


A new paradigm for EMS

FROM PREHOSPITAL TO OUT-OF-HOSPITAL CARE

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Objectives

- Insult the guys from Texas
- Tasteless jokes
- Sophomoric humor
- 8-minutes or less
- 2-minutes for the actual talk

Texas Eagles 2013 Update

Rome, Italy

Choosing a new leader

…and the envelope please

Dallas, Texas

The first ~~ego~~ Eagle

Dallas, Texas

Recognition by the Feds

Ft. Worth, Texas

Redefining EMS ⟶ Mobile Health Care

Ft. Worth, Texas

Mobile health care or patient steer-ing?

Washington, D.C. & New Orleans

Lip-synching: Who's behind all this?

Put a stethoscope on it

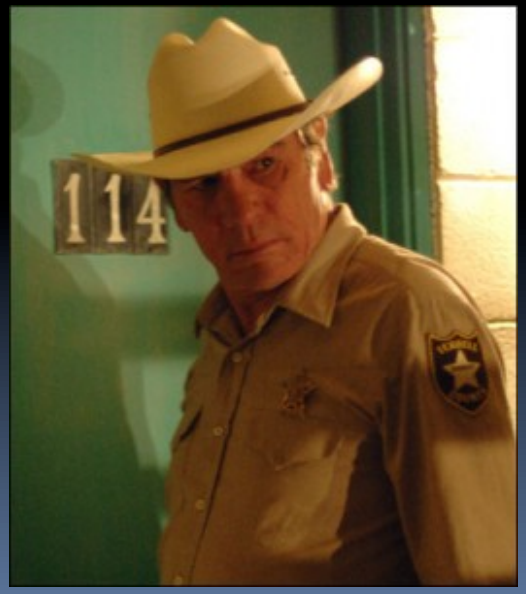
Fowler Isaacs Pepe

Healthcare (and EMS) in America

No country for old men (…or women, or kids)

"It's a mess, ain't it sheriff?

If it ain't, it'll do till the mess gets here"



Just the facts, ma'am

- The U.S. leads the world in healthcare costs
  - $2.6 trillion in 2010
- But lags in quality of care and health outcomes
  - Hypertension
    - 27% have adequate blood pressure control
  - High cholesterol
    - 17% with CAD meet guidelines
  - Obesity
    - 86% will be overweight or obese by 2036
  - U.S. ranked last in preventable deaths of 19 countries in the OECD

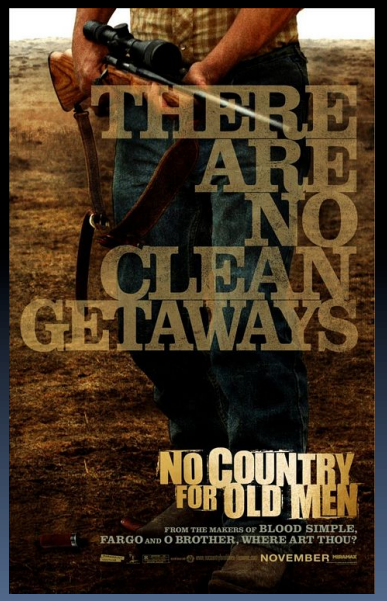
ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

OECD

So, what's up?

"There are no clean getaways"

- Aging population & ↑ chronic disease
- Limited primary & preventative care
- Model for health delivery & reimbursement
- Episodic care for acute illnesses
- Revolving door effect

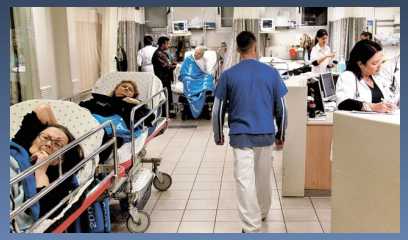


Well just how dangerous is it?

"Compared to the bubonic plague, it's not so bad"

Impact on 911 EMS

- Lack of primary care
- ↑ Utilization of 911 and ERs for non-emergencies
- ER overcrowding, EMS back-up, and hospital diversion
- ↓ Availability of 911 resources
  - Time-sensitive cases or critically ill
- Inappropriate or inadequate care
- ↑ Costs all-around
  - ↓ surge capacity in the face of disasters/mass-casualty events

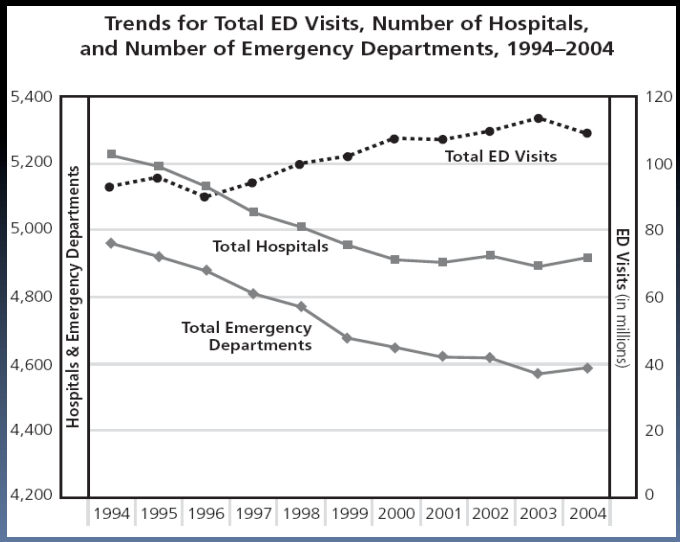


What else?

Well it may be worse than the bubonic plague?

Impact on hospitals and ERs

- ER visits ↑ at 2x the rate of growth of the U.S. population
  - 26% ↑ between 1997-2007
- At the same time that there's been a ↓ in
  - Hospitals , ERs , total # beds (200k)
- Over 90% hospitals overcrowded
  - 40% on a daily basis



To add insult to injury

Frequent ER users

- Patients who go the ER ≥ 4-times/year
- < 10% of ER patients account almost 30% of all ER visits
- In contrast to popular myth
  - 60% are white
  - Average age 40
  - Most have health insurance
    - 60% with Medicare or Medicaid
  - Most have a 1°-care physician
  - Only about 15% are uninsured

…and then there are the abusers

Sometimes, the person on the end of the line isn't even ill at all. 'We have what we call our regulars,' says Rob with a wry smile. 'We had one, we know her by name — in fact, I think she knows *me* by name.

'Anyway, she called up to say: "I've got chest pains, I'm dying." But when the paramedics got there, she said the problem was that she couldn't reach the remote control for her telly, and she asked them to pass it to her.'

At about 3.30pm, I begin listening in to the 'treble nines' being taken by 51-year-old Lorraine Gethin, a lovely, warm blonde. So far, she says, aside from the home birth, this has been a pretty routine shift.

Routine? 'Oh, the main ones are chest pains, breathing problems, strokes, even an overdose. That's quite standard: you get one a day.'

FROM the moment they're connected, all callers will hear the same thing: a voice telling them that they're through to the ambulance service, and a calm request for the most crucial information of all: 'Can you tell me the address of the emergency, please?'

It's a question that some simply can't answer. Late on Friday and Saturday nights — 'club throwing-out time', as someone acidly points out — they're often too smashed to know. Sometimes, reeling from the surge of fearful adrenaline, they can't get the address out at all, instead pouring out every unnecessary detail of what they've just seen.

Often, the computer's address recognition software will pull up an address that matches the caller's phone number, but the operator will still demand to hear it — twice — to ensure there is no mistake.

Nothing is allowed to muddle on. If after 30 seconds the address has not been confirmed, a supervisor will come into the call to see what they can do to speed up the process. But the caller is never allowed to progress to the next stage until the address is secured.

I hear Lorraine deal with a family who fear one of their relatives has taken an overdose, a woman reporting that a five-year-old has been hit by a car in a supermarket car park, a 12-year-old who's jumped off a bus and smashed his face on the kerb, and a man who fears his brother might have had a repeat stroke.

Around the room, I can hear the murmur of questions being repeated to different callers. 'Is she still breathing?' (Bizarrely, I even hear this asked of a woman whom the caller has twice explained is 'stone cold dead', but there is a rigid protocol to be followed.) 'Is he conscious?' 'Is the blood spurting out or just bleeding?'

'Got anything good yet?' asks Rob, wandering over

The caller said she was dying of a heart attack. The truth? She just wanted us to fetch her TV remote

Daily Mail Tuesday March 2, 2010
West Midland Ambulance Service-Birmingham

Case study

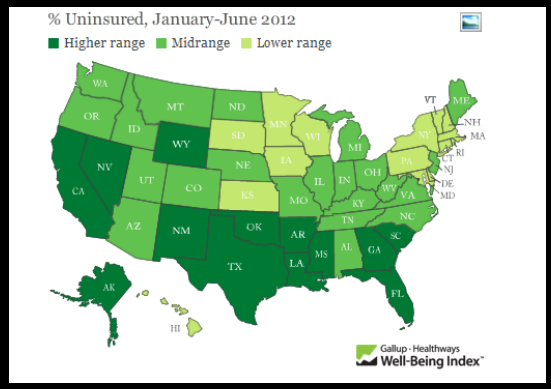
Austin, Texas

- 9-patients
- Accounted for 2700 ED visits over a 6-year period
- Cost of providing this care was $3 million
- Reflect a confluence of socioeconomic factors
  - 8-drug abuse
  - 7-mental health
  - 3-homeless

Debunking a few stereotypes

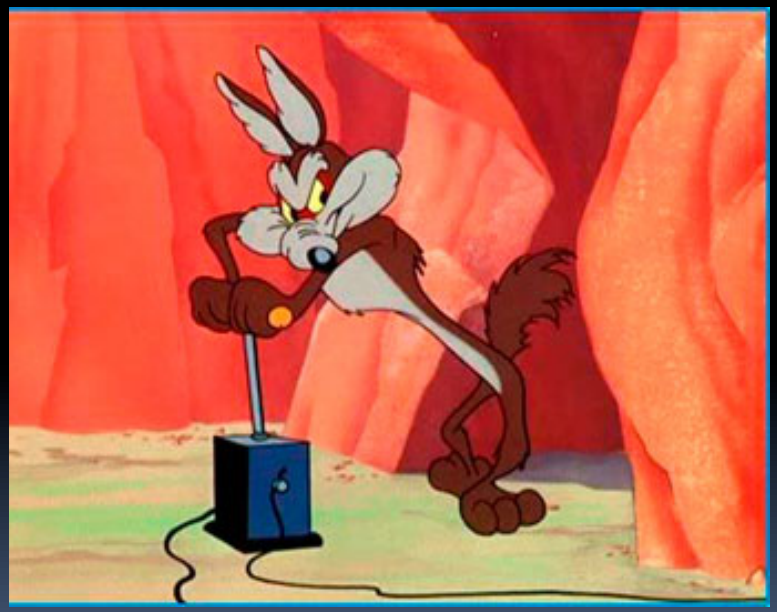
17% of the U.S. (50 million) population uninsured

- 1 in 5 use the ER for primary care
  - Twice as often as insured patients
  - Half as often as Medicaid patients
- Less than 2% are frequent ER users
- But they're at very high-risk
  - Don't know they have a chronic condition
  - Less likely to control it
    - Healthy behaviors & preventative care
  - Overall 25% ↑ risk of dying compared to the insured



What we want to do

Blow it up



In other words

Change the paradigm

- Prehospital care vs. out-of-hospital care
- Prehospital care
  - What happens before you get to the hospital
- Out-of-hospital care
  - Who says you have to go in the first place?

The underlying philosophy

Not primarily about reducing costs or inappropriate use (or abuse) of the 911 system

- About getting patients to the most appropriate care
- Once size does not fit all
- Instead of shoe-horning patients into the one we have
- Build the system to fit the care
- Let quality of care and value drive resource utilization & costs, not the other way around

A new design model

Two-arms (before & after patients call 911)

- Divert non-life threatening calls to 911 for EMS
  - Triaging to non-emergency 1°-care
  - Utilizing non-emergency transport

- Pre-empt potential calls to 911
  - Bringing the care to the heavy users & recidivists
    - Outreach
    - Case-management

Diverting low-priority calls to 911

Nurse-based triage

- Identifying 108 low-priority call-types (23% call-volume)
- 911 operator transfers
- To a specially-trained nurse
- Utilizes a diagnosis-driven algorithm
- Drills down on the diagnosis and the time factor
- Schedule a non-emergent medical visit
- Arrange alternative means of transport
  - Taxi, van, ambulette, non-Metro ambulance

Bring care to the heavy users

Drill down on the 911 recidivist population

- Top 10-addresses
  - Low-income senior living facilities
    - >2000 calls to just 9 addresses (150-300 calls/year each)
  - Homeless shelter population
    - > 400 calls to just one of these

- Individuals
  - Top 10 'platinum preferred'
    - > 1600 calls
- Corporate & government users (UPS, GE, Metro)

Medical outreach

Launch a pre-emptive strike (before they call 911)

- Run regular clinics
- Top recidivist addresses
  - Homeless shelters
  - Low-income senior living facilities
- Who sees them?
  - Supervised nurse practitioner students
  - Community paramedics
  - Social workers
- Treat on-site or make referrals
  - Physicians offices, clinics, mobile care, labs, social services, meals

For the daily users

Medical Outreach (after they call 911)

- Enroll these individuals for special attention
- Specialized community paramedic response unit (with or without an ambulance)
- Link with medical home (single hospital)
- Develop multi-disciplinary care plan

Focus on 'high-cost' users

Case manage other 'recidivists'

- Hospital re-admissions
  - Leverage fiscal disincentives
  - U.S. Affordable Care Act
    - Heart failure, pneumonia heart attack

October 2012 - January 2013

Triaged 1085 low-priority calls

Sick	Hemorrhage/laceration
Falls	Diabetic problem
Abdominal pain	Allergic reaction
Back pain	Headache
Trauma	Convulsions

October 2012 - January 2013

Dispositions

- Bounced-back to 911
  - Medical reason 53
  - Transport unavailable 40
- Non-transports
  - Lift-assist 80
  - Self-care 27
  - Home-care 3
  - Other 13
- Transports
  - Physicians' offices 44
  - Urgent care 70
  - ER 808

October 2012 - January 2013

Means of transport

- 911 ambulance 17
- POV 48
- Ambulette 43
- Taxi 8
- Other 5
- Private ambulance 813
  - Lift-assist 80

THANK YOU !