EMS Overview

Board of Directors – 2.22.2021
John Curtis – EMS Division Chief
2020: A Year Like No Other

- COVID
  - Transformed everything we do as a service provider
  - Policies, Innovation, PPE, DECON, Decompression
- Re-shaping Our Processes
  - Alignment
- A New EMS Chief
  - Focus on Culture, Processes and Moving the Needle
EMS Call Statistics

• 2020 Call Data
• EMS accounted for 65% of South Metro’s Calls For Service
• Total calls (39,840) broken down:
  • EMS: 25,818 (17,779 Transports)
  • Public Assist: 6,282
  • Alarms: 4,011
  • Other: 2,499
  • Fires: 967
  • Special Ops: 263
• Covid Influence
ARM 37

• Operational change – August 2020
• Billing implementation – June 2020
• Citizen’s Cost Savings
• Significant uptake in usage/interest
  • Operationally
  • Covid
  • Case management/navigation
## Arm Car Savings

- $211,150 total cost savings to SMFR citizens over the last 3 months
- >$2.5 million over 12 month run rate

### Medical Cost Savings by Month

<table>
<thead>
<tr>
<th>Complete Month</th>
<th>Diversion Savings Er</th>
<th>Diversion Savings 911</th>
<th>Diversion Savings Obs</th>
<th>Diversion Savings Hospitalization</th>
<th>Total Cost Savings</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2021-01</td>
<td>$37,200</td>
<td>$14,500</td>
<td>$26,550</td>
<td>$37,500</td>
<td>$115,750</td>
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<tr>
<td>2 2020-12</td>
<td>$26,900</td>
<td>$10,550</td>
<td>$3,700</td>
<td>$0</td>
<td>$41,150</td>
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<tr>
<td>3 2020-11</td>
<td>$19,400</td>
<td>$7,550</td>
<td>$14,800</td>
<td>$12,500</td>
<td>$54,250</td>
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</table>
Quality Management Program

• Evidence and Outcome-Based
  • Beginning to End

• Process
  • Dictation
  • Universal Documentation Format
  • 3rd Party Review
  • Focused Education – Non-punitive

• Innovation
  • Ultrasound
  • Redundancies
    • Agitated Patient
    • Narcotics
    • Pediatric Dosing

• Denver Metro Physicians’ Group
Evidence and Outcome-Based Practices

- IDENTIFIED AREA OF IMPROVEMENT
- GOAL OF 100% AIRWAY MANAGEMENT
- PRODUCED 18 MONTH PLAN
- EXECUTED PLAN WITH RESULTS
  - 67% -> 89% FIRST ATTEMPT SUCCESS RATE
  - 100% OVERALL AIRWAY MANAGEMENT
- Cardiac Arrest Discussion
Pre-hospital Ultrasound

• Pioneering the next advancement in EMS
• Cardiac contractility – TOR
  • Transport Decisions
    • 25% Decrease
    • 3% Increase in Survivability
• Respiratory Diagnosis
  • Life Saving Treatment
• COVID
• All the above are or will be engaged in publication
• 30 units – 54K
Research and Publication

Prehospital and Disaster Medicine PDM-20-0236.R1

• Ultrasound aids in tension pneumothorax recognition speeding up time to needle decompression

Point-of-Care Ultrasound Use by EMS Providers in Out-of-Hospital Cardiac Arrest

• South Metro Fire Rescue (SMFR) paramedics received training in point-of-care ultrasound (POCUS) to assess for cardiac contractility during management of medical out-of-hospital cardiac arrest (OHCA).
Other Noteworthy Publications

- American College of Surgery- Clinical Congress 2020
- MSS12: Mitigating Factors of Physiologic Stress in First Responders During Warm Zone Active Shooter Drills
- Journal of Emergency Medicine 11/19
- Academic Emergency Medicine Education and Training (10/20)- Hand Motion Analysis
- Strategic Operations – Lessons Learned after STEM school shooting
- Disaster Medicine Journal 12/20 issue
What we Do Matters

“I am sure that I am only one of many people you have saved, but I felt the need to reach out and tell you how much you mean to me. Even if I don’t have a memory of you, you will always be an important part of my life. You guys are incredible, selfless heroes that make a big difference in this world each and every day.”
The Big 4: LEADING TO BETTER OUTCOMES

- Sepsis: 867 Cases
- STEMI: 125 Cases
- Stroke: 467 Cases
- Trauma: 387 Cases
What have we done thus far?

- COVID
- KETAMINE
- INTEGRATION
- TASK BOOKS
- PROMOTIONAL PROCESS
- MEDIC 3RD RIDER PROGRAM
- ARM: RE-STRUCTURE
- FUTURE STAFFING PLAN
- OPPORTUNITES – PATHWAY-PROMOTIONS
- ULTRASOUND
- BOLSTERING OUR LINE LEADERSHIP
- ACCOUNTABILITY
- SUPPORT
- CULTURE
- AIRWAY/CMAC INITIATIVE
- LEARNING SYMPOSIUM
- BUDGET CONSOLIDATIONS
- SELLING EMS
- HEALTHCARE FACILITIES MANAGEMENT
- DETOX PROGRAM
- COVID VACCINE PREPARATION
Looking Ahead for EMS

- Remember the Mission
- Move the Needle
- Future of Healthcare
- Continue to be Innovative/Adaptive
- Mental Health/Crisis Intervention
- Focus on Culture