# Changing the Staffing Paradigm

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## History of Staffing at ATCEMS

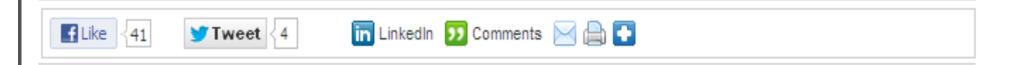
- At its inception utilized two EMT "Aid Units"
   with Paramedic response units
- Promotion to Paramedic was merit based
- 1996 staffing changed to 2 Paramedics
- Has remained 2 medic units until 2011
  - And then the Yankee came to town



#### Texas EMS System: Plan to Decrease Number of Paramedics on Units All About Patient Care

BY PAUL PELUSO, EMSWorld.com Staff Writer Created: February 10, 2012

Austin-Travis County EMS officials say the decision will better utilize the skills of the paramedics, plus open up a larger applicant pool.





In the current economic climate, the plan that was approved last week by Austin-Travis County EMS to decrease the number of paramedics per ambulance may have been seen as a cost-saving measure by some, but officials are quick to point out that the change is all about patient care.

Medical Director Paul Hinchey -- who became a paramedic in 1989 -- says he was a big proponent of the

#### ALS all the time?

- In the late 80's there was a push for all ALS in the "More is Better" model of EMS staffing
- 200 largest cities reporting all ALS:
  - **-** 1989 63%
  - -1990 82%
- Despite the fact that advanced intervention is commonly reported at 20-30%
- So why the overkill?



# Focus has become what we do **TO** patients not what we do **FOR** patients

- Skills paradigm
  - How many things can we do to a patient
  - How fast can we do them
- Response times
  - How fast do we get there
  - How fast do we get off the scene
- No regard for association with outcomes and with little research to support it



Evidence of the creation of the...

## EMS Skills Paradigm

...the single most harmful thing that we have done to ourselves



## Don't buy what we've been selling

- If you are defined by your skills you will become obsolete
- Skills can be overcome by technology
- If you are defined by your knowledge your value never ends



Like any other healthcare professional your value is in your KNOWLEDGE ...

and sophisticated, knowledgeable providers at all certification levels have value...



# Why the Change? OFFICE OF THE MEDICAL DIRECTOR

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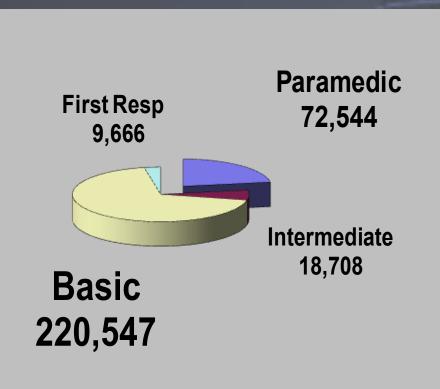
#### You must have good people

- Good people want to be challenged and want to work with other good people
- The quality of your people determines the quality of your organization, the care you provide and drives all subsequent decisions
- An organization with good people can adapt to the changing needs of the market

...organizations without are at it's mercy.



#### SOPHISTICATED PROVIDERS

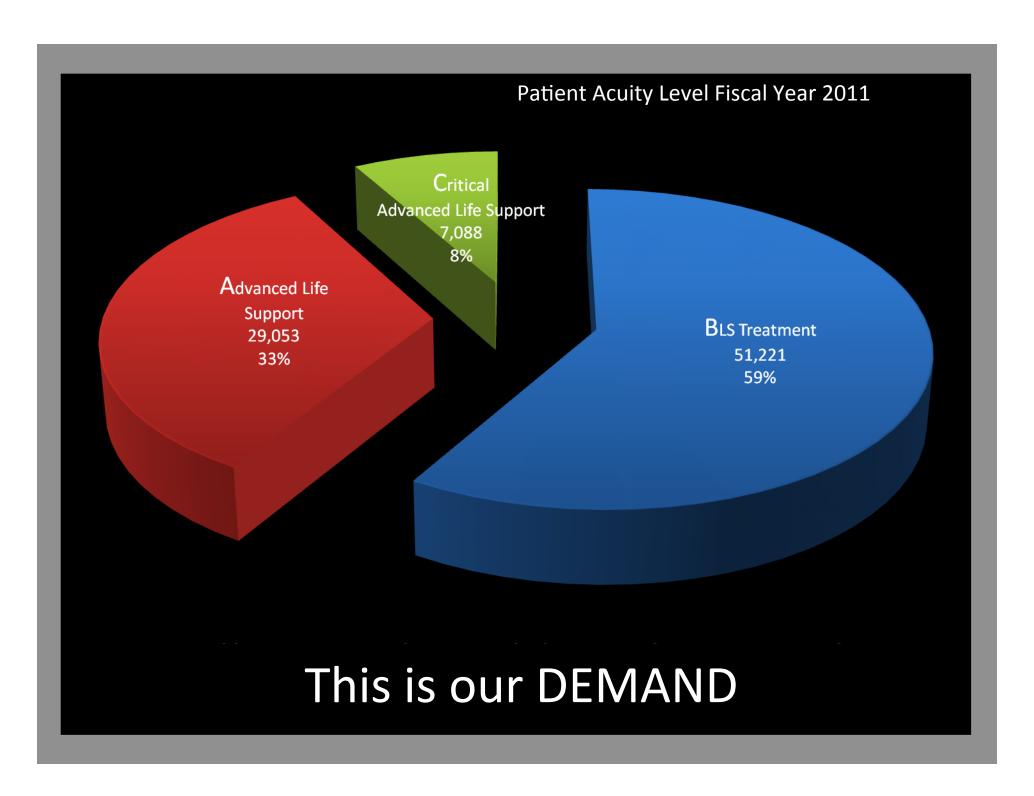


- Larger applicant pool
- Mentorship
- Career ladder

We want to hire and retain GOOD people regardless of their certification!

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#### This is our SUPPLY



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#### What this means to the Medic

- Roughly 300 paramedics transported 87,362
- 51,221 BLS calls
  - 3.4 per provider per week
- 29,053 ALS calls
  - 1.9 per provider per week
- 7,088 Critical calls
  - 2 per provider per MONTH
- 700 Cardiac arrest
  - 2.3 per provider per YEAR



#### **Experience Matters!**

Cardiac arrest survival as a function of ambulance deployment strategy in a large urban emergency medical services system

David E. Persse a,b,c,\*, Craig B. Key d, Richard N. Bradley a,b,c, Charles C. Miller c, Atul Dhingra a

#### THE EFFECT OF PARAMEDIC EXPERIENCE ON SURVIVAL FROM CARDIAC ARREST

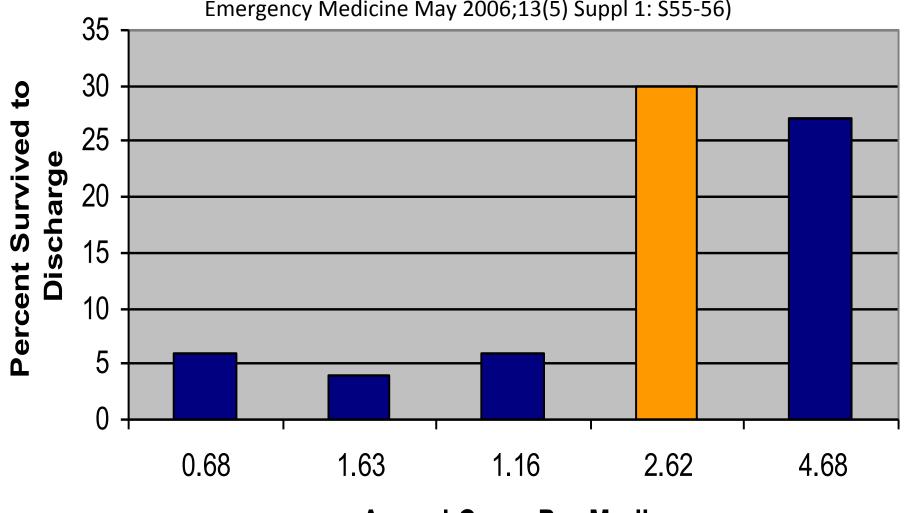
Laura S. Gold, PhC, Mickey S. Eisenberg, MD, PhD

#### EFFECT OF PARAMEDIC EXPERIENCE ON OROTRACHEAL INTUBATION SUCCESS RATES

Alex G. Garza, мр,\*† Matthew C. Gratton, мр,\*† Darryl Coontz, емт-р, мва,‡ Elizabeth Noble, Рhр,§ and O. John Ma, мр\*

#### **Percent Survival Cardiac Arrest**

Sayre MR et al. Cardiac Arrest Survival Rates Depend on Paramedic Experience. Academic Emergency Medicine May 2006;13(5) Suppl 1: S55-56)



**Annual Cases Per Medic** 

# OK but if one paramedic is good more MUST be better....

#### PREHOSPITAL CARE

Do ambulance crews with one advanced paramedic skills officer have longer scene times than crews with two?

#### A-M Kelly, A Currell

- 1537 "time critical" cases
- Scene times:
  - Mixed crew 15.54 min
  - All ALS 16.92 min
- All ALS performed more interventions
  - 0.9/case vs 0.76/case
  - No difference in failed procedure rates
- Conclusion: Concern for longer scene times not substantiated and should not be considered as a barrier to mixed crew staffing models.



But what about cardiac arrest? These are skills intensive and having two brains is better than one, right?...

## IMPACT OF AMBULANCE CREW CONFIGURATION ON SIMULATED CARDIAC ARREST RESUSCITATION

Ryan Bayley, EMT-P, BA, Matthew Weinger, MD, Stephen Meador, EMT-P, Corey Slovis, MD

- 15 P/P & 15 P/E
- Errors, time to interv, % comp; Result 2P avg:
  - -0.7 (+/- .5) MORE errors of commission
  - 0.5 (+/-.4) MORE errors of sequence
  - -0.8 (+/- .8) MORE errors per resuscitation
  - P=0.008 (0.017-0.036)
- Intubation was quicker but CPR poor CF <50%</li>
- Conclusion: 2P more error prone and does not support 2P provide better care for cardiac arrest.



## We Reap What We Sow

- Adoption of "MORE is Better" model
  - ALS on every ambulance (some w/2 medics!)
  - ALS with first response (> 4 medics!)
- As paramedic positions increased....
  - Increased demand for paramedics
  - Reduced selectivity and training cycle
- Pulse and a Patch model of EMS

We have promoted the value of the Paramedic indiscriminately and in the process we have lost sight of what it is about prehospital providers and the EMS System that has value to the patient and value added to the healthcare system.

#### What is our value added?

- Easy and rapid access to care
  - 24/7/365 at relatively low cost
- Provide trained "eyes on" the patient
  - Where/when others can't/won't go
- Reduced costs by:
  - Preventing the next 911 call
  - Reducing recidivism in chronic disease
  - Determine better, lower cost destinations

#### So what is the RIGHT staffing model?

- EMT/EMT(no Paramedic)
- EMT/EMT with separate Paramedic Response
- EMT/Paramedic
- Paramedic/Paramedic

Every System Will Be Different...

Become what your **Community** needs you to be not what **You** want to be



#### It is NOT more is better

- Focus should be:
  - Right resource to the right patient in the right amount of time AND
  - Right patient to the right destination in the right amount of time
- Emphasis on clinical decision making and outcome based value added of the EMS System
- Increased value of <u>all</u> providers in EMS System



#### What this is not!

- This is not saying we need fewer paramedics
- It IS saying we need to choose good providers to fill new roles
- IF we are going to take our most sophisticated paramedics out of traditional response roles HOW do we fill the seat?
- Pulse and a Patch or good providers that will establish the future of our profession?



### Need Not Tradition Drives Staffing

- First Responders/Basic Providers:
  - Stop life threats with necessary tools.
- Advanced Providers:
  - Care for the sickest of patients
  - Have extended training periods
- Experienced Providers:
  - Sophisticated decision makers
  - Complex differential diagnosis beyond life threats
  - Alternative management/destination



# This is the most exciting time in history to be involved in EMS

- We are facing dramatic changes in almost everything we do.
- We have to throw away old beliefs and be prepared for change
- We have to value and know our science and base our decisions on what we know
- We have to show that what we do makes a difference in patient OUTCOMES



