EMS Driving Hospital Care

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New Orleans EMS Recruitment Brochure

YOU'RE HIRED!
HOW MUCH CAN YOU PAY US TO BEGIN WITH?
Does EMS indeed drive care?
End Tidal CO2 Qualitative and Quantitative

- 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 (i.e., 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
<table>
<thead>
<tr>
<th>Hospital</th>
<th>ED Status</th>
<th>ED Wait Time</th>
<th>Ped ED Wait Time</th>
<th>M/S Holds</th>
<th>Tele Holds</th>
<th>ICU Holds</th>
<th>Psych Holds</th>
<th>Additional Hospital Holds</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hospital</td>
<td>Open</td>
<td>Green</td>
<td>Green</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>We do not have adult services.</td>
</tr>
<tr>
<td>Jefferson General Hospital</td>
<td>Limited</td>
<td>Red</td>
<td>Red</td>
<td>0</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>Adult and Geri Psych Beds Unavailable. Med/Surg beds available for geri psy or adult psy...</td>
</tr>
<tr>
<td>Community Medical Center - Kenner</td>
<td>Limited</td>
<td>Purple</td>
<td>Purple</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>NO NEUROSURGERY</td>
</tr>
<tr>
<td>Charity Hospital</td>
<td>Open</td>
<td>Purple</td>
<td>Green</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>18</td>
<td>0</td>
<td>We are accepting Trauma patients. This facility offers a separate Peds ED. MHERE=15 ER =3 No psych beds. int svc s</td>
</tr>
<tr>
<td>Medical Center - Westbank</td>
<td>Open</td>
<td>Purple</td>
<td>Purple</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>Holding Tele/Med/ICU/Psych in ED. Hosp on Temp Diversion.</td>
</tr>
<tr>
<td>University Hospital</td>
<td>Open</td>
<td>Green</td>
<td>Green</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>8</td>
<td>1 on the wall</td>
</tr>
<tr>
<td>Charity Hospital</td>
<td>Open</td>
<td>Green</td>
<td>Green</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>No inpatient psyc, L&amp;D or peds services</td>
</tr>
<tr>
<td>Tulane Medical Center</td>
<td>Open</td>
<td>Black</td>
<td>Green</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>Closed to ambulance traffic. Closed to ambulance traffic.</td>
</tr>
</tbody>
</table>

PAC

| Hospital-New Orleans            | Open      | 0            |                  |           |            |           |              | We are open. Please call all referrals to 762-5140. No psych services |
| Specialty Hospital              | Open      | 0            |                  |           |            |           |              | We are operational. Call referrals to 504-349-2470. |
| Charity Hospital                | Open      | --           |                  |           |            |           |              | Referral number 504-210-3497. Accepts all payer sources including Medicaid. |
| Charity Hospital - Westbank     | Open      | --           |                  |           |            |           |              |                                           |
| Charity Memorial Hospital (SHNO) | Open      | --           |                  |           |            |           |              |                                           |

Psych

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Ops Status</th>
<th>Male Adult Psych</th>
<th>Female Adult Psych</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charity Hospital</td>
<td>Open</td>
<td>0</td>
<td>0</td>
<td>NOAH is closing, we are not accepting any packets. NOAH is closing, we are not accepting any packets.</td>
</tr>
<tr>
<td>Charity Hospital for Adolescents</td>
<td>Open</td>
<td>0</td>
<td>0</td>
<td>NOAH is closing, we are not accepting any packets. NOAH is closing, we are not accepting any packets.</td>
</tr>
</tbody>
</table>
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
- EMSSystems

- 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
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???