

Douglas F. Kupas, MD, EMT-P, FAEMS
@paemsmd

Hindsight is 20/40

Musings About the Past, Present,
and Future of EMS





HUSKY, COLLIE, BEAGLE ...
AFGHAN, POODLE, PUG ...
YORKIE, SHIH TZU, CORGI.

YOUR
HINDSIGHT
IS 20/20.

Hindsight is 20/40

- 20 years
 - Commonwealth EMS Medical Director
- 40 years
 - PA EMS provider
 - AHA Advanced First Aid
 - EMT
 - EMT-MAST
 - Paramedic I
 - Paramedic II

- Past
- Present
- Future

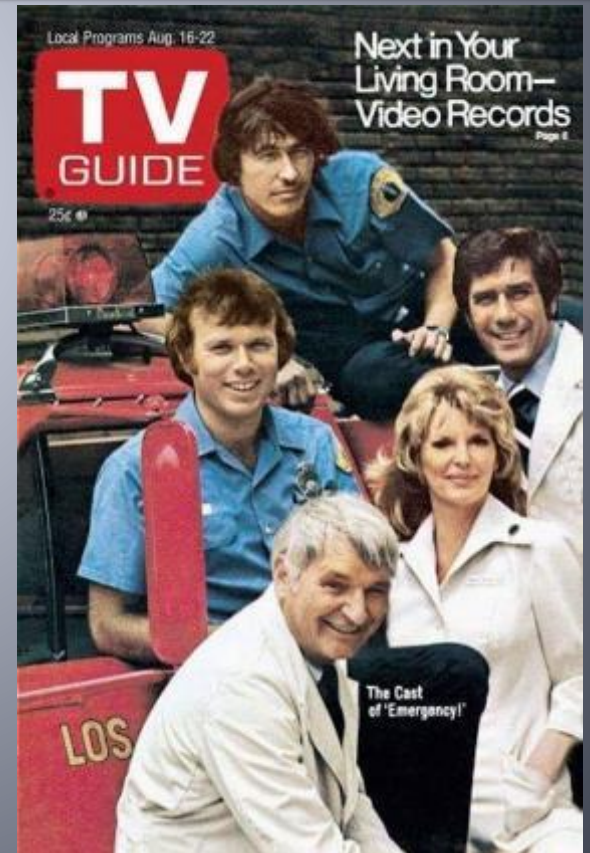


I Miss All of You

Questions ?

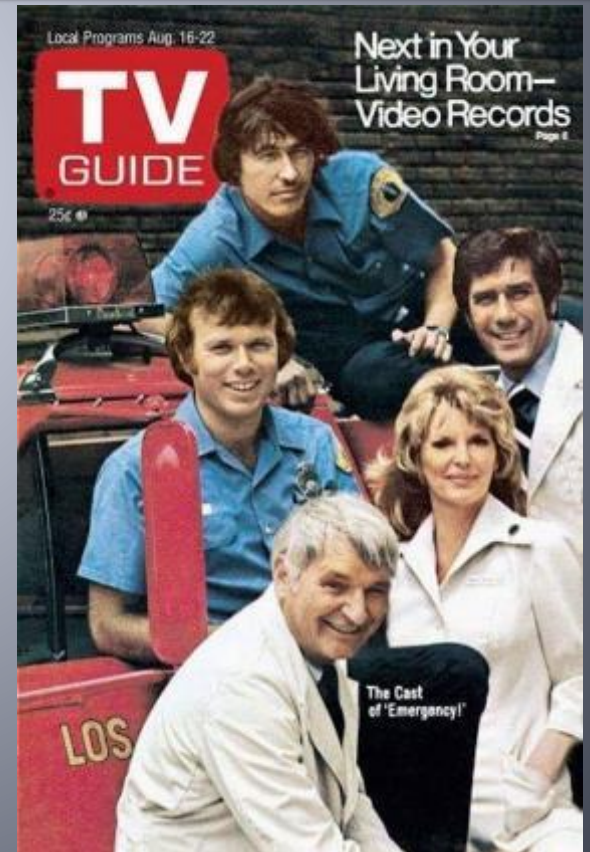
My Biography

Before EMS



My Biography

Before EMS







Lower Kiski Ambulance Service

Volunteers Helping Their Community



Heroes

- Discipline
- Competence
- Caring







Life-saving techniques

Robert Kepics, left, an instructor from Lower Kiski Ambulance Service, points out a procedure to be followed on a dummy victim being utilized in a first aid life saving course being conducted in Freeport Fire Hall. Observers, from left, are: Mike Kepics, assistant instructor; Ken Miller, a Freeport fireman; Nello Tafi,

assistant instructor, and Ernest Stirland, a New Kensington fireman. Some 70 local firefighters and residents are participating in the 18-hour course conducted three hours each Wednesday evening in Freeport.



LOWER
KISKI
AMBULANCE



LOWER KISKI
AMBULANCE

LOWER KISKI

AMBULANCE

LOWER
KISKI

NEWS

DR. HARRY FRALEY

Doctor who was 'institution' in Leechburg

By Michael Logan
Post-Gazette Staff Writer

The rundown house was roughly five miles outside Leechburg, had no source of heat and was home to nine sick family members, including seven children.

Temperatures were running high. The family could barely afford medical care.

"One of them had a fever of about 102," said Tony Quarato, a Leechburg plumber, who guesses the year was 1948 or 1949.

Dr. Harry Fraley ordered Quarato to start a fire so the pair could boil hypodermic needles. Dr. Fraley treated the family's flu symptoms, though they could pay him just \$3 in return.

"How many doctors would do that for you today?" Quarato said of the friend he had known for more than 60 years. "That's the kind of guy he was."

Dr. Fraley, a family practitioner who worked on Leechburg's Main Street for 58 years, died Thursday. He would have been 87 on June 30.

Dr. Fraley earned a bachelor's degree in 1935 and a doctorate in medicine in 1937, both from the University of Pittsburgh.

In 1941, he was called to Camp Lee, Va., as a member of the Army Medical Corps Reserves. Dr. Fraley later treated WWII's wounded in Egypt and Sicily with the Army's Fourth Field Hospital.

Many of Dr. Fraley's friends recalled him as a "humanitarian" and a Leechburg "institution."

"It's just hard to imagine a Leechburg without a Dr. Fraley," said Madeline Napoli, his secretary for 42 years. "He always worried about the next person. He didn't worry about himself."

Napoli remembered the time when Dr. Fraley bought a pair of work shoes for a 14-year-old boy



1950 photo

Dr. Harry Fraley

who needed them to acquire a job. A few months ago, Dr. Fraley paid for the funeral of a man who otherwise would not have had one.

"He did so many good things, but he never advertised it," Napoli said.

In 1991, when friends and patients wanted to publicly thank the man they knew as "Doc" for his impact on their lives, the event had to be organized in secret. They feared that the publicity-shy doctor would cancel the plan.

"He was a very simple man. He loved his work, and he loved the people of Leechburg," said Phyllis Framel, Dr. Fraley's daughter. "For many years, he was the only doctor here."

Framel said her father was a doctor to mill workers, treating patients on the work site or at their homes. If patients couldn't afford Dr. Fraley's normal fees, they paid him with tomatoes, corn, turkeys, hams or baked goods.

"Money was never really important to Doc," Framel said.

What was important was making sick people well. He worked in the profession until 1996, when he was 84.

Besides attending to the ill, Dr. Fraley's other love was beautifying Leechburg with trees and shrubs through the Shade Tree Commission, a group of volunteers he formed in 1959.

Framel said her father had developed a heightened sense of "appreciation for a good shade tree and a glass of water" after spending time in the deserts of North Africa.

One of his first projects was cleaning up the main entryway into Leechburg along Third Street.

For many years, visitors and residents driving into town had been greeted by billboards, trash and rats.

Motorists are now welcomed by a park. Fem Biagioni, one of two surviving members of the commission, said the borough officially renamed the park for Fraley four years ago and dedicated it last year.

In addition to his daughter, Dr. Fraley is survived by Anna-Marie Fraley, his wife of 32 years, and his twin sister, Julia Goettel, of Oakmont.

Friends will be received from 2 to 4 and 7 to 9 p.m. today in the Clawson Funeral Home, 170 Main St., Leechburg. Also, there will be visitation from 2 to 9 p.m. tomorrow in First United Methodist Church, 261 Main St. Funeral services will be held at 10 a.m. Monday in the church.

In lieu of flowers, family members have suggested contributions be sent to the Leechburg Area Memorial Planting Fund or to the Dr. H.W. Fraley Memorial Fund at 147 Main St., Leechburg 15656.

House Calls Dr. Fraley

Patient-centered Family-centered Caring

EMS never stopped doing house calls

1980 Connecticut EMS Patient Survey

- Public's Reasons for EMS Uneasiness
 - Sirens and noise
 - Getting a lot of attention
 - Abilities of crew
 - Dealing with strangers
- “Competence is more often shown by quiet deliberateness than by noisy bravado.”

E. Marie Wilson, Conn. EMS Patient Survey, 1980



Citizens Ambulance Service

Professionalism, Safety, High-functioning Teams
Fraternity





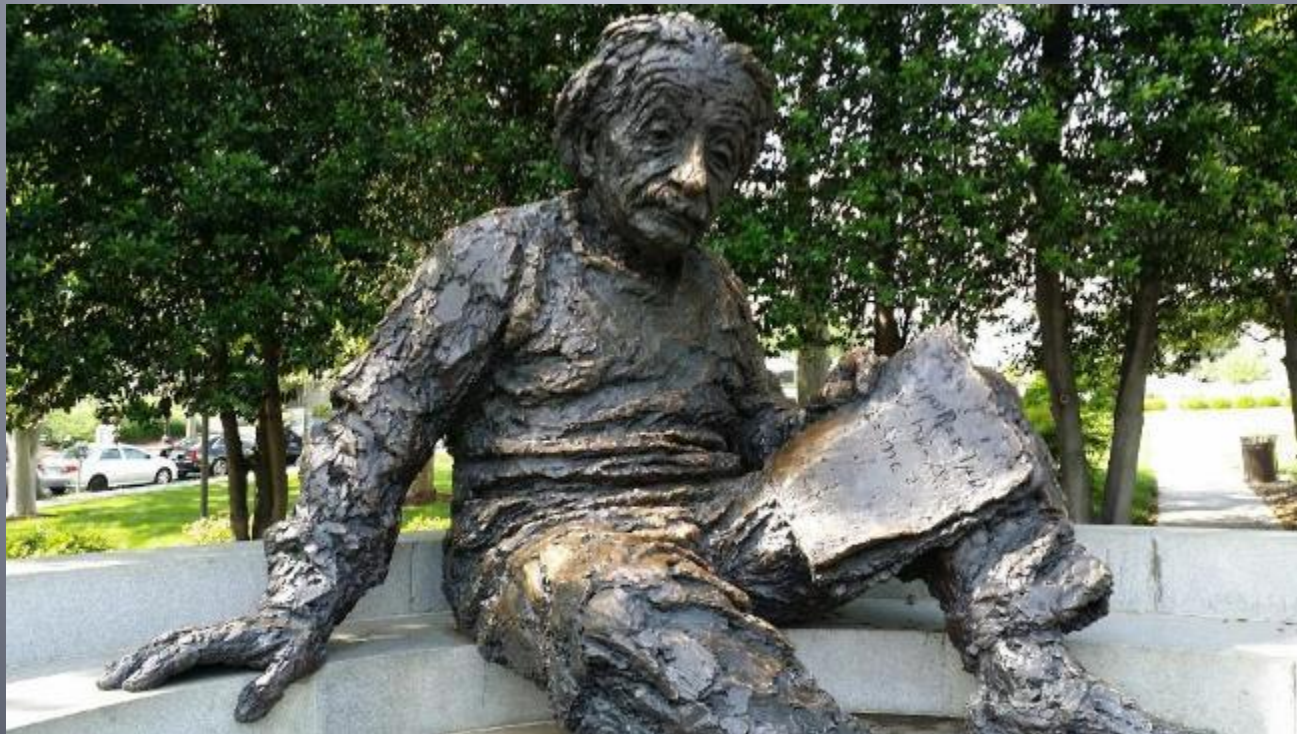
S. W. JACK
AMBULANCE CENTER



Medical School/ Residency

Scholarly

Patient-focused Integrated Health Care



Lessons

- Beware of the shiny new toy
- Rosen's "technical imperative"
- Patient safety – primum non nocere
- Evidence-based
- Patient outcomes are not based on how many things you do
- Treat the patient, not the monitor
- Value of EMS physician

Teaching

We Learn More Than Our Students















State BEMS

Regulation and Technical Assistance



Terrorism/ Disasters Changed Everything



State Observations

PA is a leader

- BLS CPAP
- Safety Initiatives
- Antibiotics for open fractures
- Ketamine for excited delirium (controlled)
- HeartRescue Project
- CARES (Cardiac Arrest Registry to Enhance Survival)
- 2009 EMS Systems Act
 - EMS essential service
 - Community health
 - Integrated with health care
 - Preamble, MT MIH
- Pennsylvania Bulletin (for Scope, Med list, Equip list)
- EMS Information Bulletins
- Statewide protocols



Advocacy

- EMS must ban together
- Is your cause patient-centered?





EMS Identity Crisis

Police, Fire, and ?



AUGUST 2019[CPR LifeLinks Toolkit](#)[Nomenclature of EMS](#)[Naloxone EBG](#)[Draft EMS Education Standards](#)[« Return to Newsletter](#)

WHAT'S IN A NAME? EMS STAKEHOLDERS DISCUSS THE PROFESSION'S NOMENCLATURE

NEMSAC recommendation for a change in nomenclature brings more than 20 EMS stakeholder groups together for a conversation about EMS terminology

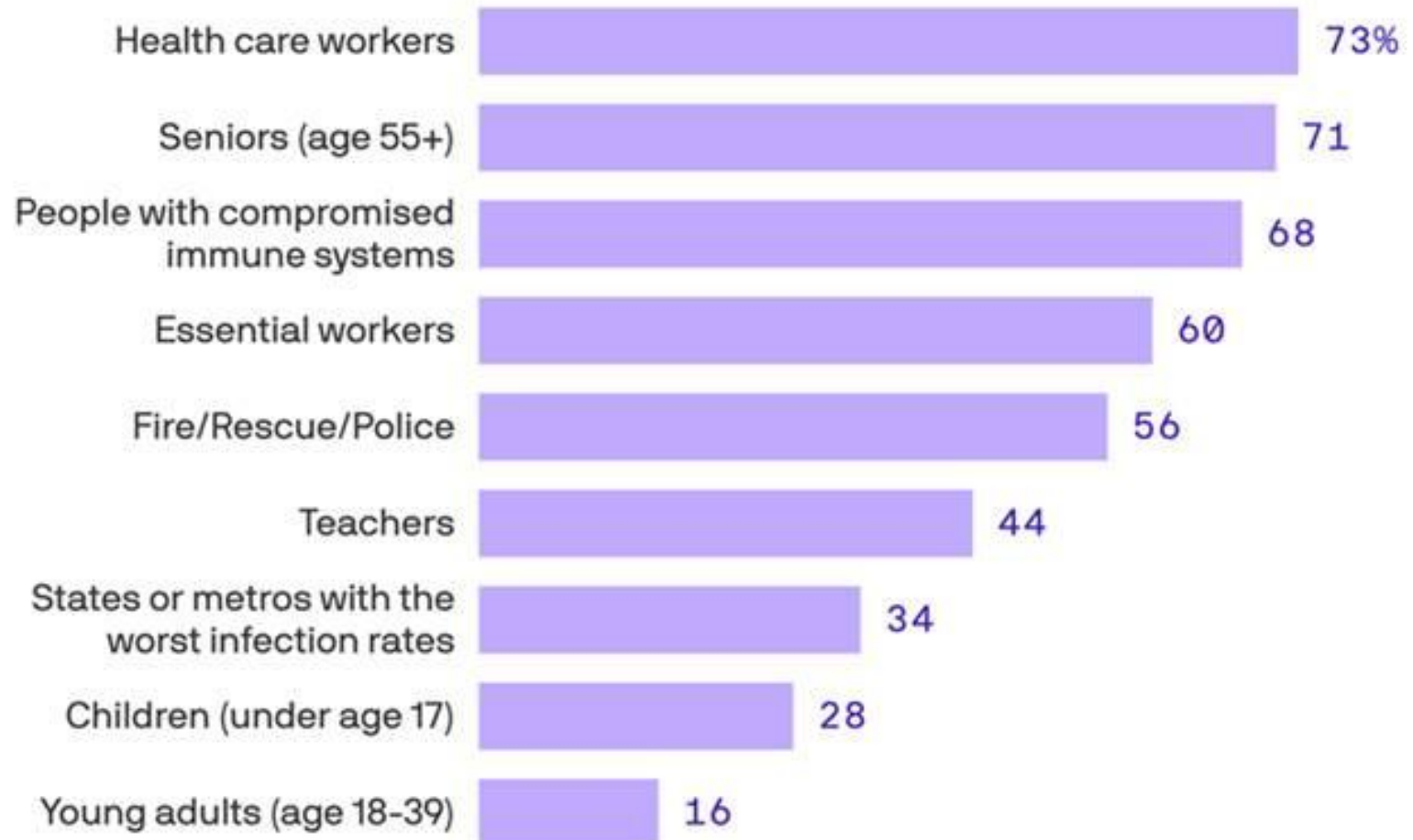


The term "emergency medical services" and the associated titles of EMS providers is the topic of an ongoing discussion in the profession. In 2017, the National EMS Advisory Council (NEMSAC) approved an advisory entitled "Changing the Nomenclature of Emergency Medical Services is Necessary." In this advisory, NEMSAC outlined its concerns about the number of terms used to describe EMS and its practitioners over the years, and how this can be extremely confusing for the general public, elected officials and members of the media, as well as within healthcare and public safety. The council also

recommended specific terminology to describe the practice of EMS clinicians and recommended the creation of a single term to describe all certified EMS practitioners

Which of the following groups should receive priority when a COVID-19 vaccine is available?

Survey of 1,399 U.S. adults, Aug. 14-16, 2020



Data: The Harris Poll; Chart: Andrew Witherspoon/Axios

Professionalism

- Public trust
-
-
-
-
-
-
-
- Health care provider



EMS Subspecialty

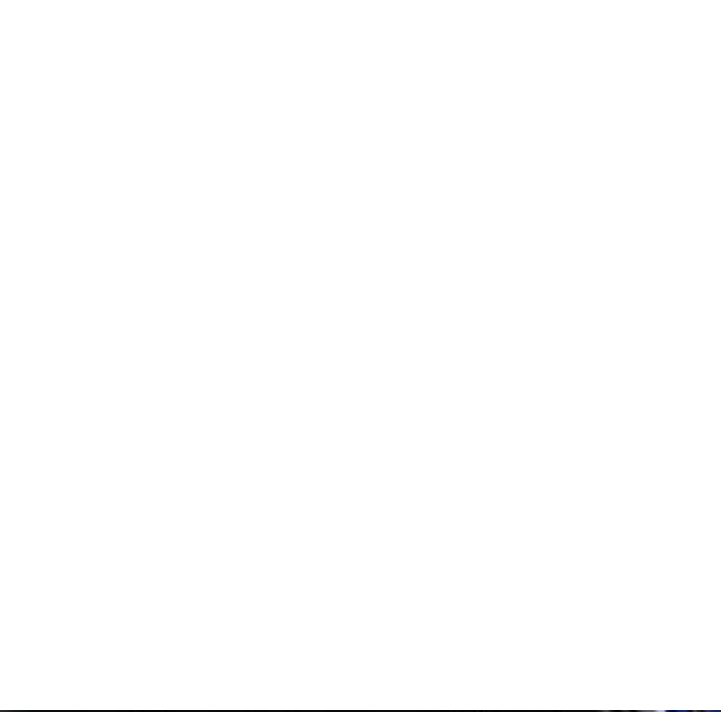
- ABEM
 - PA EMS board-certified physicians 38/202 in 2013
- AOBEM



**American Board of
Emergency Medicine**

CELEBRATING **40** YEARS

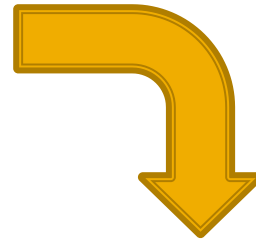
YOUR EXCELLENCE • YOUR DEDICATION • YOUR SPECIALTY



Safety

For our patients and our providers

EMS Safety Culture



Must be required and supported from top management to frontline providers

TactiCool or MediCool





Xylazine HCl



Have you looked in your agency's drug bag/box?







NDC 63323-012-01 91201

OXYTOCIN
INJECTION, USP
(SYNTHETIC)

10 USP Units/mL

For IV Infusion or IM Use

1 mL

Rx only

1156863

ENALAPRILAT
INJECTION

FOR IV USE ONLY

1.25 mg/mL

(Anhydrous equivalent)

Opportunity for Safety Hand-off/ Hand-over/ Transfer of Care



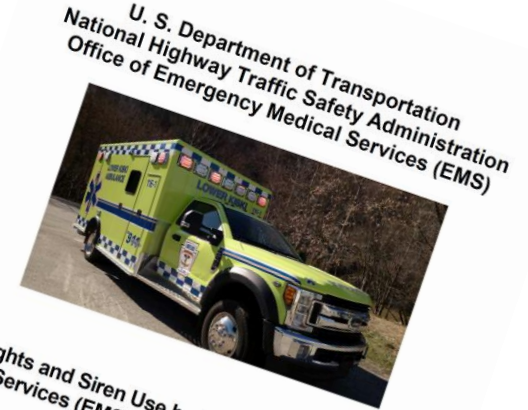


Douglas F. Kupas, MD, EMT-P, FAEMS
@paemsmd

Lights & Siren Use by EMS:

Above All,
Do No Harm

Available at:
ems.gov



Lights and Siren Use by Emergency Medical Services (EMS): Above All Do No Harm

Author:
Douglas F. Kupas, MD, EMT-P, FAEMS, FACEP
Submitted by Maryn Consulting, Inc.
For NHTSA Contract DTNH22-14-F-00579



Introduction – primum non nocere



- **L&S use is a medical intervention**

DEA# GB000000 Lic. # ME 000000

Tr [REDACTED] 901

NAME _____ AGE _____

ADDRESS _____ DATE _____

R_x Lights and Siren
Sig: Dispense one
L&S response,
Use sparingly and
only when indicated

(SIGNATURE)

LABEL
REFILL 0 1 2 3 4 5 PRN

DRS -PAT PRES: T
1-800-694-0800

Who does better than we do?









ניידת טיפול נמרץ

AMERICAN FRIENDS OF MAGEN DAVID ADOM

נרמל
14

PA EMS

Service

Duty

Commitment

Honor



AMERICAN FRIENDS OF
MAGEN DAVID ADOM

Presented to the People of Israel

By

ALAN & BEVERLY KASDAN
AND FAMILY

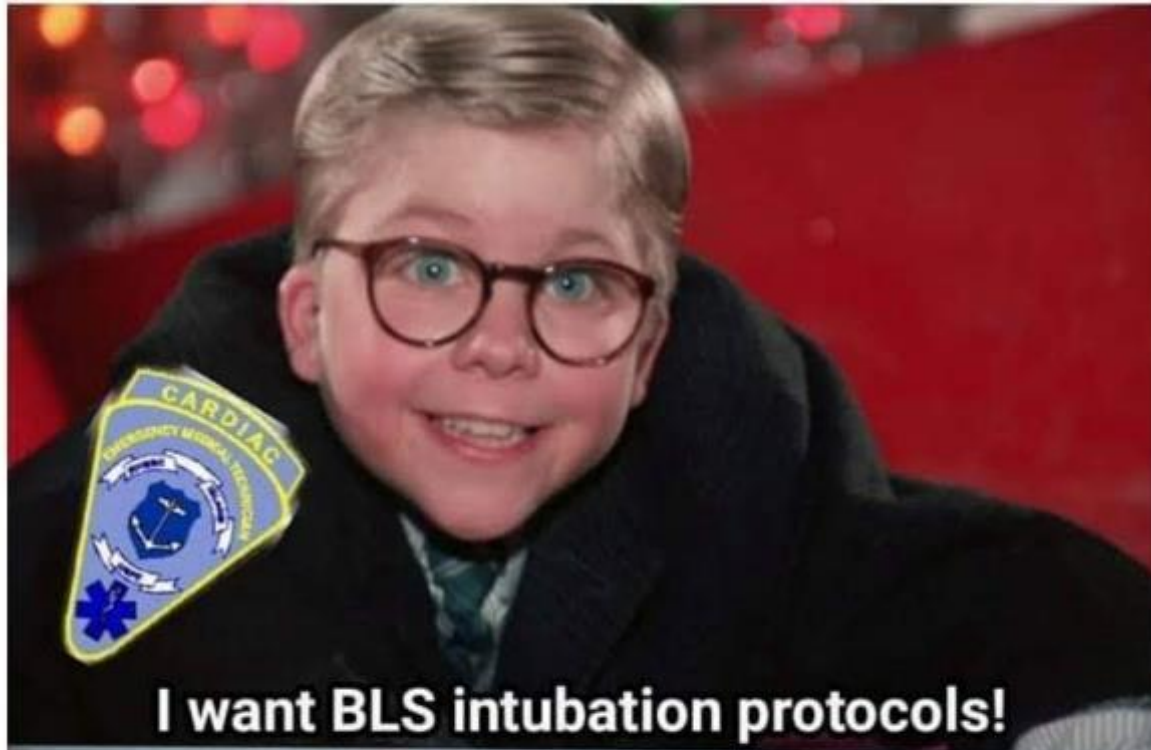
MINNEAPOLIS, MINNESOTA, U.S.A.

2013





Quality



I want BLS intubation protocols!




*burned out memes
for ems teams*

You'll put it in the esophagus, kid.

Toys and Shiny Objects

- Distraction
- Technical imperative
- Innovation imperative
- Cooperation imperative

A photograph of Donald Berwick, MD, speaking at a podium. He is wearing a dark suit, a white shirt, and a red tie. The podium is clear with a white sign that reads "Institute for Healthcare Improvement".

“Health care has no
intrinsic value at all. None.
Health does. Joy does.
Peace does.”

- Donald Berwick, MD,
IHI Senior Fellow & President Emeritus



Institute for
Healthcare
Improvement

Families & Guests
Please ask any of our
PICU staff members to
explain the
information on this
board. Thank you!

CLABSI Days between events 666 550	VAP Days between events 3207 61	CAUTI Days between events 496 255	HAPU Days between events 177 7
UNPLANNED EXTUBATION Days between events 77 2	FALL Days between events 1179 238	RE-ADMIT Days between events 249 33	HANDWASHING Rates For Current Month 74% 727



“Without data
you’re just
another person
with an opinion.”

- W. Edwards Deming,
Data Scientist

High-functioning System

Are you going through the motions or disappointed if no ROSC?





pennsylvania
DEPARTMENT OF HEALTH



American
Heart
Association
Learn and Live



HeartRescue
PROJECT
PENNSYLVANIA



Lend a hand
Save a life

Learn CPR NOW

It's only 5 minutes





Rethinking
out-of-hospital
cardiac arrest



HeartRescueNow.com



12







JOY








Evidence-based Medicine

For every level of EMS provider

Evidence-based

- 50% of what you are taught is wrong, we just don't know which 50%
- JEMS vs EBM
- Carry all meds
- Population health vs individual
- Dispatch 911 response



BACKBOARDS

@DrJeffJarvis

FIT IN RURAL AND URBAN DUMPSTERS



Where Are We Going?

Forward or Backward?

1973



2020



NOW HIRING!

STORE TEAM MEMBER: \$10.50

SUPERVISOR: \$13.00

ASSIST. MGR: \$16.00

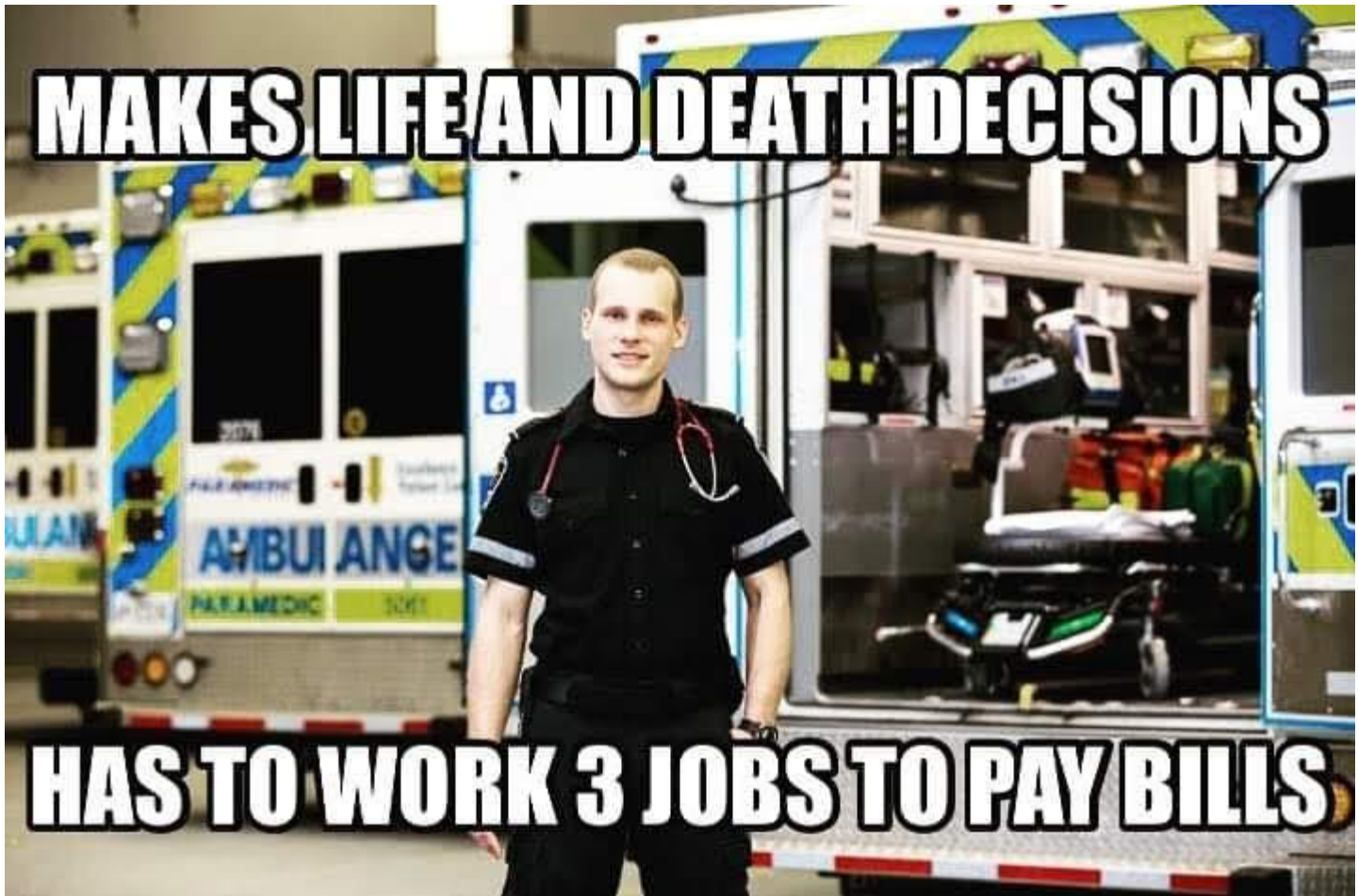
TEXT "SHEETZ" TO 97211 TO APPLY

JOBS.SHEETZ.COM



FLYRTAB0119-3





MAKES LIFE AND DEATH DECISIONS

HAS TO WORK 3 JOBS TO PAY BILLS

EMS system has more value than you know

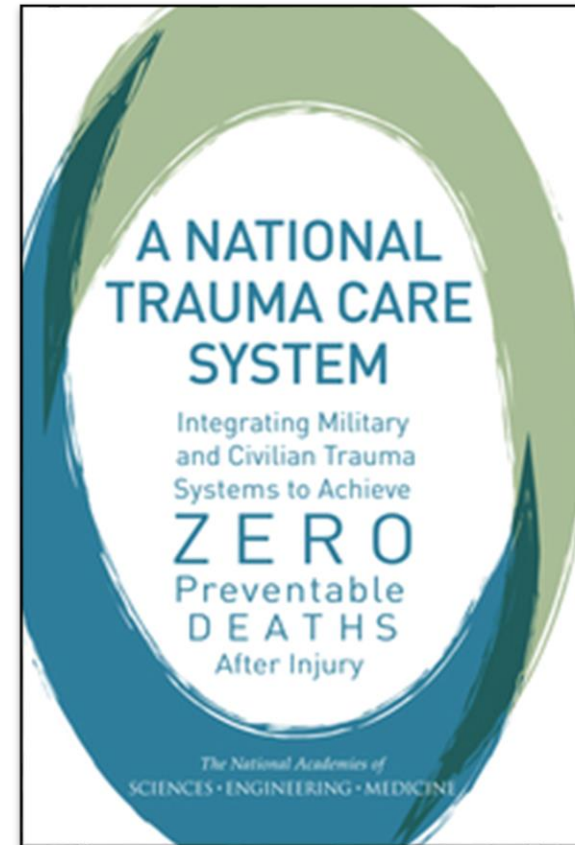
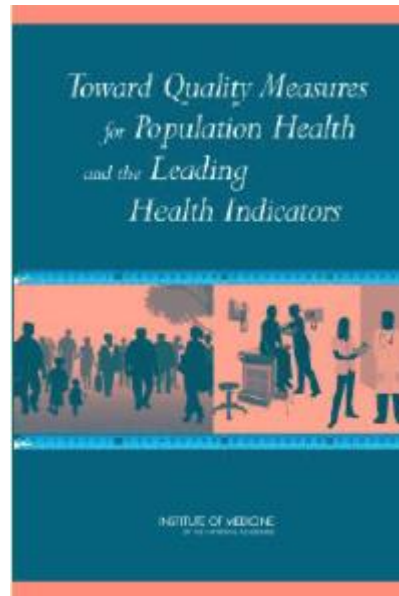
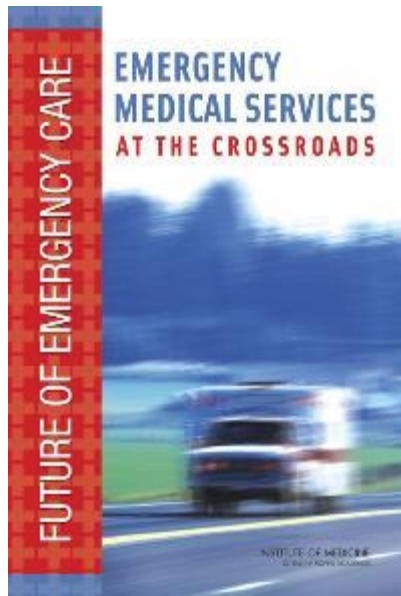
- **Geographically diverse** deployment
- Excess production capacity in the system
- Sophisticated trainable **low cost** work-force
- Comfortable with **algorithm based care**
- Comfortable in nearly any setting
- **First contact capability**
- **Payor agnostic**
- **Navigation AND transport** capability
- Touch **every aspect of pre/post acute care**
- Ability to **change OUTCOMES**



EMS Revenue CMS History

Transport
Supplier
vs.
Healthcare
Provider









States Strive to Keep Medicaid Patients Out of the Emergency Department

STATELINE ARTICLE February 24, 2015 By: [Michael Ollove](#) Topics: [Health](#) Read time: 8 min

Share 

Read Mode 



The entrance to the emergency department at North Fulton Hospital in Roswell, Georgia. A new approach to reducing the number of nonemergency visits to emergency departments among Medicaid beneficiaries is showing promise. (AP)

RELATED

Topics [Health](#)

Places [United States, Washington](#)

EXPLORE MORE FROM STATELINE

explore by place 

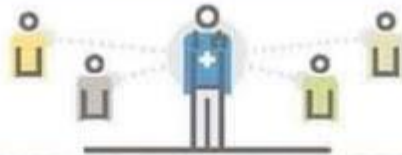
explore by topic 

STATELINE DAILY EMAIL

Sign up for our daily update – original reporting on state policy, plus the day's five top reads from around the web

Where to Go for Care

Call your primary care provider, even after hours, if you are unsure where to go.



PRIMARY & PEDIATRIC CARE OFFICE

\$\$\$\$

The go-to place for managing your health care. Your primary/pediatric care provider knows your medical history best.

OPEN: Same-day appointments available. Weekdays. Some offices have early, late and weekend appointments. Providers always on call to provide guidance as needed

GOOD FOR:

- Colds and flu
- Minor cuts and burns
- Sprains and strains
- Vomiting and diarrhea
- Fever in a child over 3 months old
- Chronic conditions
- Annual physicals
- Routine screenings
- Vaccines
- Medicine refills
- Anxiety and depression
- General asthma treatment
- Tick/Insect bites and Skin Irritation



EMERGENCY ROOM

\$\$\$\$

Immediate care for life-threatening conditions, including heart attack and stroke.

OPEN: Always.

GOOD FOR:

- Fever in a child less than 2 months old
- Chest pain
- Shortness of breath
- Sudden numbness, weakness or speech difficulty
- Severe belly pain
- Cuts requiring stitches
- Broken bones
- Concussions
- Coughing or vomiting blood
- Uncontrolled bleeding
- Mental health crisis
- Asthma attack



Unjustified Variation



Health Insurer Goal:
“Keep patients out of ED and hospital”

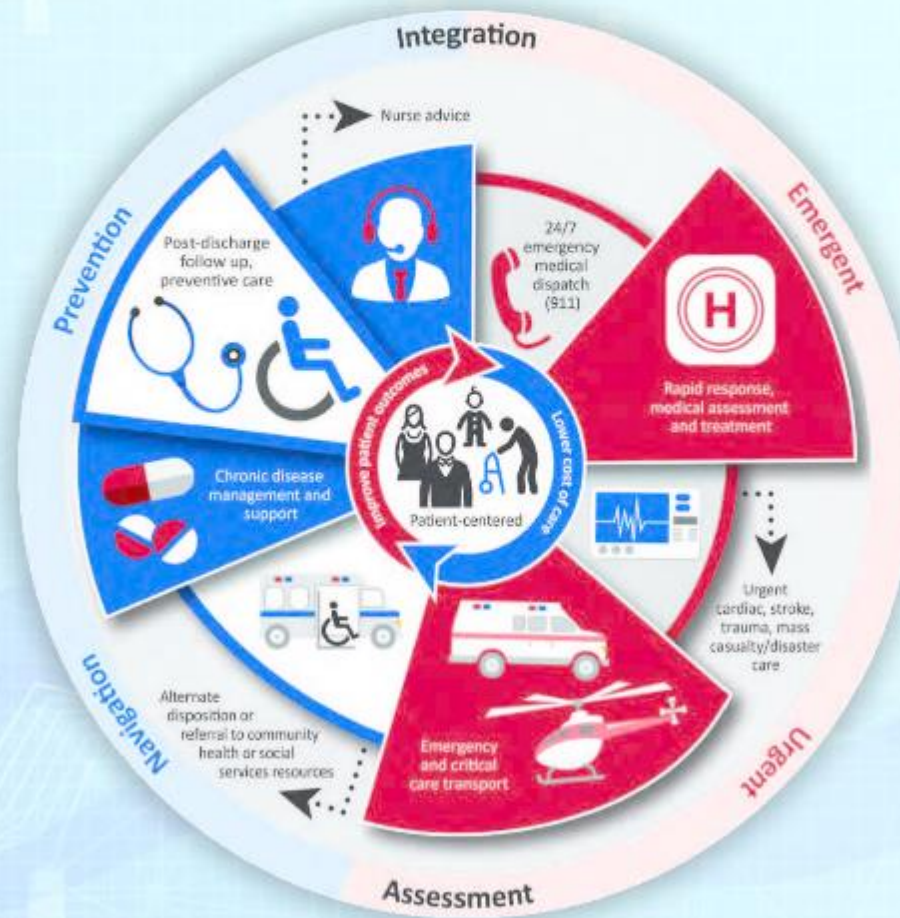
~~Health Insurance~~
~~“Keep patients out of~~



**Better Goal:
Keep People Well at Home**

EMS 3.0

The Future of Service Delivery, Reimbursement,
Education, Dispatch, Medical Direction,
Technology and Regulation



A SUPPLEMENT TO **EMSWORLD**

In Partnership with the National Association
of Emergency Medical Technicians **NAEMT**

You Heard it Here First

“In the near future, EMS agencies that embrace patient-centered health care that is integrated with regional health systems will provide 20% traditional 911 transport and 80% home-centered care.”

D. Kupas, 2019

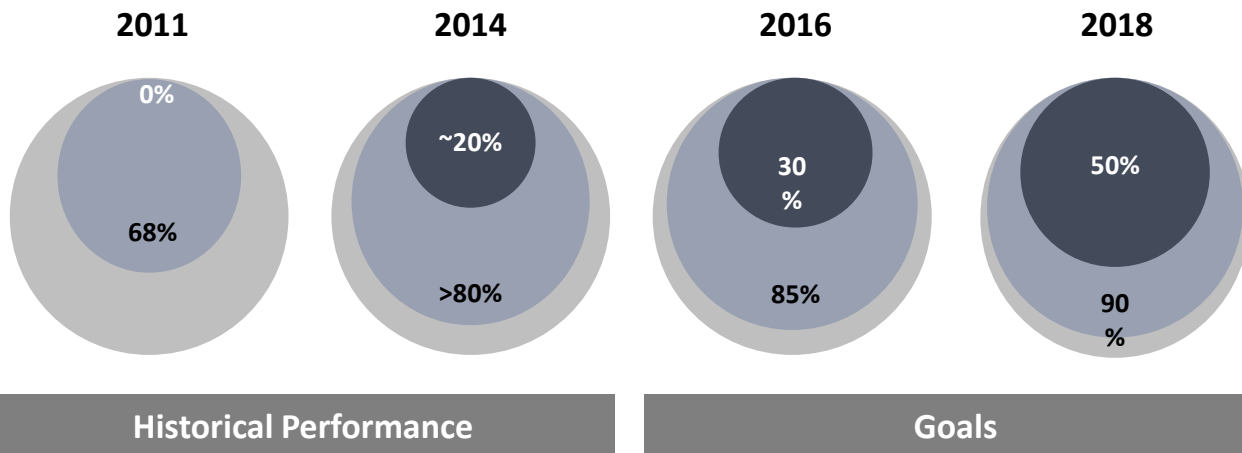
You Heard it Here First

“In the future, every EMS provider will be viewed as an MH provider.”

D. Kupas, 2019

EMS Revenue HHS & Delivery System Reform

- Alternative payment models (Categories 3-4)
- FFS linked to quality (Categories 2-4)
- All Medicare FFS (Categories 1-4)



What about:

Value?

Pay for
Measurement?

Pay for
Performance?



COST & PAYMENT

By Abby Alpert, Kristy G. Morganti, Gregg S. Margolis, Jeffrey Wasserman, and Arthur L. Kellermann

Giving EMS Flexibility In Transporting Low-Acuity Patients Could Generate Substantial Medicare Savings

\$560 million

Saved

If low-acuity cases were managed in less expensive settings, Medicare could save roughly \$560 million per year.

ET₃ Model

Emergency Triage, Treatment, Transport

ALTERNATIVE DESTINATION

- Pay for transport
- Agreed upon non-ED destinations
- Medical necessity applies
- QI monitoring for secondary transport or use of ED

TREAT-IN-PLACE

- Telehealth
- MC qualified provider
- Pay EMS for non-transport
- Pay qualified provider for telehealth visit
- QI monitoring for secondary transport or use of ED

ET₃ Model

Emergency Triage, Treatment, Transport

- CMS CMMI Project
- 30% of Medicare enrollees
- 24/7 capability for model
- Monitoring, Quality Metrics, Performance-based Payments
- Phase 2: fund limited 911 Nurse Triage
- Six ET₃ EMS Agencies in PA



Administrator Seema Verma  @SeemaCMS · 43m

ET3 seeks to realign Medicare's incentives so we can cut down on those surprise bills and make sure beneficiaries are getting appropriate care at the right time and place. [cms.gov/newsroom/press...](https://www.cms.gov/newsroom/press-releases/2023/08/230815-et3)



BACKGROUND

OOHCA Care Paradigms



Scoop and Run

Vs.



Treat on the "X"

Results

After adjusting for significant confounding variables, the following significant differences emerged when comparing patient outcomes between LFTA and HFTA.

	LFTA	HFTA	Adjusted OR
ROSC	26.4%	35.4%	1.20
Survival to Discharge	8.5%	12.5%	1.95
Favorable Neurologic	77.9%	86.7%	1.60

Funding Cardiac Arrest Care

CURRENT STATE

- Pay ALS fee if treated/transported
 - >\$4,000 ED fee
- Pay BLS fee if treat and field termination

PROPOSAL

- Fund CARES data
- Pay ALS fee if treated



Health Care System

Chronic
Care
&
Wellness

“EMS of the future will be
community-based health
management which is fully
integrated with the overall
healthcare system”

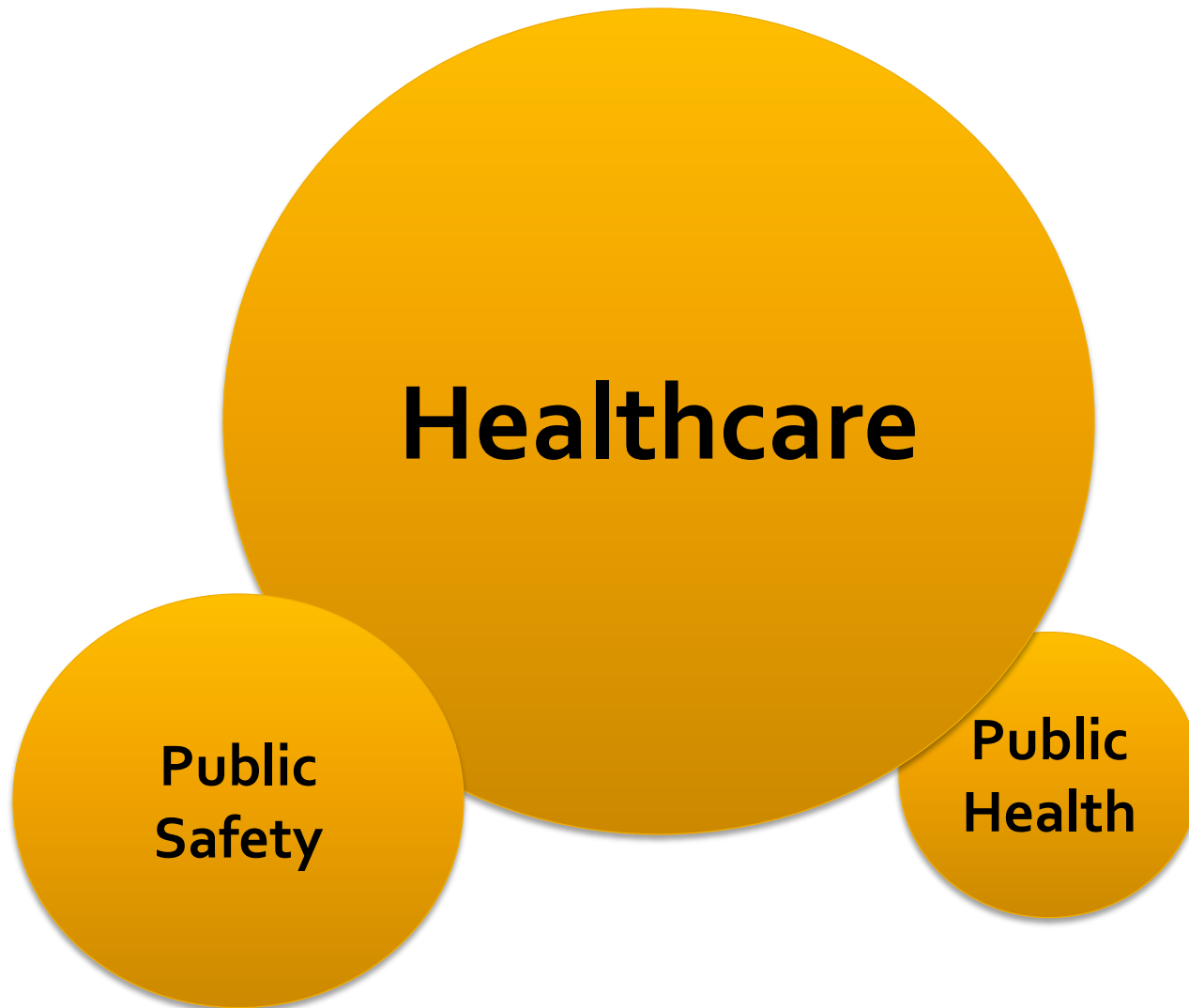


EMS Agenda for the Future
(NHTSA, 1996)

Acute/
Episodic
Care

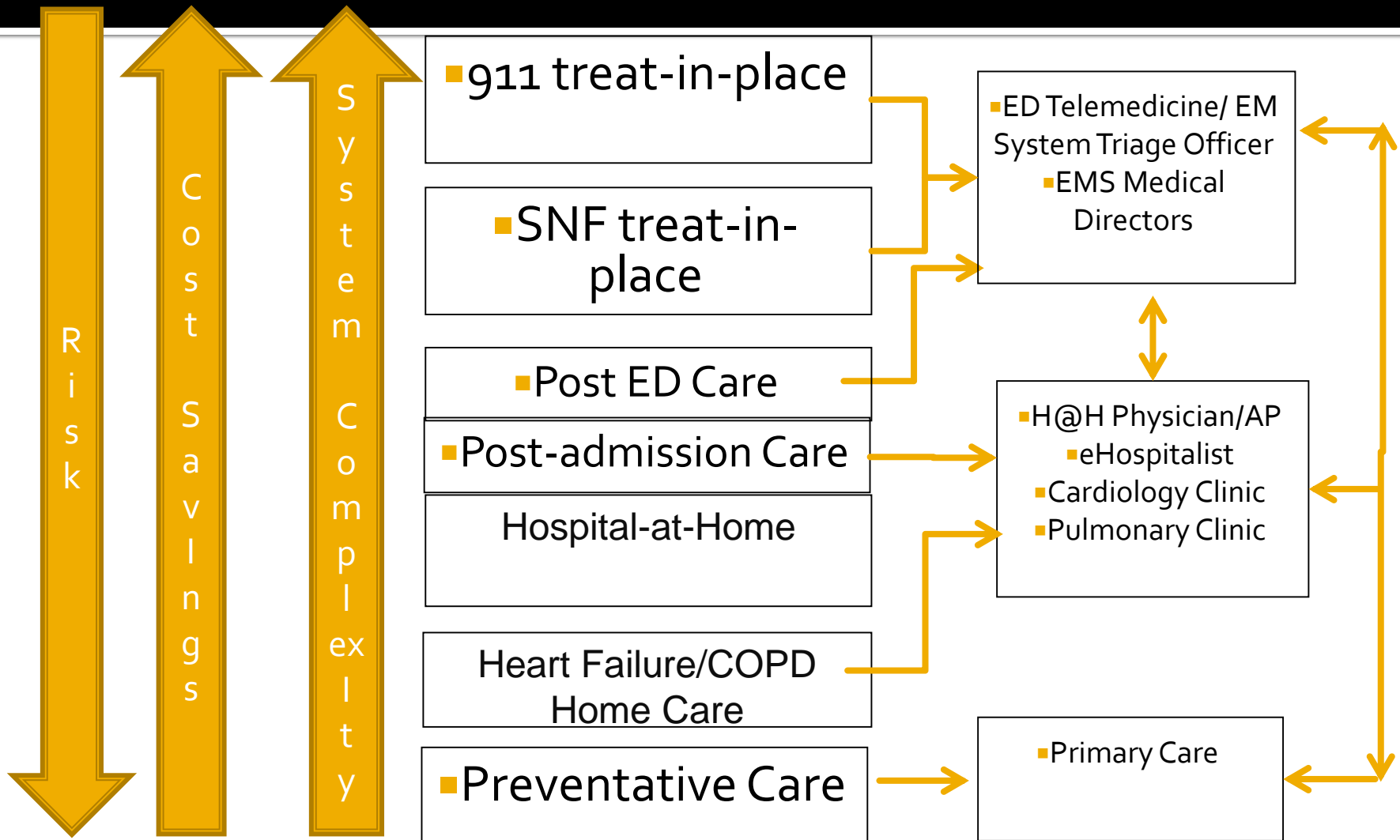
Palliative
Care
&
End-of-Life

What is Our Value?



CP/MIH Expanding Roles

Caution: NOT current PA EMS



All non-911 care documented in health system EHR



Are You Ready to Change?



HOLD MY BEER
& WATCH THIS....

 **SILVERADO**



Where the
magic happens



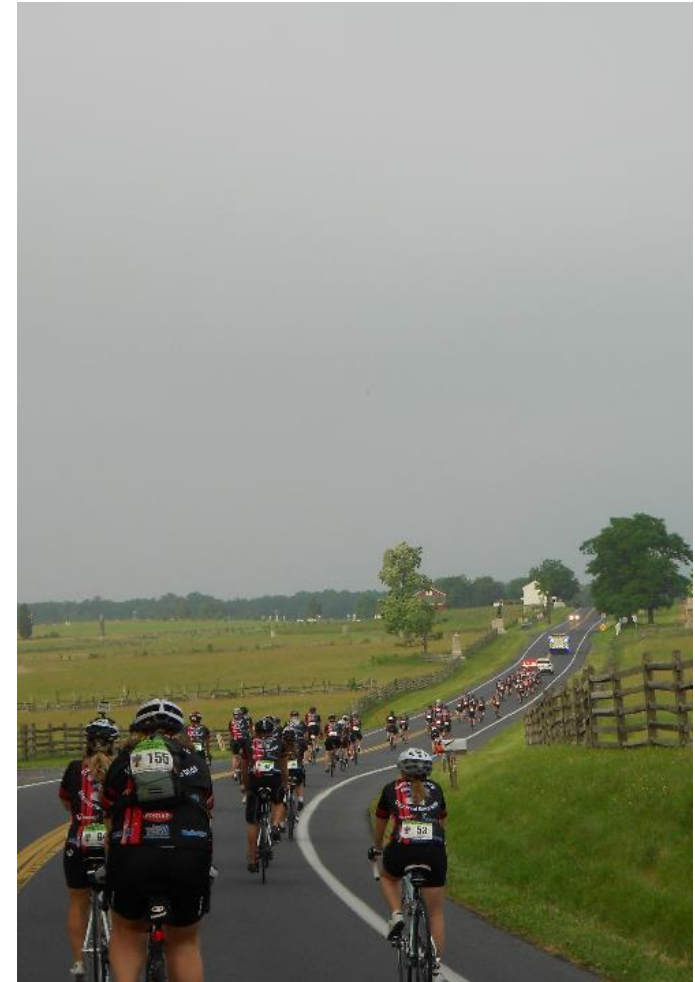
Your
comfort
zone

Impactful Moments

Get Involved



Remember/ Reenergize/ Celebrate/ Stay Well



Recruit

Emergency program revived

Figures behind Explorer effort testify training can lead to careers

By GEBI GIBSONS
Times-Tribune Staff Writer

DANVILLE — Eric Gill spent more than 30 years as a police officer. He credits participating as a teen in an Emergency Medical Services Explorer program as his motivation for that career.

It familiarized young people with emergency care. And Gill is part of an effort to bring the program back to Danville.

Gill said as a young teen, he witnessed a bad accident in front of his parents' house in which two people were hurt, and he didn't know what to do.

Shortly after that, Gill joined the EMS Explorer program to get Emergency Medical Technician training and meet area emergency personnel.

"It was a very life-altering thing because that's how I got into law enforcement," Gill explained. "It was routine for me to see police officers interacting with emergency personnel."

The previous program has been out of existence for decades. But the new Explorers' post will share the same number, Post #4.

Reviving the program

Gill and his wife Dawn Kruse-Gill, both EMTs, are especially pleased their son Brantley, an Interactive Care Unit course at Geisinger, is also volunteering to conduct the Explorer program.

Brantley Gill worked as an EMT in Danville before attending Mansfield University, where he got an advanced degree in nursing. He graduated last year.

Gill said his experience on the ambulance was a great benefit to him, especially when he began the clinical part of the program.

He remembers being familiar with how to do an electrocardiogram, or ECG, when other students struggled to know how to complete the test.

In the field, he said, he was confident in dealing with patients, and comfortable speaking to other professionals.

While in high school, Gill had to travel to Luzerne County Community College and then to Geisinger Wyoming Valley, which was about an hour away, to complete his emergency training.

The Explorers program, he said, will provide a chance for young people to learn close to home and with experienced emergency responders from their area.

Open House slated

The Explorer program will hold an open house at the



Share





U.S. DEPARTMENT OF THE INTERIOR
Land, Water, and Sky

BOEM

NPS

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
EVENTS & RECREATION
HARLEYVILLE



Dr. K. K. K.

AMERICAN
NPS

U.S. DEPARTMENT OF THE INTERIOR



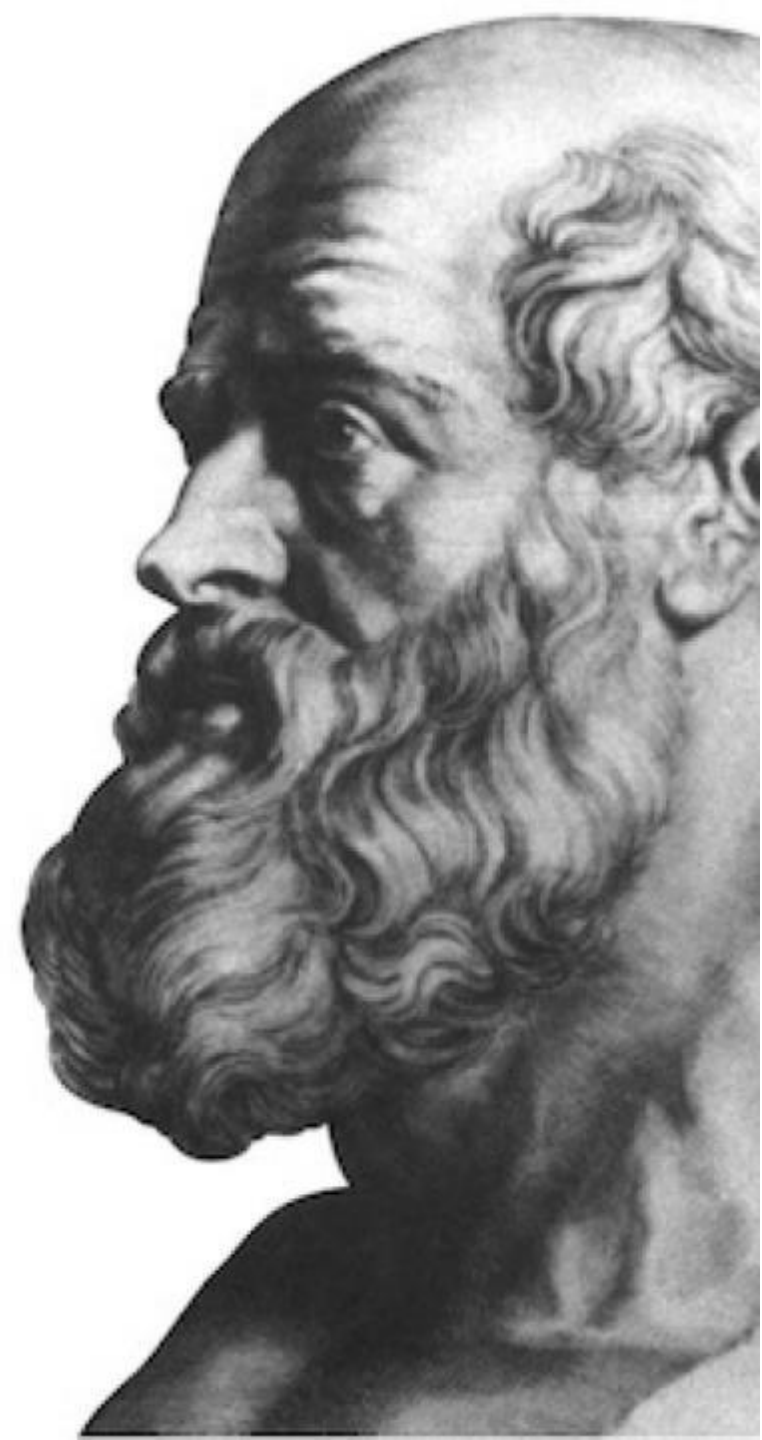




Care

**“Cure sometimes,
treat often,
comfort always.”**

Hippocrates









No matter how educated,
talented, rich, or cool you believe
you are, how you treat people
ultimately tells all.

Integrity is
Everything.



Relax/ Recharge



Summary

- We do health care, public safety, and public health
- We do house calls!
- We save lives sometimes; we can care always.
- Right now is critical!
 - Who are we?
 - Unite
 - What value will we bring to patients?
 - Don't chase shiny toys, follow the evidence/ outcomes
 - Will we integrate with health care?
 - Our future depends upon being a solution, not an expensive problem
- Tipping Point – The future is ours to lose

“Let’s Be Careful Out There” For Our Patients and Our Providers

