EMS Driving Hospital Care

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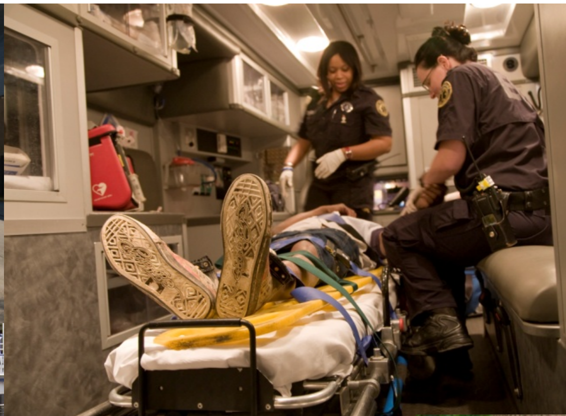
2010

New Orleans EMS Recruitment Brochure



NEW ORLEANS EMS
PARAMEDIC

NEW ORLEANS
EMS

NEW ORLEANS
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PARAMEDICS
EMS

NEW ORLEANS EMS

Does EMS indeed drive care?

Mayor
Dr. Elder-EMS
NEW ORLEANS

End Tidal CO2 Qualitative and Quanitative

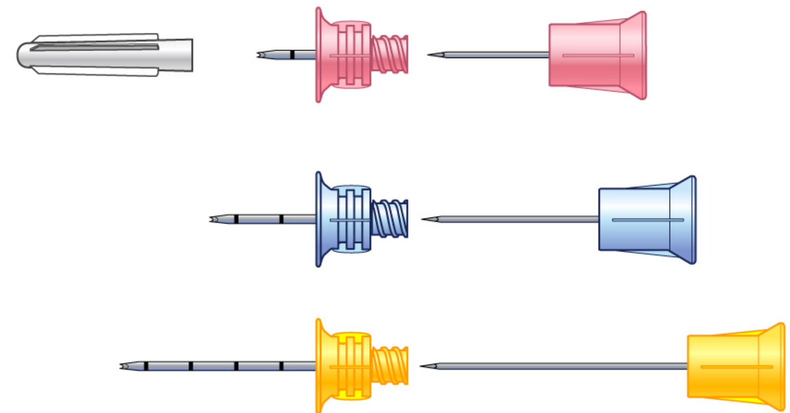
- Not currently available in our trauma center
- ETT confirmation
- Stops accusations of where ETT comes out
- Unrecognized esophageal intubation virtually a thing of the past

Therapeutic Hypothermia

- Hospitals forced to do this in order to get ROSC patients
- Creates competition among hospitals; resuscitation centers
- Creation of resuscitation centers
- Basic (ice chests, cold fluids, ice packs)
  -measuring temperatures pre-hospitally

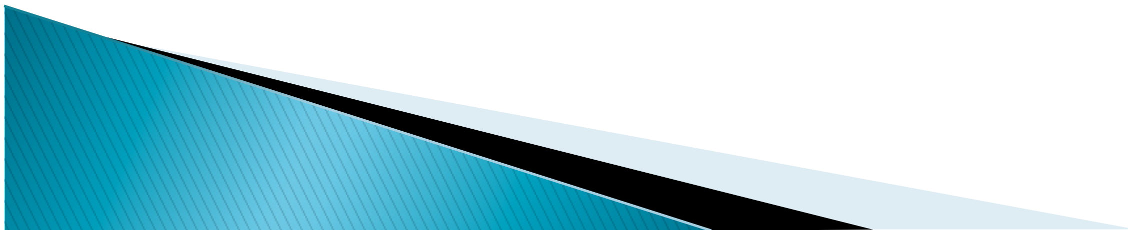
Intraosseous Vasculature Access

- Adult and Pediatric IO
- Immediate access upon arrival in ED
- Unnecessary emergent central lines in face of CMS directives regarding iatrogenic infections
- Everyone who needs access gets access
- Early access in cardiac arrest and improved ROSC



CPR Devices

- Effective uninterrupted CPR
- Medic can focus on arrest management
- Medic safety
- Medic satisfaction

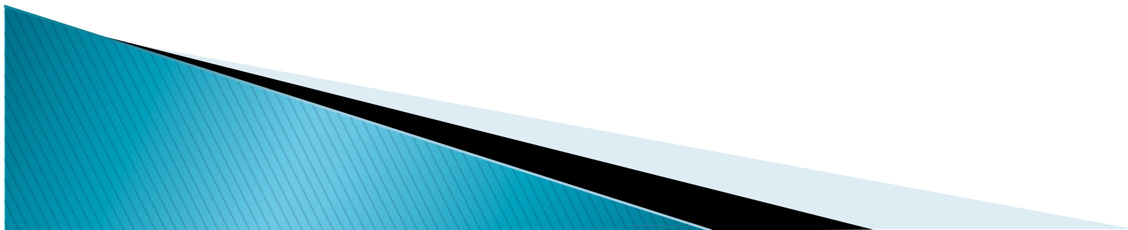


Impedance Threshold Device

- Science supports use
- Need more human data
- Challenges
- Expensive
- Non-reimbursable
- Need to be bundled

Difficult Airway Adjuncts

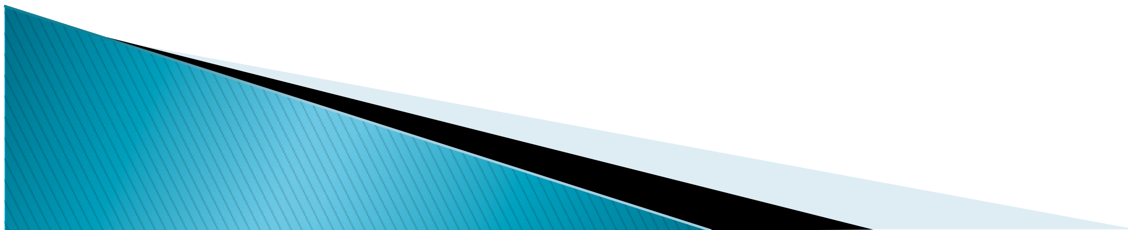
- ETT introducer
- King Airway in ED
- Glidascope
- LMA’s in ED



Pain Management

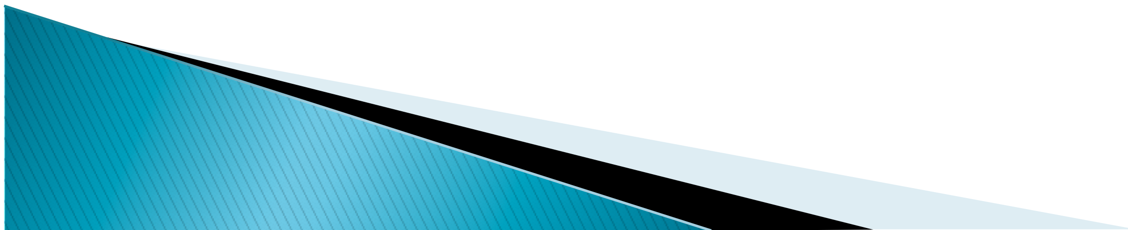
- Fentanyl use predominantly driving use in hospital
  -profile (totally synthetic)
    - -faster onset
    - -faster peak
    - -shorter acting
    - -less vasoactive
    - -more potent (80 times MSO4; 100 heroin)

  -Dosing in a mcg/kg
  -Cost: relatively equal as waste morphine more than fentanyl
  -Downside: apneagenic; high chest wall rigidity
  -some fatal overdoses in cancer patients (duragesic)



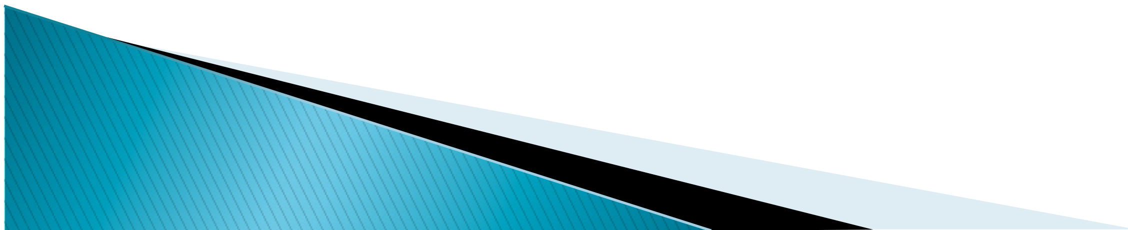
EMS MD's in the field and ED

- Enhancing medical decision making
- Improves relationship between EMS and ED
- Decreases liability by seeing and examining patient
- Allows for MD to MD patient reports
- MD's in the community
- Helping with difficult social situations and transport decisions



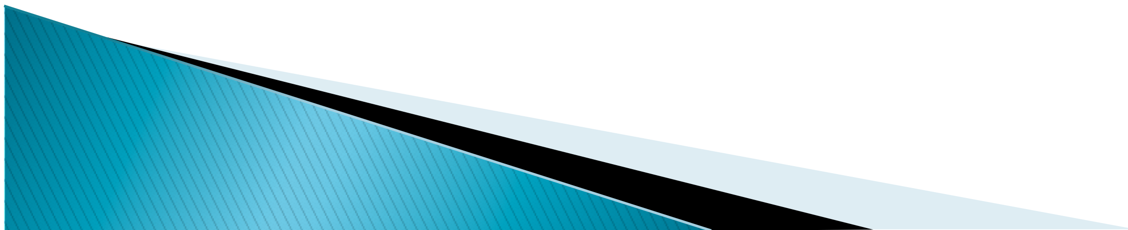
Temperatures

- Controversial, but having that vital sign drives triage and treatment in ED
- Cooling guide
- Use in pandemic situation (ie screening for PPE use for medics)



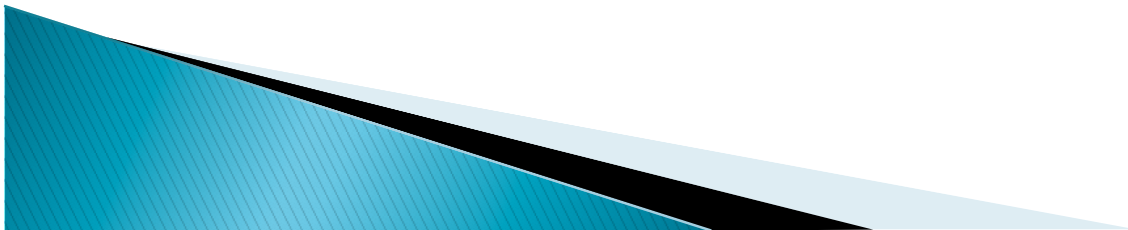
I-Stat Monitoring for Electrolytes (future)

- Extreme sports events
- Dialysis patients
- New onset seizures
- dysrhythmias



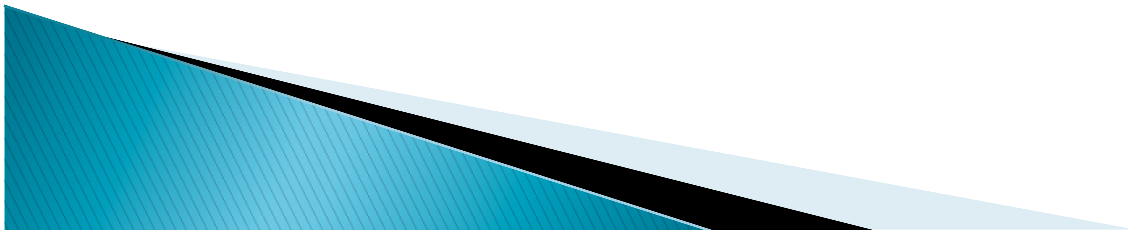
Others

- CO detection devices
- I-Stat electrolyte monitoring (debut Sunday)
- CPAP



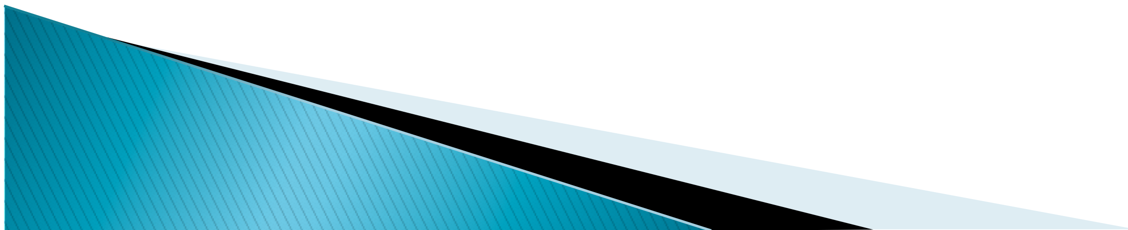
Pre-hospital Trauma, Stroke and STEMI activation

- Medics able to initiate hospital "team" approach through pre-hospital report
- Activations called based on medic assessment
- No EKG transmission…EKG interpretation combined with history including cardiac risk stratification



Ultrasound in Ambulance

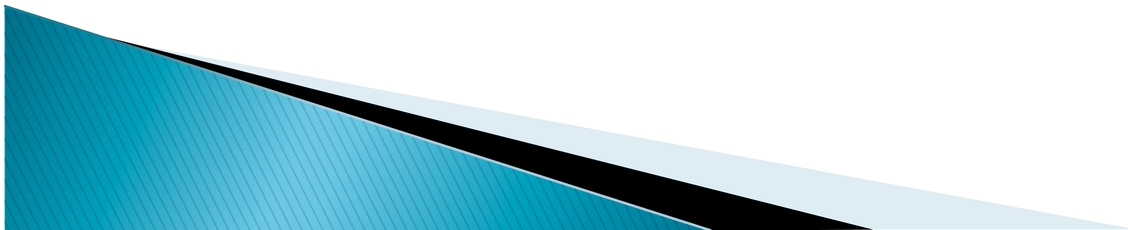
- Early FAST in blunt trauma
- Pregnancy
- Trauma and pregnancy
- Cardiac activity
- Tamponade



Destination Decisions

- Patient choice
- Operational considerations–color system
- Designated hospitals for:
  - –Trauma
  - –STEMI
  - –Stroke

“expedited offload” directive



Event | Preferences | Form | Report | Regional Info | Instant Message | U

pr

	ED Status	ED Wait Time	Ped ED Wait Time	M/S Holds	Tele Holds	ICU Holds	Psych Holds	Additional Hospital Holds	Comment
lospital	Open	Green	Green	0	0	0	0	0	We do not have adult services.
son General Hospital	Limited Diversion	Red	Red	0	2	0	2	0	Adult and Geri Psych Beds Unavailable. | Med/Sur beds available for geri psyc or adult psy...
edical Center - Kenner	Limited Diversion	Purple	Purple	0	5	0	2	0	NO NEUROSURGERY | 5 Tele holds in ED | 2 PE in ER. | ED Saturation, .Ortho unavailable
tr. of LA-Univ. Camp.	Open	Purple	Purple	0	3	2	18	0	We are accepting Trauma patients. | This facility d a separate Peds ED. | MHERE=15 ER =3
edical Center - Westbank	Limited Diversion	Red	Red	1	7	0	1	0	No psych/peds. inpt svcs | Tele, All rms full. 7 Tele ER, 1 unit on wall.
edical Center	Open	Purple	Green	6	6	2	2	0	Holding Tele/Med/ICU/Psych in ED. Hosp on Tele Diversion.
nary	Open	Green	Green	0	1	0	0	0	
ical Center	Open	Black	Green	5	0	1	1	8	1 on the wall | All MS beds are Tele beds | 4 ICU p MS in PACU
rson Medical Center	Open	Green	Green	0	0	0	2	0	
TUCC	Closed	Black	Black	0	0	--	--	--	Closed to ambulance traffic. | Closed to ambulan
ptist	Open	Green	Green	2	0	0	0	0	No inpatient psych, L&D,or peds services.No ICU available. No Med Surg beds available. | no ped...

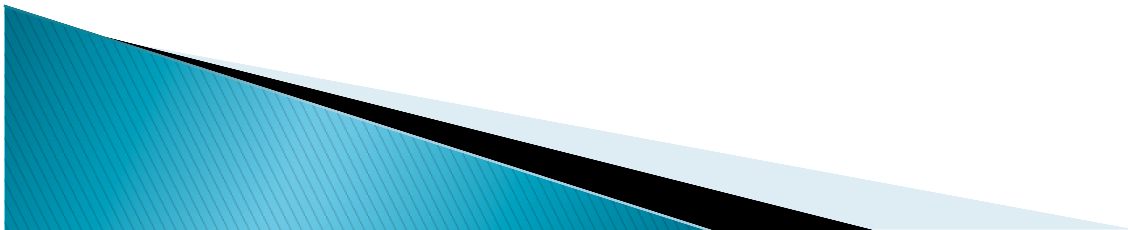
AC	Ops Status	Male Adult Psych	Comment
spital-New Orleans	Open	0	We are open. Please call all referrals to 762-5140. | No psych services
Specialty Hospital	Open	0	
y West	Open	--	We are operational. Call referrals to 504-349-2470.
e Memorial Hospital (SHNO)	Open	--	Referral number 504-210-3497. Accepts all payer sources including Medicaid.
pice	Open	--	
est Specialty	Open	--	
xtended Care Hospital	Open	--	
AC	Open	--	
n Hospice	Open	--	

ych	Ops Status	Male Adult Psych	Female Adult Psych	Comment
Care Hospital	Open	0	0	
s Adolescent Hospital	Open	0	0	NOAH is closing, we are not accepting any packets. | NOAH is closing, we are not accepting an

Internet

Improving ED throughput

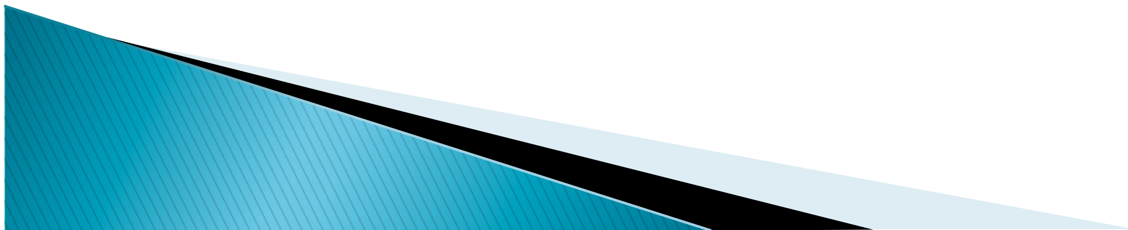
- Getting to know hospital by being asked to be on throughput committee
- Getting to know and communicate with hospital administration
- Educate hospitals and staff re EMS mission
- EMSystems
- Person to person "give me a break" calls
- Placing patient in waiting rooms, wheelchairs
- Finally, and not desirable, but "expedited offload"



Response Time Compliance

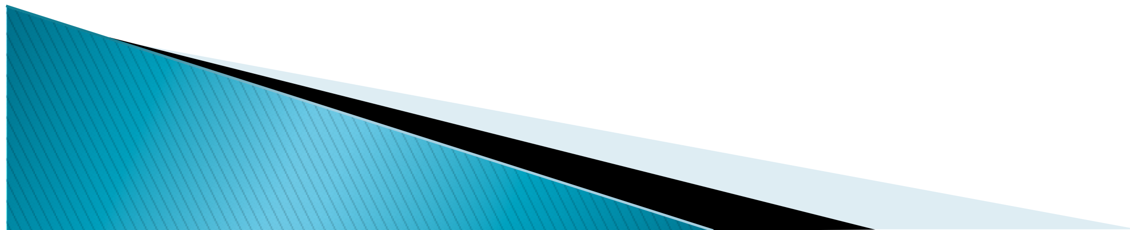
- 11:59 (90% of time)
- 7:59 (38% of time)

- Time ALS in route to patient’s side
- Not inclusive of first responder’s times



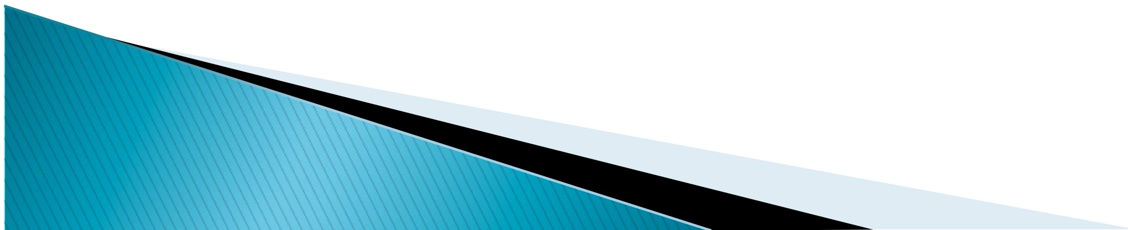
Bundling Technology to improve out of hospital cardiac arrest ROSC

- CPR devices: uninterrupted CPR; rescuer fatigue
- Humeral head IO
- ITD
- Pre-hospital Cooling
- Transport to a Cooling, STEMI center….Resuscitation Centers
- Early epinephrine
- Early defibrillation for v-fib



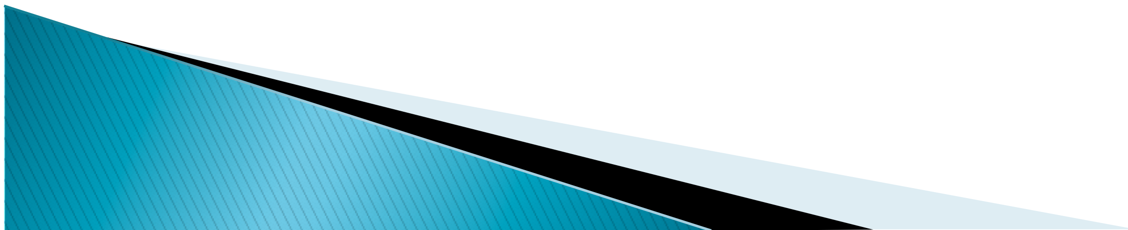
Early Data…What does it mean?

- 90 arrests; 71 charts for review; all comers
- ROSC on 21 of 71(30%)
- 12 of 21 (17%) sustained to ED admission
- Only 35 of 71 transported to hospital; rest DEAD



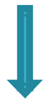
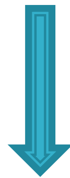
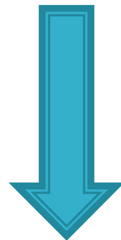
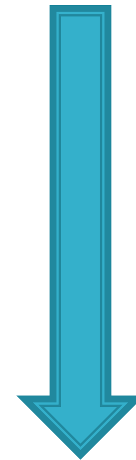
Bundling Technology/Adjuncts

- 51 of 71 had LUCAS applied (72%)
- 56 of 71 had ResQPod (79%)
- 56 of 71 (79%) had IO access; 36 of 56 (64%) were Humeral Head other were tibial
- 40 of 71 (56.3%) received full bundle of treatment
- Sustained ROSC on 5 of 40 patients full bundle (13%)



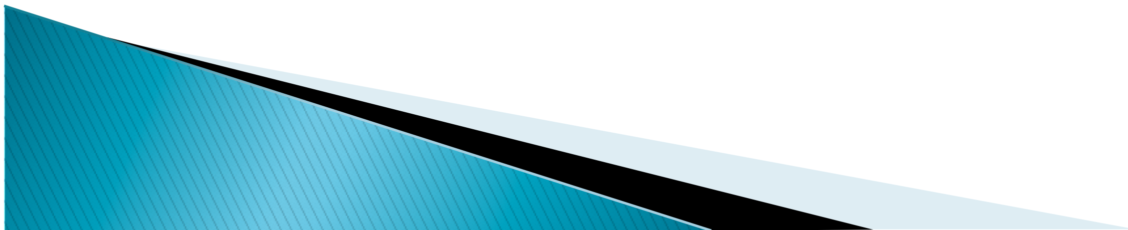
What does this mean???

- Need for human studies in high volume cardiac arrest systems
- Ability to arm study by adjuncts
- IO IO/ITD IO/Lucas/ITD IO/Lucas/ITD/Cool

Meaning???

- Clear as mud…so,
- Does one adjunct vs bundle make a difference
- Which bundle?
- Need to factor out all comers by rhythm and downtime plus or minus time to patient contact (CPR)
- More next year…..



QUESTIONS???