



# Department of Public Safety

## EMS DIVISION

Citizen's Academy Presentation 2013

### Today's Presentation:

- Welcome
- Introduction to Volusia County EVAC
- The Distinctive 911/First Responder/EMS/Hospital relationship
- Quality and Clinical Excellence
- "What happens when I call 911"
- Important changes/improvements to the pre-hospital community health care system
- Discussion and Questions

### Introduction and Welcome



15 Minute Post Lunch Ambulance Tour  
(Before starting the actual presentation)

### Service Background

- FDOH Licensed Primary Provider of Advanced Life Support (ALS) level Emergency Ambulance Services for Volusia County
- Independent Emergency Medical Foundation (EVAC) incorporated October 1981, taking over county EMS responsibilities for Beacon Ambulance.
- Fall 2011, EMF dissolved and EVAC transitioned into a county division under Public Protection

## Service Background

- Serves a diverse population of 500,000 residents + transient population (contiguous populations, seasonal and tourists)
- 1100 **diverse** square miles
  - Urban to Ultra-Rural
- Staff of over 180 skilled EMS staff
  - Field care providers
  - Support (ASTs)
  - Maintenance
  - Administrative/Accounting
- Provides 24/7 ambulance coverage, high of 23 “peak time” units down to 12 at night
- **HIGH PERFORMANCE EMS MODEL**

## By the Numbers

- Expenses
  - Annual Budget of Approximately \$15.8 Million
  - Staffing (70%)
  - Fuel/Maintenance (15%)
  - Medical equipment/supplies (10%)

## Ever Increasing Demand

- Over **77,000** calls in 2012
- Transported over **40,000**
- **Linear increase in demand**
  - (3-5%/year)

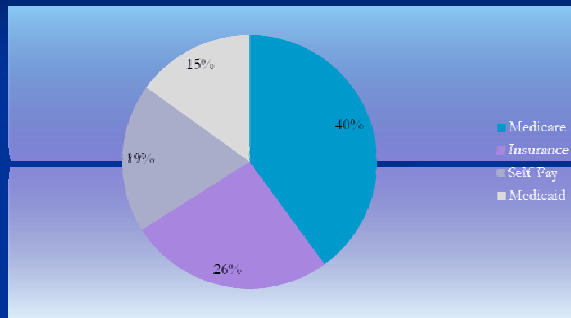
## By the Numbers

- Revenues
  - Rates set at 150% of the Federally established Medicare National Fee Schedule
  - NFS = 80% of CMS determined “reasonable & customary” (+) GPCI (+/-) inflation factor (+/-) urban/rural/super rural factor.....

- “Gross” approximately \$32M
- “Net” approximately \$14.8M
- - Less Entitlement Write-downs
- - Write-offs (bad debt, indigence, etc)

Service	Medicare NFS	VC Rates
BLS NE	\$215.57	\$324.00
BLS E	\$344.92	\$518.00
ALS NE	\$258.69	\$389.00
ALS E	\$409.59	\$615.00
ALS 2	\$592.83	\$890.00
SCT	\$700.62	\$1,051.00
Mileage	\$7.09	\$11.00

## Pay Mix



## EMS is....

- **NOT** just a fast ride/easy access to the hospital.
- **The clinical skills and treatment provided by the Paramedics and EMTs, NOT the vehicle!**
- **Clinically/Operationally focused on quality improvement**
- Fast Becoming Recognized as an **integral partner** of the total health care delivery system ...**BEGINNING WITH THE INITIAL ACCESS POINT.**
- **Often stressed due to inappropriate utilization, sometimes not immediately available for true emergencies**

## High Performance EMS ?

- **Traditional Deployment**
  - Station Based
  - Geographic coverage ("covering dirt")
- **High Performance**
  - Uses Historical Statistical Modeling
  - Predicts/Identifies emergency call location probabilities
  - Stages vehicles to meet predicted demand (intersection staging)
  - Maximizes deployment and efficiency

## EMS Includes....

- **The Public**
- **911 Call Takers & Dispatchers**
- **Fire first response**
- **Augmented Public Safety Agencies**
  - **Law enforcement**
  - **Beach patrol**
- **Aeromedical Transportation**
- **EMS**
- **Local Health Systems**

## Basic v Advanced Life Support

- *In simple terms* - Determined by the level of education and capabilities of the responder
- Emergency Medical Technician
  - “Associate” degree level education
  - Basic ‘noninvasive’ skills -
    - CPR
    - Wound care
    - Splinting

## NOT THIS!



## Basic v Advanced Life Support

- Paramedics
  - “Bachelors Degree”
  - Higher skill level, “Invasive”
    - Medications/Fluid administration
    - Advanced airway skills
    - 12 lead ECG Interpretation

## Clinical & Operational Excellence

- Medical Direction and Control
  - EMS does not function without physician oversight
  - Sets treatment policies and procedures
  - Ensures clinician capability
  - Monitors compliance and care

## Future Vision

- Not all 911 Calls are Emergencies!
  - Emergencies are largely Self determined/defined by the caller.
- Continued Concentration on Clinical & Operational Quality Practices & Excellence
- Clinical Integration from 911 to Hospital Discharge
- “Right Care, Right Time, Right Place”
- Develop Advanced Practice/Community Health Paramedic Clinicians
- Determine correct clinical pathway
- Concentrate on True Emergencies.

## 911 Call Intake/Interrogation

**10 CHEST PAIN (NON-TRAUMATIC)**

**KEY QUESTIONS**

1. Is she completely awake (alert)?
2. Is she breathing normally?
3. Is she changing color?
4. Is she clammy (cold/sweaty)?
5. Does she have a history of heart problems?
6. Did she take any drugs or medications in the past 12 hours?

*Cause or worsen Medications*

**POST-DISPATCH INSTRUCTIONS**

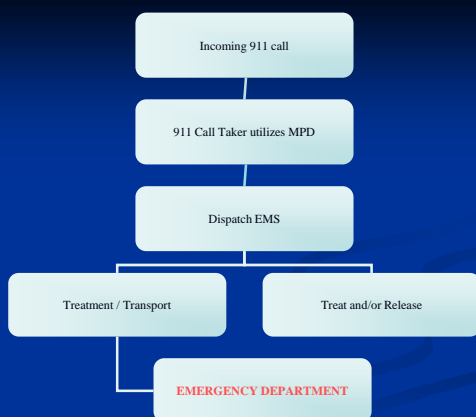
For sending the paramedics (ambulance) to help you now.  
**Stay on the line** and I'll tell you exactly what to do next.  
 (Patient medication requested) Remind her/him to do what her/his doctor has instructed for these situations.  
 (If 1 + SRD or Not alert) If there is a defibrillator (AED) available, send someone to get it now in case we need it later.

Stay on the line with caller if her/his condition seems unstable or is worsening.

**BLS** → Link to X-1 unless  
 INEFFECTIVE BREATHING and Not start → **A&C-1**

LEVEL	#	DETERMINANT DESCRIPTORS	CODES	RESPONSES	MODES
<b>D</b>	1	SEVERE RESPIRATORY DISTRESS	10-D-1		
	2	Not alert	10-D-2		
	3	Clammy	10-D-3		
<b>C</b>	1	Abnormal breathing	10-C-1		
	2	Cardiac history	10-C-2		
	3	Causeless	10-C-3		
	4	Breathing normally > 35	10-C-4		
<b>A</b>	1	Breathing normally < 35	10-A-1		

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## 911 Call Prioritization

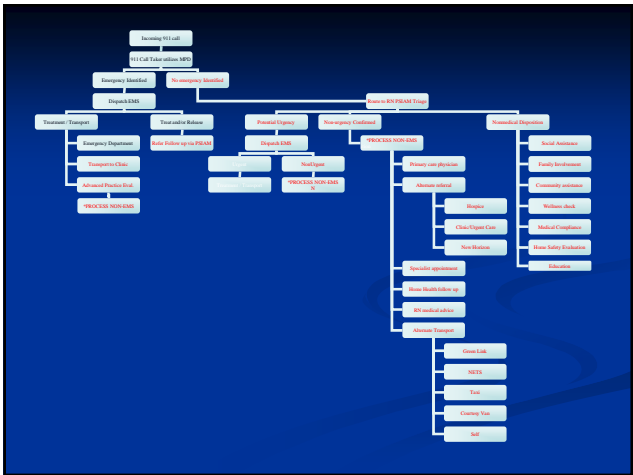
**Baseline Response Example**  
 All actual response assignments are decided by local Medical Control and EMS Administration

Level	Response	Mode
<b>ECHO</b>	Closest Apparatus-Any (includes Truck Companies, HAZMAT, or similar staff)	<b>HOT</b>
<b>DELTA</b>	Closest BLS Engine Paramedic Ambulance	<b>HOT</b> <b>HOT</b>
<b>CHARLIE</b>	Paramedic Ambulance	<b>COLD</b>
<b>BRAVO</b>	Closest BLS Engine BLS Ambulance (alone NOT if close)	<b>HOT</b> <b>COLD</b>
<b>ALPHA</b>	BLS Ambulance	<b>COLD</b>
<b>OMEGA</b>	Referral or Alternate Care	

# TOTAL COMMUNITY HEALTH INITIATIVE

- *Defining actual need:*
  - Secondary supplemental RN-based telephone triage process for low acuity calls for assistance.
  - Not all calls to 911 are emergencies!
  - Provides the *right care, right place, right time...*
  - Collaboration with local Hospital Systems & coalitions
  - Provides a solution which May NOT necessarily result in a response by EMS
  - Support the “Medical Home” concept

- # The Emerging EMS and National Health Care Paradigm
- Elements of Affordable Care Act (“Obamacare”) here to stay regardless of political outcome.
  - Encourages “Best Practice” (Quality Practice)
  - EMS’ Verified/Recognized Impact on Clinical Outcomes
  - Mutual development of alternate clinical pathways and destinations
  - Enhanced Practice/Community Health Paramedics
  - **Regardless of Acuity, Provide the Correct Level of Care.**





## Wrap up and Questions

Citizen's Academy  
Presentation 2013