EMRS and Full Scope BLS Review

November 2017
Emergency Medical Response System Update

EMRS

- Performance Outcomes
- Strategies
- Innovations

Full-Scope BLS

- Baseline Status
- Phase 1 Updates
- Phases 2 & 3 Projections

Customer Service | Cohesive Service Delivery | Culture of Medicine Systemwide | Continuous Improvement
EMRS Operational Compliance Statistics

NFPA Standard: 95% of Calls Answered in 15 Seconds

NFPA Standard: 99% of Calls Answered in 40 Seconds
EMRS Operational Compliance Statistics

DFD Turnout and Response Compliance
- Turnout Compliance Rate: 0.919
- Enroute to Arrive Compliance: 0.769
- Assign to Arrive Compliance: 0.844
- Call Volume: 88.47K

DHPD Response Compliance
- Assign To Arrive Compliance: 0.909
- Call Volume: 58.37K
- Average of Response Time: 5.68
- Median of Response Time: 5.30

Response Time (Minutes)

Assign To Arrive Time (minutes)

Enroute To Arrive Time (minutes)
Performance: Comms. Center Volume Growth

911 Incident Volume And Population Growth

- 911 Total Calls
- Denver Population
- 911 Incidents

Innovation Strategies: Comms. Center

**Issue**
911 call volume growth negatively affects NFPA compliance

**Strategy**
- Develop and implement 2018 hiring push
- Implement new employee-retention strategies

**Outcomes**
- 911 leads department in employee engagement improvement
- Progress toward full staffing in 2018
Innovation Outcomes: Comms. Center

911 Call Taker Staffing

- Call Taker Authorized
- Call Taker Hired
- Call Taker Cleared
- Dispatcher Authorized
- Dispatcher Hired
- Dispatcher Cleared
Innovation Outcomes: Comms. Center

• Comms. Center tops department for employee engagement improvement

• Goal: reach full staffing by Q4 2018
Performance: DFD Volume By Call Type

- Medical call growth represents 75% of overall growth
Innovation Strategies: DFD

**Issue**
Fire’s volume growth is medical calls and the busiest DFD Companies are in the downtown core

**Strategy**
Deploy Med Unit on Friday and Saturday nights for downtown calls

**Outcomes**
Med Unit handled 24% of downtown calls, the busiest company
Right resources at the right time and place
Innovation Outcomes: DFD

Med Unit is Busiest Downtown Company Friday and Saturday Nights

Average Calls Per Hour

Hour Of Day
Innovation Outcomes: DFD

- Next step: analyze potential Med Unit expansion opportunities
Performance: Patient Outcomes

- Denver’s cardiac arrest survival consistently above other top performers
- High-performance CPR
Innovation Strategies: Full Scope BLS

Culture of Medicine Systemwide

Customer Service

Cohesive Service Delivery

Continuous Improvement
# Key Milestones

*From February to November 2017*

<table>
<thead>
<tr>
<th>Scope</th>
<th>Feb. 2017</th>
<th>Nov. 2017</th>
<th>Complete</th>
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<tbody>
<tr>
<td>Identify and Approve BLS Skills Authorized</td>
<td>✔️</td>
<td>✔️</td>
<td>Complete</td>
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<tr>
<td>Create Internal &amp; External Communications Plan</td>
<td>✔️</td>
<td>✔️</td>
<td>Complete</td>
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<tr>
<td>Finalize Skill Rollout Timeline &amp; Logistics</td>
<td>✔️</td>
<td>✔️</td>
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<tr>
<td>Select and Implement Patient Care Reporting System</td>
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<td>✔️</td>
<td>Complete</td>
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<tr>
<td>Implement Learning Management System (Tier 1 Metrics)</td>
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<td>✔️</td>
<td>Complete</td>
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<tr>
<td>Identify Training Capacity and Schedule (Tier 1 Metrics)</td>
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<tr>
<td>Identify Budget Requests for 2018</td>
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<tr>
<td>Identify Supplemental Requests for 2017</td>
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<tr>
<td>Identify Operating Agreement Requests and Language Updates for 2018</td>
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<tr>
<td>Develop Customer Service and Employee Satisfaction Metrics</td>
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<td>Q2 2018</td>
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<tr>
<td>Hire Fire QA/QI Analyst &amp; Begin QA/QI Data Analysis Process</td>
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<tr>
<td>Consistent and Uniform Patient Care Reporting</td>
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<td>Q1 2018</td>
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<tr>
<td>Implement QA on Added BLS Services</td>
<td>✔️</td>
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<td>Q1 2018</td>
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BLS Rollout Plan

Technology

- DH Technology Progress
- DFD Technology Progress

Training

- 100% Complete Paramedics Tablets & ESO
- 100% Complete Firefighters Report-Writing
- Begin 11/2017 Firefighters Tablets & ESO
- Q1 2018 BLS Skills: Aspirin, CPAP, 12-Lead ECG
- Q2 2018 & Beyond BLS Skill Areas: Cardiac, Respiratory, Environmental, Altered Mentation, Trauma/Shock, Pediatrics/Obstetrics

QA/QI

- Job Exposure
- Build Relationships
- Culture Change
- Compliance Narcan Reports:
  - Aug 50%
  - Sep 77%
  - Oct 100%
- DFD Protocols
- DFD Implementation
- System-wide QA/QI
BLS Training-Intensive Skillsets: Examples

Cardiac
- Nitroglycerine SL for heart attacks

Respiratory
- Capnography and albuterol for asthma and breathing emergencies

Environment
- Epinephrine for life-threatening allergic reaction

Altered Mentation
- Glucose monitoring for diabetic emergencies

Trauma & Shock
- Bleeding control

Pediatrics & Obstetrics
- Emergency delivery protocol
## EMRS: Next Steps 2018

### Cohesive Service Delivery: Leverage 2017 Innovations
- 911 Employee Hiring and Retention
- Assess Expansion of DFD Med Unit
- High Quality Cardiac Arrest

### Culture Of Medicine: Continue Full Scope BLS
- New software and patient reporting
- High yield, rapid rollout skills
- Training-intensive skills

### Continuous Improvement: Building Metrics and QA/QI Baseline
- EMS on-scene efficiency
- Patient outcomes
- Measure citizen engagement

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**Customer Service**
DFD Begins New Patient Report
DFD Initiates Report Transfer
Report Given Unique Transfer Code

Patient Transferred

Patient DENVER RESIDENT has been sent to Denver Health Paramedic Division.

Your transfer code is below. Pass this on to the receiving personnel.

6 9 2 2
Paramedics Initiate Report Capture
Paramedics Enter Unique Code
Patient Report Transferred
Paramedics Use DFD Data