The National Academies Transportation Research Board EMS Safety Subcommittee

Ambulance Transport Safety Summit Washington, District of Columbia October 29, 2009 Summary

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EMS Safety Summit Wrap Up

- · Burden/Benefit
 - Safety Data
 - Multiple datasets not interoperable, huge holes
 - · Inconsistent definitions, incomplete collection
 - Economics
 - · Vehicles: small fortune; crashes: many fortunes
 - · Data-driven business and insurance case is strong
 - Ethics and Risk/Benefit
 - Decision rules ↓ crashes, but few use them
 - Technology also ↓ crashes, but few have it



EMS Safety Summit Wrap Up

- · Transport System Management
 - Fleet/Vehicle Operations Safety
 - Safety program/culture crashes 1 60%
 - "Trust, but verify" vehicle "black boxes"
 - · Align rewards with safety, not profit
 - Operations Management
 - EMD ⊥ hot responses, hence crashes
 - ITS: great promise in ↓ crashes
 - Dynamic deployment, visual systems ↓ crashes



EMS Safety Summit Wrap Up

- Vehicle Safety Assessment and Design
 - Vehicles
 - · Our engineering colleagues are way ahead of us
 - Special Populations Pediatric to Bariatric
 - Special populations → illustrative solutions
- Information Sharing and Research Priorities
 - Knowledge Transfer/Dissemination
 - The world is large...our "worlds" are small, and insular
 - Standards/Specifications/Policy
 - For vehicles, not patients or providers... must change!



Bird's Eye View

- Self evident truths
 - Constitutional history: division/separation of powers
 - · We've got to change our way of facilitating progress
 - First few minutes of resuscitation are most critical
 - · But the last few consume far greater resources
 - EMS mostly not about cardiac arrest/major trauma
 - But EMS still funded for resurrection not resuscitation
 - Iron Triangle: good, cheap, fast pick any two
 - "Need, greed, and speed is how you get stung" (Hoving)



Bird's Eye View

- Public health truths
 - The population is growing...and aging
 - · Things won't get better...and will get worse
 - There is a shortage of emergency health providers
 - · No one wants to work as hard as their parents
 - Health care is becoming increasingly unaffordable
 - Total health care costs now approach 18% GDP
 - Nevertheless the public wants it all...
 - · ...yet wants someone else to pay for it



Bird's Eye View

- Right patient, provider, care, time, place, cost
 - What is the future of EMS?
 - Volunteer rescue squad? Professional medical service?
 - What is the future of CMS in EMS?
 - Payment linked to treatment not transport?
 - What are the futures of EBM, EHR, ITS, and "ICS"?
 - Can they be linked? Can costs be absorbed?
 - What are the financial and human costs to society?
 - · Personal vs. public? Technology vs. privacy?



Solutions?

- National Incident Management System
 - Unified ICS (potential partnership with DHS)
- $\underline{\mathbf{T}}$ ogether $\underline{\mathbf{E}}$ veryone $\underline{\mathbf{A}}$ chieves $\underline{\mathbf{M}}$ ore
 - TeamSTEPPS (AHRQ/TriCare) may help
- Government can't (and shouldn't) do it alone
 Interdisciplinary professional collaboration needed
- · We all know what needs to be done
 - TRB White Paper → interdisciplinary NAs panel



Thoughts To Ponder

- · Public Health Answering Points
 - Health advice for patients at home
- No substitute for the human touch
 - Mid level providers/advanced practice medics
- PC based telemedicine in rural areas
 - Skype[™] has shown us how to do it
- Fossil fuels will be prohibitively expensive
 - Medical transport only a last resort



Questions??

- Please raise your hand or type in the message box
- Be safe out there and thank you for your participation!

