

# Emergency Medicine's Role in an Emerging Healthcare System

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# Emergency Care Circa 1960



“People keep coming *down there*”



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# Forces Driving the Development of EM

- **Societal Factors**

- Growing population
- Aging population
- Rise of chronic illness
- Urban growth – Poverty
- Mobile population
- Increased trauma
- Changing expectations
- Insurance coverage
- Scientific discovery

- **Physician Factors**

- Fewer GPs/more specialists
- Fewer housecalls
- Suburban translocation
- Busier practices
- Less availability

## **Institutional Factors**

Hospital/technology needed for advanced care

Cost

Personnel

24 hour availability

Growth of ED Visits

1961 – First full-time EPs in US

- *Adapted from Webb ML and Zink BJ*

# IOM Report on the Future of Emergency Care - 2006



# Key Findings – Gains and Losses

- 1993-2003
  - US population increased 12%
  - ED visits increased 26% (90.3 million to 113.9 million)
  - US lost:
    - 703 hospitals
    - 198,000 hospital beds
    - 425 EDs
- 2001 – 60% of hospitals operating over capacity

# Impact

- Overcrowding
- Boarding
- Ambulance Diversion
- Loss of “surge capacity”

# Key Findings - Fragmentation

- EMS
  - Multiple providers, little coordination
    - Multiple models in single service areas
    - Multiple, disconnected medical directors and protocols
    - Inability to “load balance” among facilities
- ED
  - Data problems
    - Lack of interoperability with EHRs
    - Lack of EHRs
    - Patients with multiple, disconnected providers



# Impact

- Crowding
- Patient distribution often not connected to capability or capacity
- Care not appropriately standardized or coordinated
- Redundant testing
- Lack of data necessary to care for the patient

# Key Findings - Utilization

- Medicaid patients use the ED:
  - Four times more frequently than the privately insured
  - Twice as often as the uninsured
- ED patients are increasingly:
  - Elderly
  - Chronically Ill
  - Medically complex

# What has happened since the IOM report?

- In many areas there has been little progress
- The landscape has changed somewhat

# How far have we come in four years?

- Problems are largely the same
  - EDs at or over capacity (2007)
    - 67% of urban hospitals
    - 47% of all hospitals
  - Diversion
    - 56% of urban hospitals report some time on diversion

# Four years later

- ED visits growing faster than population growth
  - Virtually all accounted for by an increase in visits by adults with Medicaid
  - Essentially no change in visit for those with:
    - Private insurance
    - Medicare
    - The uninsured
- Are we doing a better job of providing chronic illness care to Medicare recipients?
- Do Medicaid enrollees have a difficult time obtaining primary care?

# Four years later

Number of facilities qualifying as “safety net” EDs increased.

# Four years later

- Fragmentation is still a problem
  - EDs are part of a complex, poorly coordinated web of care for the chronically ill
  - EHRs more common
    - Interoperability still a problem
  - Issues of time limitation and data overload

# Local Impact

- EMS
  - Fragmentation remains a problem here, as well
  - Local example
    - 50 plus providers of EMS in the greater Houston area
    - A variety of different models
    - No real regional authority
    - A bit of paranoia



# Local Impacts

- Local ED capacity appears to be improving
  - Several new suburban hospitals
  - Freestanding EDs

# Four Years Later

- Regionalization – Still far to go.
  - Pediatrics and Trauma largely successful
  - Stroke, Cardiac, less so

# Barriers to Regionalization

- Patient Preference
- Financial Factors



# “Bob” Paramedic



# Commitment to Trauma

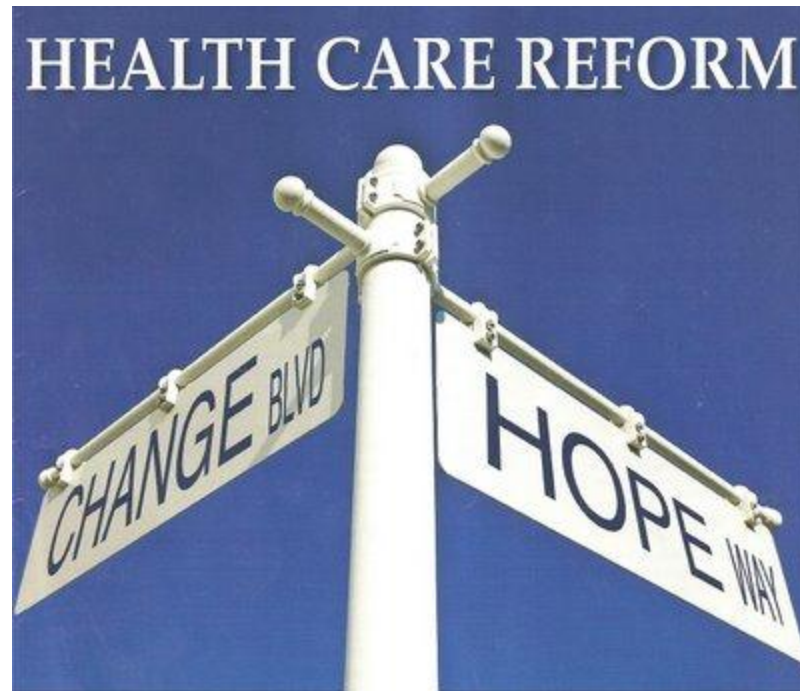
- Designation vs. True alignment to trauma care

# Four years later – Myths still the same

- “The problem with the *emergency room* are the people who use it as a clinic.”
- CDC – 88% of ED visits are for needed care.

# The Impact of Healthcare Reform

## One view





# The impact of healthcare reform: Another view

**This is going to hurt**



# Impacts we can reasonably expect

- ED Utilization in Texas may increase
  - In MA ED use increased 9%
  - Why?
    - PCP shortage
      - US national average -1.2 PCPs/1000 people
      - MA -1.8 PCPs/1000 people
      - TX – 0.9 PCPs/1000 people

# Impacts we can reasonably expect

- Aging population = More chronically ill people
- People with 10 or more chronic illnesses utilize hospital services 360 times more frequently than healthier people



# After Fee for Service

- Pay for performance
- Gain sharing
- Cost reduction
  
- Measurements and ratings
  - Quality
  - Cost
  - Satisfaction

# The role of EM in new payment models

- Problems and Risks
  - Information
    - Too little
    - Too much
  - Lack of comprehensive tort reform
  - Human nature – risk tolerance
  - Legislation
  - Public expectations

# The Role of EM in new payment models

- The “right” amount of data is key
- The ED as a “safety net”

# The role of EM in new payment models

- Bundled Payments
- Accountable Care Organizations (ACOs)
- Capitation



“When there is less food, table manners deteriorate” Nate Kaufman



# The role of EM in new payment models

- Ideal Emergency Care
  - Used only when needed
  - Non-duplicative; complementary
  - Part of a continuum of care; not an independent silo
  - Efficient and effective

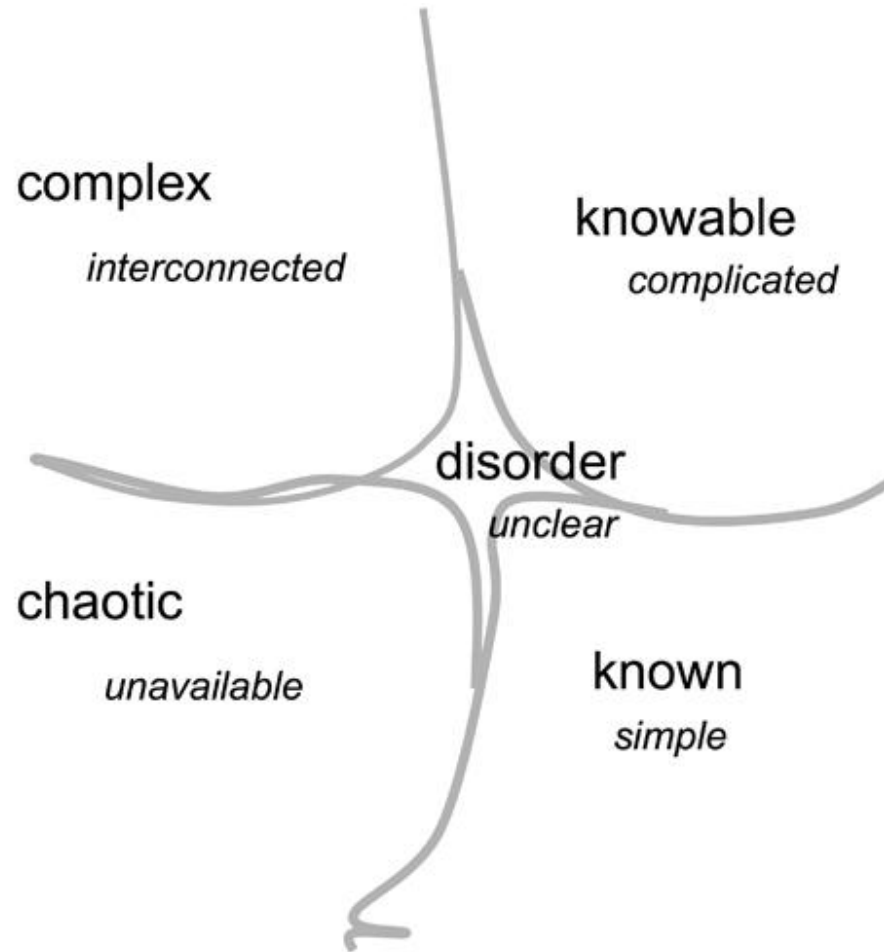
# Tools

- Operations Engineering
  - Six Sigma
  - Lean
  - Others
- Cognitive science
  - Error reduction
  - System resilience

# The Twin Constraints

- Time
- Information

# Cynefin Framework





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