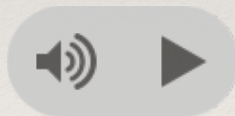


Terence Valenzuela, MD Medical Director

Throw Away The Radio

Tucson Fire Department.2015



Acknowledgement

Michael K Copass MD

Medical Director Emeritus

Seattle Fire Department

&

Professor of Medicine and Surgery

University of Washington



QUESTIONS

Are MDs and RNs “on the radio” a threat or a menace to EMS?

Can we stop them before they kill again?

Many Eagles Presentations

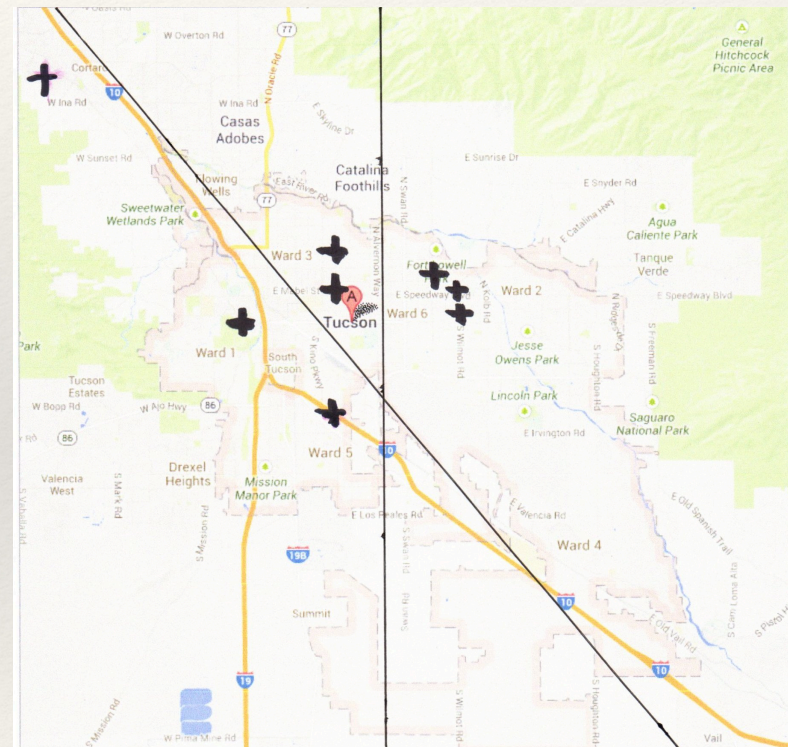
- ❖ When to start/stop a resuscitation
- ❖ Intoxicated/drug influenced patient “refusal”
- ❖ Answer: “We tell them (EMTs; PMs) to call it in”
- ❖ Can one instead handle such problems without radio telemetries?

Physician On-line Medical Direction

- ❖ Very few jurisdictions can afford multiple full or part-time medical directors.
- ❖ Telemetry defaults to on duty emergency physicians
- ❖ **Some (not all) problems:**
- ❖ Adds yet another distraction to often chaotic ED
- ❖ Inter-physician differences in instructions radioed to EMS units in the field

Tucson Telemetry 1980's

- ❖ Transporting Units radio to destination base hospitals
- ❖ Orders received from on duty physician
- ❖ Regional Standing Orders-not well-known to practicing EM MDs of the time
- ❖ EMS units based at each hospital



Medical Direction Authority

- ❖ Not attached to a hospital
- ❖ Preferable for EMS jurisdiction with multiple competing hospitals (now freestanding EDs).
- ❖ Allows standardization of approach to illness and injuries

Administrative Guidelines

- ❖ Reduce the need for radio communications
- ❖ Guidelines-not protocols or algorithms
- ❖ TFD EMS expected to use education, experience and full scope of practice
- ❖ Deviations (not “violations”) from guidelines require a rationale



Patient Decision Capacity³

Cognitive Screen: Patient must score 5/6. Missed question can only be day of month

6-Item Cognitive Screen		<u>Incorrect</u>	<u>Correct</u>
<ul style="list-style-type: none">• I'm going to ask that you remember 3 words and I'll ask you some additional questions.• After I say all 3 words, please repeat them out loud, remember them, because I will ask you to repeat them again.• Repeat these words: APPLE, TABLE, PENNY• Did Patient repeat all 3 words? YES NO	• Year?	0	1
	• Month?	0	1
	• Day?	0	1
	• 3 objects?		
	Apple	0	1
	Table	0	1
	Penny	0	1

Triage of the Impaired Person (Serial Inebriate)

- ❖ Talking and Walking → Law enforcement / POV
- ❖ Talking not Walking → BLS transport
- ❖ Not Talking or Walking → ALS transport

Throw Away The Radio

- However continued confusion of “need to know” with “nice to know”
- New electronic patient care record often did not reach hospital before patient arrived
- A standard medical dataset relayed through dispatchers failed due to lack of sufficient medical training possessed by dispatchers
- A clear, standard notification from field to hospital needed for incoming patients

Collaboration Arizona Department of Health Services and Tucson Fire Department based on “EMResource”

- Web based emergency resources communication tool
- Provides real-time hospital “ED Divert” status
- Queries hospitals for their ability to receive patients
- Queries hospitals for their available resource during emergencies and MCIs
- Notification system during an MCI which alerts:

Instructions

* Indicates a Mandatory Field

Unit Information

* Unit completing form:

Patient Information

* Age:

* Age Units:

* Gender:

Chief Complaint / Admin Orders

* Chief Complaint:

Admin Orders Used:
Cardiac Arrest
Metabolic

Alerts:
Cardiac
Respiratory

Unstable: ☐

Transport / Treatment

* Transport Unit:

* Level of Care:

* Transport ETA (mins):

EKG Sent: ☐

Spinal Immobilization: ☐

2015 TFD eTelemetry

- Required Fields
- 2015 AG's embedded
- Free text within the Chief Complaint field

Throw Away The Radio

Thank You!
Your form has been submitted for processing.

This window will close in just a moment.

EMSystem © Version 1.8 build 633
Copyright © 2010 [EMSystem, LLC](#)
[Terms and Conditions](#)

- Confirmation that the submitted form has been sent!

Throw Away The Radio

- eTelemetry once sent, is protected
- There is a 3 minute hospital screen refresh
- A crew less than 5 minutes out can send a voice relay via Tucson MEDS Control to ensure the ED staff is prepared for the patient.

Throw Away The Radio

Open
Caution
Caution
Open
Open
Open
Open
Diversio
Open
Open
Open
Open
Open
Open
Open
Open
Open
Open
Helicopter
Available

ER Main Entrance Closed Construction. EMS Bay is main entrance

Completed Forms snooze



[Acknowledge All Forms](#)

Meds Relay (eTelemetry) 2/7/2014 08:48

Submitted by Tim Singleton, State EMSsystem Coordinator for Graham-Greenlee Health Clinic
Summary: | Agency: Tucson Fire (TFD)| unitid: Engine 9| Age: 55| ageunits: Years| gender: Male|
ptcondition: Unstable| alerts: STEMI| cc: Chest Pain| SO: Chest Pain| level of care: ALS| Transunit: PM
9| ETA: 10| ekgsent: Yes| cspinetaken: No

[Review Form](#) [Print Form](#)

[Acknowledge All Forms](#)

Comment
Available

E SUP F

Meds Relay	
Activated By:	Tim Singleton, State EMSsystem Coordinator (singlet)
Time:	02/07/2014 08:46:41 MST
Submitted By:	Tim Singleton, State EMSsystem Coordinator (singlet)
Time:	02/07/2014 08:48:24 MST
Agency	
Agency Tucson Fire (TFD)	
Unit Engine 9	
Age	
Age 55	
Age Units Years	
Gender	
Gender Male	
Patient Condition	
Patient Condition Unstable	
Alerts	
Alerts STEMI	
Chief Complaint Chest Pain	
S.O.	
Please select all that apply: Chest Pain	
Level of Care	
Level of care ALS	
Transport	
Transport Unit PM 9	
Transport ETA 10	
12 Lead EKG Sent ?	
EKG Sent? Yes	
C-Spine Precautions ?	
C-Spine Precautions taken? No	
<div>Finished Reviewing Print</div>	

This is the eTelemetry form that appears on the screen if the ED intermediary opens it. The option to print is also available from this screen.

2 Options

1. **Review the Form** This allows the ED intermediary the ability to open the form and allow printing of the form
2. **Print Form**. This feature allows for immediate printing of the form without ever having to open it

Whatever choice is utilized, the ED can see at all times what is being transported to their ED

EMResource

Southern AZ

View

Event

Preferences

Form

Report

Regional Info

My Forms List

My Pending Forms

There are no pending forms at this time.

My Recent Forms

Action	Form	Sent Time	Sent By	Sent To	Completed Time
Review	Meds Relay (eTelemetry)	2014-02-05 13:04	Tim Singleton, State EMSsystem Coordinator	Tim Singleton, State EMSsystem Coordinator	2014-02-05 13:06

To open up any recently sent eTelemetry forms within the past 24 hours select Review.

Activated By: Tim Singleton, State EMSsystem Coordinator (singlet)

Time: 02/07/2014 08:46:41 MST

Submitted By: Tim Singleton, State EMSsystem Coordinator (singlet)

Time: 02/07/2014 08:48:24 MST

Meds Relay

Agency

Agency Tucson Fire (TFD)

Unit Engine 9

Age

Age 55

Age Units Years

Gender

Gender Male

Patient Condition

Patient Condition Unstable

Alerts

Alerts STEMI

Chief Complaint Chest Pain

S.O.

Please select all that apply: Chest Pain

Level of Care

Level of care ALS

Transport

Transport Unit PM 9

Transport ETA 10

12 Lead EKG Sent ?

EKG Sent? Yes

C-Spine Precautions ?

C-Spine Precautions taken? No

Finished Reviewing

Print



Report

Regional Info

** indicates the information is required.

Start Date (mm/dd/yyyy):** 02/04/2014

End Date (mm/dd/yyyy):** 02/06/2014

Report Format:**
☒ Web Browser (HTML)
☐ Data File, Comma-separated (CSV)

Form:** Meds Relay (eTelemetry) ▼

Generate Report

Filter...

Cancel

REPORT ON MEDS RELAY

ACTIVATION DATE	ACTIVATION TIME	ACTIVATED BY	DELIVERED TO	COMPLETED DATE	COMPLETED TIME	COMPLETED BY	COMPLETED BY NAME	Agency	Unit	Age	Age Units	Gender	Patient Condition	Alerts	Chief Complaint	Please select all that apply:	Level of care	Transport Unit	Transport ETA	EKG Sent?	C-Spine Precautions taken?
2/5/2014	13:04	singlet	Graham-Greender Health Clinic	2/5/2014	13:06	singlet	Tim Singleton, State EMSystem Coordinator	Tucson Fire (TFD)	Engine 9	35	Years	Male	Select from list	STEMI	Chest Pain	Chest Pain	ALS	SWA 46	20	Yes	No
2/7/2014	08:46	singlet	Graham-Greender Health Clinic	2/7/2014	08:48	singlet	Tim Singleton, State EMSystem Coordinator	Tucson Fire (TFD)	Engine 9	55	Years	Male	Unstable	STEMI	Chest Pain	Chest Pain	ALS	PM 9	10	Yes	No

QA / QI can be completed by both the Fire / EMS departments and the ED's

Throw Away The Radio

- An immediate record on type of call, who transported, age, gender, chief complaint, as well if the patient was unstable or stable , if an EKG or if the patient was immobilized is available.
- Alerts such as STEMI's, Strokes, CPAP, Cardiac Arrests, Behavioral, Bariatric >350 lbs, and Septic patients can be gathered quickly

Throw Away The Radio

- During the process of bringing a hospital online, Tucson MEDS Control provided a redundancy net, by calling for 1 week to remind the ED that an electronic transmission was sent.
- Most hospitals asked within 2-3 days into the go-live week, to quit providing the back-up reminder calls.

Throw Away The Radio

- Tucson is the 1st City (I think) in the United States wherein all Emergency Departments receive prehospital text notification via eTelemetrys
 - 2013 = 16,332 eTelemetries were sent to receiving ED's
 - 2014 = 30,486 eTelemetrys were sent to receiving ED's
- From May 2013 through January 2015, Tucson Fire field personnel and surrounding Fire departments have sent 67,607 electronic telemetrys to receiving Tucson EDs.

Throw Away The Radio



*“The most important thing in communication is
hearing what isn’t said”*

—Peter Drucker

FIN