UPDATES FROM SAN FRANCISCO EMSA

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EMS Administrator

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Medical Director
Review of challenges to the EMS System (policy pillar)

- Standardization of regional EMS training
- Spread of High Performance CPR
- Medical Documentation improvements
- Hospital Diversion - Patient distribution
- Decision quality supported by data science
- Completion of EMSA staffing and training
Performance Improvement (Pillar)

- EMSA system improvement initiatives
  - 2020/50
    - PulsePoint
    - Lucas Device (mechanical compressor)
    - Standardization of equipment
    - Cardiac arrest review
    - After school CPR kits
Performance Improvement (Pillar)

- EMSA system improvement initiatives

- 2020/60
Performance Improvement (Pillar)

- **EMSA system improvement initiatives**

  - **2020/60**

<table>
<thead>
<tr>
<th>Time Interval</th>
<th>Average Time (mm:ss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Medical Contact to EKG Taken</td>
<td>10:37</td>
</tr>
<tr>
<td>First Medical Contact to Transfer of Care*</td>
<td>35:43</td>
</tr>
</tbody>
</table>

*Range for First Medical Contact to Transfer of Care – 14:00 to 83:00*
Dispatch Call processing time

- Dashboard time Vs policy time
- Call volume, code 3, code 2, code 3 return and non transport
- Reevaluate dispatch responses and response times
- Ambulance AVL’s
- Quick dispatch
- Supply and demand model
- RN triage line for low acuity calls
- PSA of when to call 911
Dispatch Call processing time

- *Dashboard time Vs policy time – July 2019*

<table>
<thead>
<tr>
<th>Time Interval</th>
<th>Policy Time (mm:ss)</th>
<th>Dashboard Time Average (mm:ss)</th>
<th>Dashboard Time 90th Percentile (mm:ss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Dispatch Interval* for Code 2 calls</td>
<td>02:00</td>
<td>2:26</td>
<td>4:27</td>
</tr>
<tr>
<td>Total Dispatch Interval* for Code 3 calls</td>
<td>02:00</td>
<td>1:51</td>
<td>3:28</td>
</tr>
</tbody>
</table>

*Total Dispatch Interval is the time interval between the start of dispatcher creation to the time of dispatch to the first unit responding. Data comes from FirstWatch and processed by DEM's Division of Emergency Communications (DEC).*
Dispatch Call processing time

- Call volume, code 3, code 2, code 3 return and non transport – July 2019

<table>
<thead>
<tr>
<th>EMS Call Volume</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Call Volume</td>
<td>9503</td>
</tr>
<tr>
<td>Non-Transport</td>
<td>2465 (26%)</td>
</tr>
<tr>
<td>Code 3 Calls</td>
<td>4533</td>
</tr>
<tr>
<td>Code 3 transports</td>
<td>403 (9%)</td>
</tr>
<tr>
<td>Code 2 Calls</td>
<td>4970</td>
</tr>
<tr>
<td>Code 2 transports</td>
<td>6611 (75%)</td>
</tr>
</tbody>
</table>

*All data comes from FirstWatch. Dispatch data is processed by DEM's Division of Emergency Communications (DEC). Transport data is processed by the EMS agency.
911- unit response times

- Policy Vs actual
- 1st unit on scene
- 1st ALS unit on scene
- Ambulance on scene
911- unit response times

- Policy vs. Actual – Code 3 Calls - July 2019

<table>
<thead>
<tr>
<th>Time Interval for CODE 3 CALLS</th>
<th>Policy Time (mm:ss)</th>
<th>Source Data Count</th>
<th>Source Data 90th Percentile (mm:ss)</th>
<th>Validated Responses Count</th>
<th>Validated Responses 90th Percentile (mm:ss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Unit On Scene</td>
<td>04:30</td>
<td>4528</td>
<td>5:54</td>
<td>3654</td>
<td>5:13</td>
</tr>
<tr>
<td>First ALS Unit On Scene</td>
<td>07:30</td>
<td>4493</td>
<td>6:49</td>
<td>3631</td>
<td>6:07</td>
</tr>
<tr>
<td>First Ambulance On Scene</td>
<td>10:00</td>
<td>4294</td>
<td>10:42</td>
<td>3423</td>
<td>8:52</td>
</tr>
</tbody>
</table>

*Data was obtained from the San Francisco Fire Department Monthly Response to Medical Calls report produced by the SFFD.*
911- unit response times

- **Policy vs. Actual – Code 2 Calls - July 2019**

<table>
<thead>
<tr>
<th>Time Interval for CODE 2 CALLS</th>
<th>Policy Time (mm:ss)</th>
<th>Source Data Count</th>
<th>Source Data 90th Percentile (mm:ss)</th>
<th>Validated Responses Count</th>
<th>Validated Responses 90th Percentile (mm:ss)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Unit On Scene</td>
<td>20:00</td>
<td>4967</td>
<td>17:55</td>
<td>4870</td>
<td>17:16</td>
</tr>
<tr>
<td>First ALS Unit On Scene</td>
<td>20:00</td>
<td>4911</td>
<td>18:13</td>
<td>4823</td>
<td>17:25</td>
</tr>
<tr>
<td>First Ambulance On Scene</td>
<td>20:00</td>
<td>4735</td>
<td>19:17</td>
<td>4596</td>
<td>17:59</td>
</tr>
</tbody>
</table>

*Data was obtained from the San Francisco Fire Department Monthly Response to Medical Calls report produced by the SFFD.*
On scene performance

- Infrequently used skills
- Medical documentation
- Increase in Medical Directors involvement in QI
- Competency training (sim lab)
On scene performance

- **Infrequently used skills – January 2018 - December 2018**

<table>
<thead>
<tr>
<th>Name of infrequently used skill</th>
<th>Number of Procedure Attempts</th>
<th>Number of Successful Placements</th>
<th>Percentage of Successful Placements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endotrachial Intubation (ETT)</td>
<td>366</td>
<td>209</td>
<td>57%</td>
</tr>
<tr>
<td>King Airway Placement</td>
<td>122</td>
<td>113</td>
<td>93%</td>
</tr>
<tr>
<td>Adult Intraosseous Infusion (IO)</td>
<td>467</td>
<td>445</td>
<td>95%</td>
</tr>
</tbody>
</table>

*Data was obtained from the San Francisco EMS providers and compiled by the San Francisco EMS agency.*
Hospital receiving centers

- Diversion and Transports
- EMS patient distribution
- CADDIE pilot project
- Evaluation of specialty care centers (Stroke, Trauma, STEMI, 5150)
Hospital receiving centers

- Diversion and Transports – July 2018 – July 2019

*Data was obtained from the San Francisco EMS Agency monthly EMS Diversion Report*
Community Paramedic program

- Pilot
- AB 1544
- Community focus groups
Special event medical care

- Revised EMSA policy on event medical coverage
- Working to integrate fixed, non-permitted facilities (Chase Center)
- Need for regular, ongoing disaster exercises of pre-hospital resources
Community outreach programs

- Project Friend
- PulsePoint
- Citizen CPR training
Performance Improvement summary

- Increase provider training for competency
- Improve provider medical documentation
- Dispatch the right resource to the right patient at the right time
- Level load the 911 patient distribution
- Increase cardiac arrest survival rates
- Decrease first medical contact to reperfusion for STEMI patients
- Increase community education and involvement
THANK YOU!