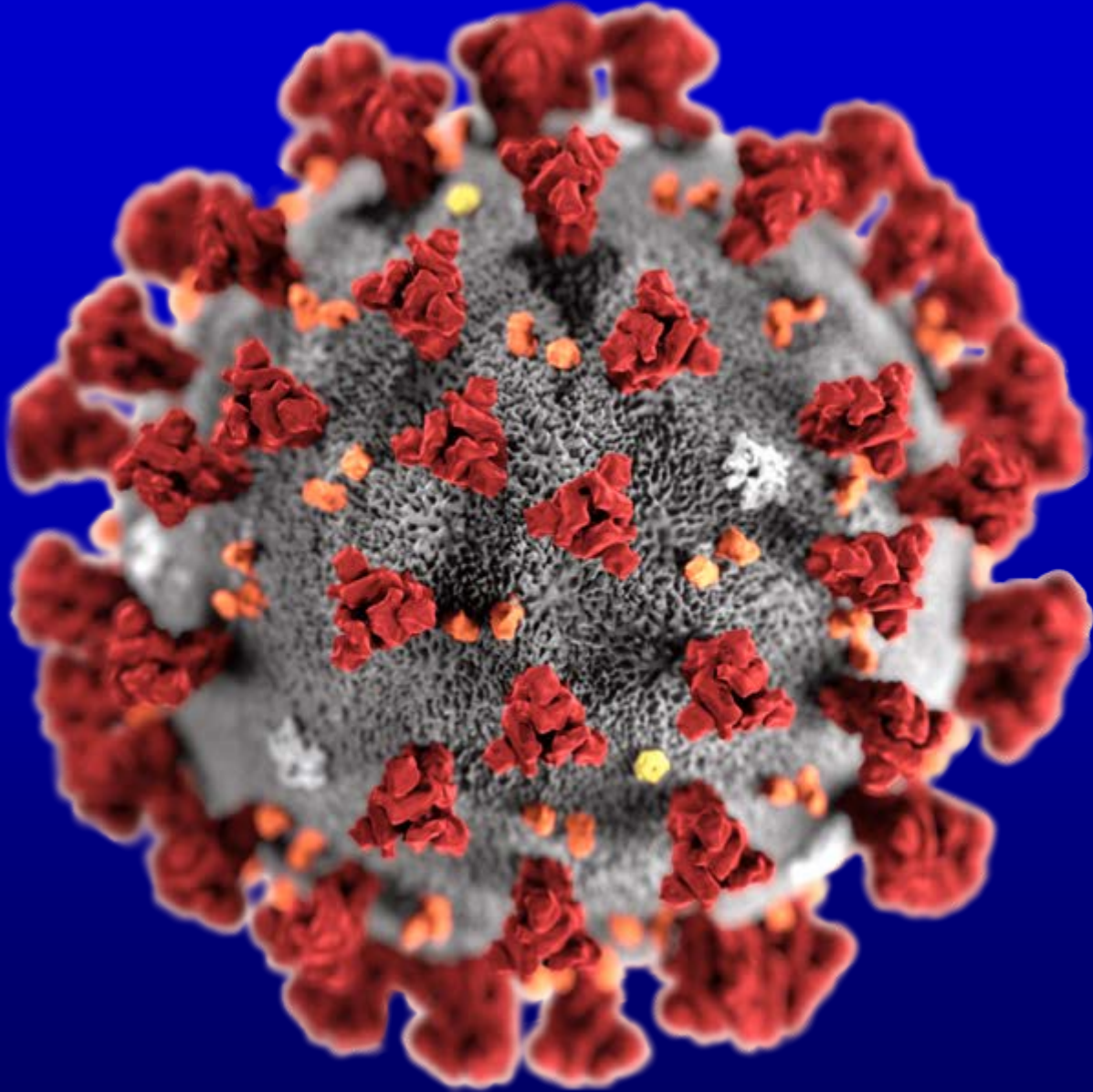
Cost

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

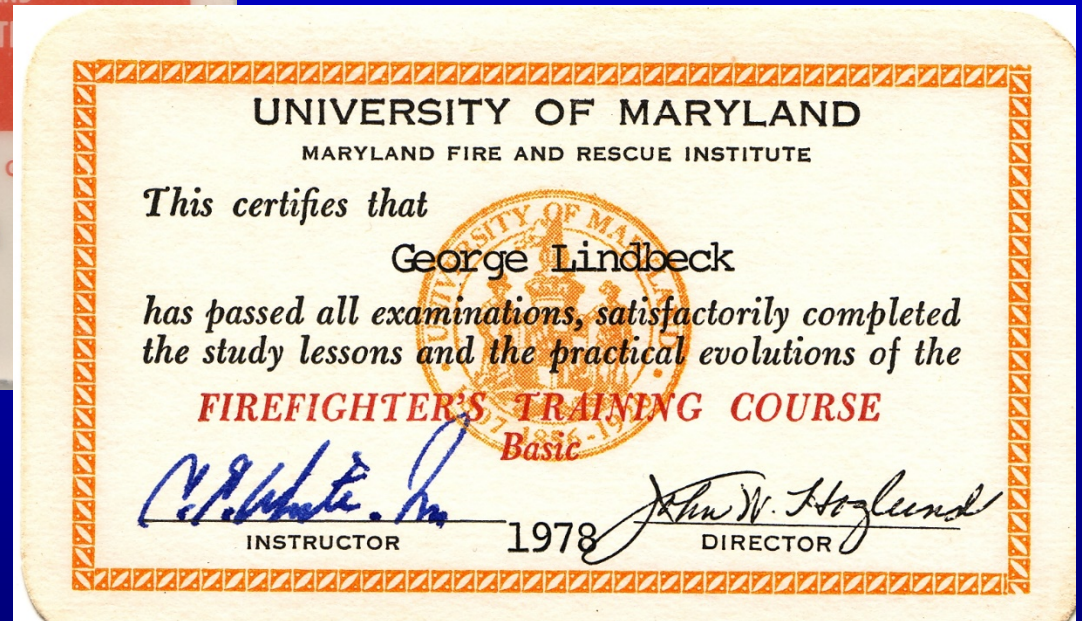
- “strike teams”

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