**Tucson Fire Department** Medical Administrative Guidelines: We have an App for that! **Terence Valenzuela MD Medical Director** 

#### Why an App?

• Tech considerations:

- 35% of ALL Americans own smart phones
- That number increases 5% annually
- EMS considerations
  - Resources must be readily accessible
  - Scope and breadth of practice evolving
  - Increasing complexity of work environment and patient profiles
  - Critical thinking and decision-making demand autonomy

#### Philosophy Behind the Method

- Administrative Orders are off-line orders approved by the TFD Medical Director. These orders are not intended to provide guidance for all medical or traumatic emergencies.
- It is expected that TFD EMS professionals provide care to the best of their ability and within their full scope of practice.
- If prudent and reasonable practice dictates a deviation from these orders, it is expected by the Medical Director that the Paramedic or EMT will provide the appropriate care and document the rationale and outcome accordingly.

#### Areas Covered

#### General Guidance

- MEDS Relays
- Transport Destinations
  - Trauma, Perinatal, Peds, Cardiac, Stroke Guidelines
- Definition of a Patient and Non-Patient
- Treat and Release
- Standard Patient Assessment
- General Triage and Transport
- Field Refusal
- Decision-making Capacity
- Death and Field Termination
- BLS & ALS Assessment Thresholds
- Standard BLS & ALS Care

Systems Approach

- Behavioral
- Cardiac Arrest: Continuous Cardiac Compressions & AHA
- Cardiovascular
- Environmental
- GI/GU/Gyn
- Injury, Trauma & Burn
- Metabolic
- Neuro
- OB/Neonatal
- Respiratory: congestive, obstructive, restrictive disease
- Human Services Referral
- References: Peds Drugs & equip. sizes; dosing clock, CO monitoring guide

# **Design Considerations**

- Mobile Application
  - Works on all devices
  - Touch screen enabled
  - Works and behaves similarly on phone, tablet, desktop computer or TV

### Cross Platform - All screens



#### **User Considerations**

- Information quickly accessible
- Simple and intuitive navigation
- Logically organized
- Searchable
- Only key concepts visible unless more detail needed

## **Our Application**



FIRE CENTRAL

#### Main Screen

- Typing in search box begins filtering out content
- Olick to select

II VIRGIN 3G 4:20 PM	0 1 🕀 🔜
<b>Tucson</b> Administr Beta	Fire rative Orders
O Filter items	
MEDS RELAY	Ø
PATIENT	Ø
NON-PATIENT	Ø
TRANSPORT DESTINA	
PATIENT ASSESSMEN	т 💿
<ul> <li>↓ +</li> </ul>	CC 🛐

### Progression: General to Specific

#### Dropdowns and links are content/AO specific



### Highlighted General Guidance

Blue Color Denotes
 BLS Assessment Thresholds
 "+" Denotes dropdown content



### Different Highlighting – Different Meaning

 Red Color Denotes ALS Assessment Thresholds
 Details can be scrolled



## Customizable – Medical Direction Specific

 Modifications and updates can be done in real-time to reflect evidence based practice changes, regional protocols etc.



### Integrated References and Tools

- All AOs build upon one another: all start with common assessment and treatments
- Hyper-links to references, contact information and auto-dial phone connection



Navigation Always Visible – Top and Bottom

- Key Concepts appear first
- Dropdowns for more detail
- Telephone numbers are instantly dialed with push of a button





Adds
 Structure
 and
 Simplifies
 Processes

Improves
 Consistency

DecreasesRadio Time

I VIRGIN 3G 4:20 PM • 7 @	
Alerts	
Injury/Trauma - include: Immobilized Y / N	
OB - include: Term/Pre-term; Labor/Not in Labor	
Unstable - (ie: Symptomatic circulatory or respiratory compromise requiring immediate intervention)	
Stroke - (ie: Onset symptoms < 6 hours & + stroke assessment); Include Stroke onset time	
STEMI - (ie: ST segment elevation MI identified by 12-lead or PM on scene)	
	-
	3

### Metric Usage Data – What's In It For the Coole Analytics Medical Director?

- Viewable aggregate App usage by all crews on all calls
- Usage trends may indicate areas that need to be addressed formally in CE
- Usage metrics can help determine need for revisions and updates









## The People of Substance Behind the Front Man

- Michael Martinez
- Adrienne Hollen
- Darin Wallentine
- Norma Battaglia RIP