

TRB EMS Subcommittee ANB10(5)

# EMS Safety Summit 2012 Safety Systems, Strategies and Solutions

**Dispatch Systems – Basic to Cutting Edge**  
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February 29<sup>th</sup>, 2012



## Dispatch Systems, Basic to Cutting Edge

- IT and Communication System
- Direct Relationship to Safe Vehicle Operations
- Community Needs
- Public Safety Integrated Systems
- Reporting Integration
- Instruction Help to Callers



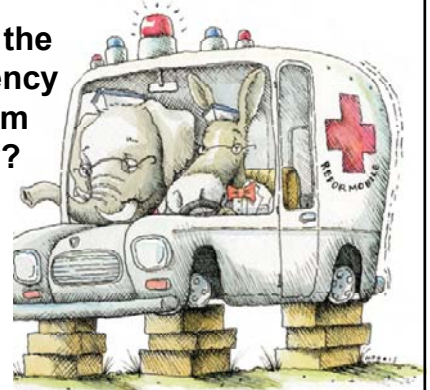
## Integrated Public Safety



- 15,000 or so often integrated at county level
- Public Safety under EMA or Law Enforcement
- Conflicts



## Why is the Emergency System Busy?



**The service that allows  
sick patients to go home  
or stay home!**



### Community-Based Health Care

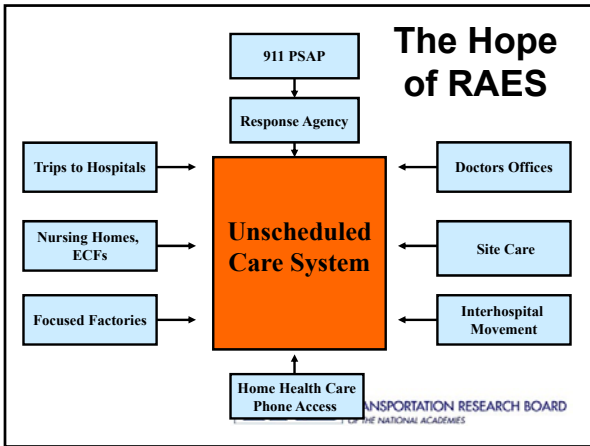


### Unscheduled Care System

EMS - ED - Urgent Care - Ask-A-Nurse



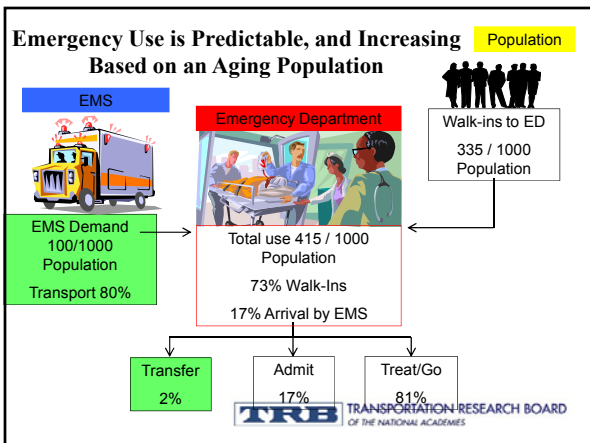
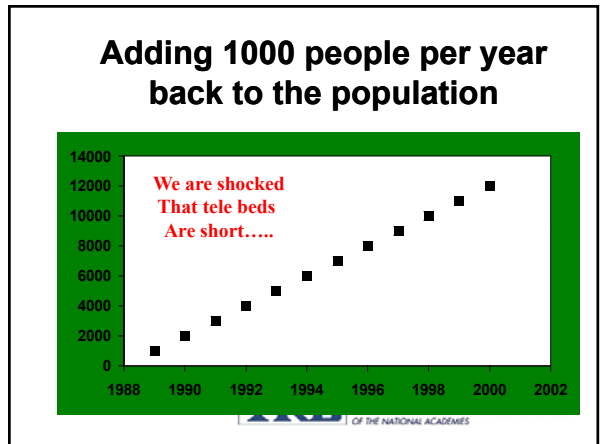
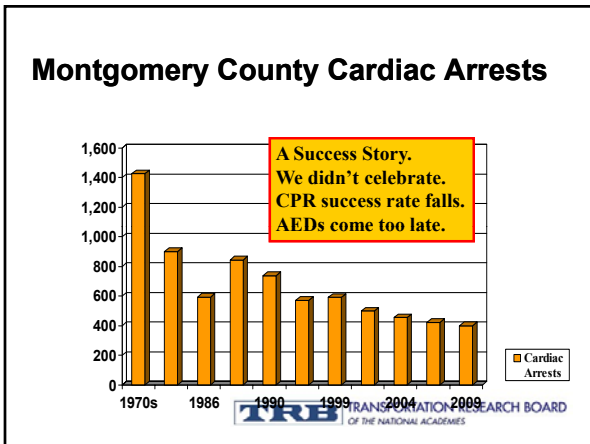
### Hospital-Based Health Care



### The Burn, Trauma, Injury and Cardiac Arrest Issue

- What should we have known?
- Prevention Works
- When prevention works, more people are alive to get ill

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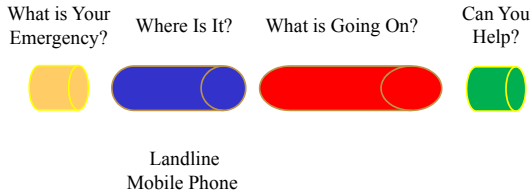


### Dispatch Systems: Simple to Complex

- Text to address outline
- Ideally less than 24 words and simple
- Many Small Programs and Simple Operation Centers
- But... Large software producers with integrated programs
- Tiered Levels of Response
- Challenge of Fewer Landline 911 Calls

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## The Timing Challenge



## Ideal EMS Call Tiering

- Highest Priority Calls get Pre-Alert Dispatching and Full Responses
- Medium Priority Calls get Pre-Alert and One or Two Vehicle Responses
- Low Priority Calls get One Vehicle, no lights or siren response
- Lowest Priority Calls get phone advice and referral to followup care

## Fully Integrated

- Predictive Algorithms Deploy Resources
- Call Taking and Dispatch Computer-Aided
- Call Management Assistance to Get to Call
- On-Scene Patient Management
- Communicate to Hospital or Tele-Medicine
- Electronic Patient Care Report
- Quality Assured
- Integrated Billing, Reports, System Learning

## Reduce Call Layers

- CAD
- AVL
- GPS
- Caller Talks Directly to Lead Responder



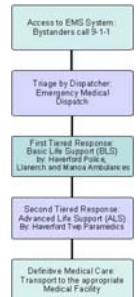
## Erase Boundaries

- Reduced reliance on “volunteer” and private vehicle responses
- Still dangerous: Public Safety responders running into each other



## Uniform EMS Call Management

- Call Taking
- Medical Interview
- Pre-Arrival Instructions
- Timely Alerts for Response



## Medical Transport

- Right Facility
- NOT on Diversion
- Surge Capable
- Reduce Emergency Transports
- Provide Safe Transport



## Major Challenges

- Unpredictable Callers
- Time Limitations
- 911 Calls in the Public Domain (should be Privileged and Confidential)
- Call Locating with the Challenge of Mobile Phones
- Can't use Text, SMS, Twitter....
- Newest Challenge to 911 Centers – “Lift Assist”. At home = Good. “How Big”

## Summary Of Communication Integration for Safety

- Systems Become More Integrated
- Strategies Include Use of New Call Taking and Information Sharing in Public Safety

## Solutions

- Call Taking Assistance
- Resource Management to Reduce Time to Response and Get Appropriate Response with Minimal Duplication
- Support for Medical Mgt and Transport
- Training the Community