OCTOBER 28, 2021 | 12:00 PM CT

Best Practices for Mitigating the EMS Workforce Shortage

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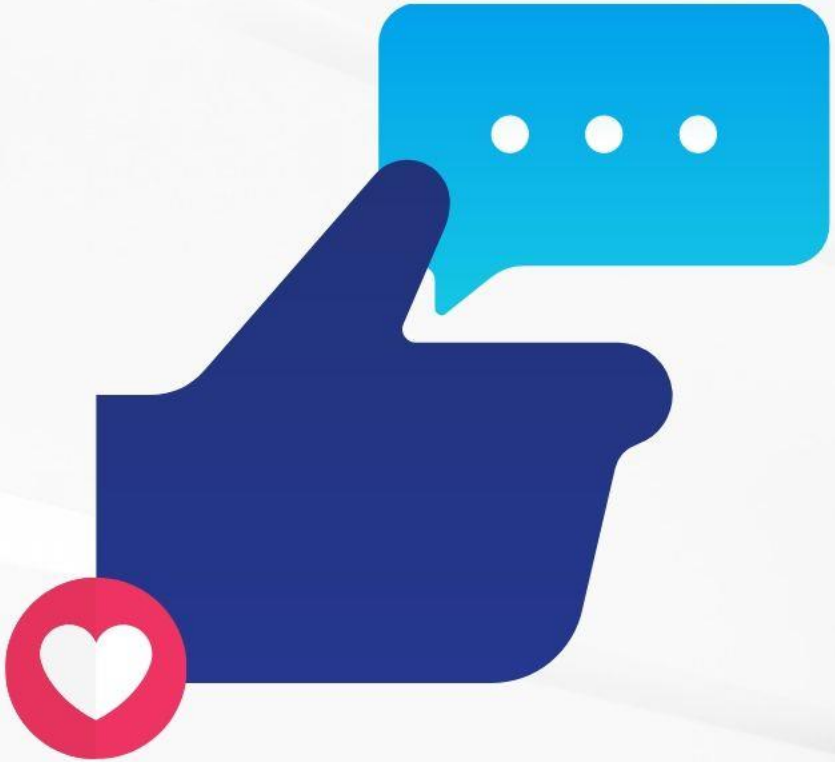
This session is being livestreamed and recorded!



Like (or ♥) the stream!
Ask questions in the comments.

Submit questions through the
Q&A function.

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NAEMT
Advancing the EMS profession

AIMHI
ACADEMY OF INTERNATIONAL MOBILE HEALTHCARE INTEGRATION

MEDSTAR
MOBILE HEALTHCARE

What if you call 911 and no one comes?

Inside the collapse of America's emergency medical services.

By Erika Edwards

Oct. 22 2019

Like so many other small towns in America, Hebron relies almost exclusively on volunteers, making it difficult to keep its EMS going.

“We struggle getting enough staff to cover every shift, 24 hours a day, seven days a week,” Steven Maershbecker, squad leader of the Hebron ambulance service, said.

“We are literally one person away from closing,” said Erick Hartse, a volunteer paramedic with the Marmarth ambulance service.

There are 12 EMS personnel in Marmarth, and they each take 12-hour shifts. Two people must be on call at the same time: usually one to drive the ambulance and another to administer more advanced medical care. All 12 donate their time, without compensation of any kind. That means they must also work a full-time job to support their families.

“We’ve been relying on volunteers to be the backbone in EMS for a long time, and unfortunately, that needs to change,” Hartse, 30, said. “Could you imagine being a volunteer doctor? It’s unfathomable.”

NEWS

https://www.nbcnews.com/health/health-care/there-s-shortage-volunteer-ems-workers-ambulances-rural-america-n1068556

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In Mobile, if you need an ambulance, it might not be available

BRENDAN KIRBY

AUG 19, 2021

At one point Wednesday, there were no ambulances available to respond to 911 calls in Mobile.

The reason? The fleet was tied up, mostly with COVID-19 patients.

Health care officials said it is another sign of a system in jeopardy of breaking down.

“That means that that next car wreck, that next cardiac arrest, that next diabetic emergency, stroke call – any of those medical emergencies where we would normally respond and have a very quick response time – may be delayed because we don’t have any ambulances available,” said Steven Millhouse, a spokesman for the Mobile Fire-Rescue Department.

The call went out at 11:21 a.m. over the emergency radio frequency: “All stations, stand by. Copy general information. Fire alarm has reached critical mass index zero. There are no rescue trucks citywide.”

FOX10 NEWS

AIMHI ACADEMY OF INTERNATIONAL MOBILE HEALTHCARE INTEGRATION

https://www.fox10tv.com/news/coronavirus/in-mobile-if-you-need-an-ambulance-it-might-not-be-available/article_e6c28f28-0097-11ec-8508-171fe44bbd25.html

EMS services warn of 'crippling labor shortage' undermining 911 system

“We’re not bleeding any longer — we’re hemorrhaging,” one ambulance service operator said of a decadelong worker shortage exacerbated by the pandemic.

By Phil McCausland

Oct. 8, 2021

The loss of staff to pandemic-related burnout and low wages has created a vicious cycle, requiring greater dependence on those workers who have stayed on. The situation has deteriorated to such a degree in recent months that ambulance services and industry leaders are pleading with Congress and state legislatures to help.

"The magnitude has really blown up over the last few months," Baird said. "When you take a system that was already fragile and stretched it, because you didn't have enough people entering the field, then you throw a public health emergency and all of the additional burdens that it put on our workforce as well as the labor shortages across the entire economy, and it really has put us in a crisis mode.“

The decline in Texas has been particularly substantial. ***By mid-August, only 27 percent of licensed EMS professionals had submitted a patient care record, according to the Texas Department of State Health Services, meaning that over 70 percent of licensed Texas EMTs did not work on an ambulance in the first eight months of the year***. That represents a significant drop from the 43 percent of EMTs who submitted reports in 2020 and the 45 percent who did in 2019.

The circumstances have pushed the American Ambulance Association and National Association of Emergency Medical Technicians to send a letter to Congress last week pushing for a hearing to address the shortfall and asking for more funding to increase wages.

NEWS

https://www.nbcnews.com/news/us-news/ems-services-warn-crippling-labor-shortage-undermining-911-system-rcna2677

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Dialing 911 in Charlotte? Some calls are being handled differently now, Medic says

BY JONATHAN LIMEHOUSE

OCTOBER 22, 2021

To help manage resources during the ongoing COVID-19 pandemic and a nationwide shortage of health care providers, Mecklenburg EMS is changing how it responds to 911 calls. Now, a caller to 911 who does not require serious medical attention will get an immediate "lights and sirens" response from the Charlotte Fire Department and its EMTs, but not Medic.

"Low-acuity," or low-risk, patients also will receive a "no lights and sirens" response from a Medic ambulance, *with a target arrival time of 30 minutes or less*, John Studnek, Medic deputy director, said during a news conference Thursday.

Extending low-risk response times also will allow Medic dispatchers to ensure resources remain in place to rapidly respond to more high-risk patients. Medic employees has had mandatory overtime in place in October, and Studnek said that will continue through November. The agency is short 38 full-time, patient-facing employees, he said. As of June 30, Medic had 576 employees. "*It's protocols like this change in response configuration that's going to help us bridge the gap of the long-term problem of staffing so we can start to idle down some of that mandatory overtime*," he said.

The Charlotte Observer

https://www.charlotteobserver.com/news/local/article255184137.html

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2019

National Registry Data, Dashboard, & Maps

Select Report

Annual Certification Report

Select Year

2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | **2019** | 2020 | 2021

2019 Annual Certification Report

Total Certified

EMR	EMT
10,401	292,369
AEMT	**PARAMEDIC**
17,949	110,061

First Time Certified

EMR	EMT
3,724	73,404
AEMT	**PARAMEDIC**
4,509	11,570

Tested
(Cognitive Exam)

EMR	EMT
5,436	99,044
AEMT	**PARAMEDIC**
6,800	15,416

RAA
Richmond Ambulance Authority

2020


National Registry Data, Dashboard, & Maps
Select Report
Annual Certification Report
Select Year
2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021
2020 Annual Certification Report
Total Certified
EMR 9,060
EMT 293,891
AEMT 18,449
PARAMEDIC 111,953
First Time Certified
EMR 2,084
EMT 58,969
AEMT 3,626
PARAMEDIC 9,415
Tested
(Cognitive Exam)
EMR 3,125
EMT 84,633
AEMT 6,232
PARAMEDIC 14,297

2021


National Registry Data, Dashboard, & Maps
Select Report
Annual Certification Report
Select Year
2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021
2021 Annual Certification Report
Total Certified
EMR 4,891
EMT 184,787
AEMT 11,522
PARAMEDIC 67,497
First Time Certified
EMR 150
EMT 4,284
AEMT 211
PARAMEDIC 470
Tested
(Cognitive Exam)
EMR 216
EMT 7,274
AEMT 563
PARAMEDIC 1,078

Check your State & Local Ordinances!

12VAC5-31-1230. Ground ambulance staffing requirements.

A ground ambulance transport requires a minimum of two persons:

1. An operator shall at a minimum possess a valid motor vehicle operator's permit issued by Virginia or another state and have successfully completed an approved Emergency Vehicle Operator's Course (EVOC) training course or an equivalent.

2. An attendant-in-charge who must meet the requirements listed for the type of transport to be performed.

Statutory Authority

§§ 32.1-12 and 32.1-111.4 of the Code of Virginia.

Check your State & Local Ordinances!

Richmond City Code

Sec. 10-81. - Advanced life support and basic life support services.

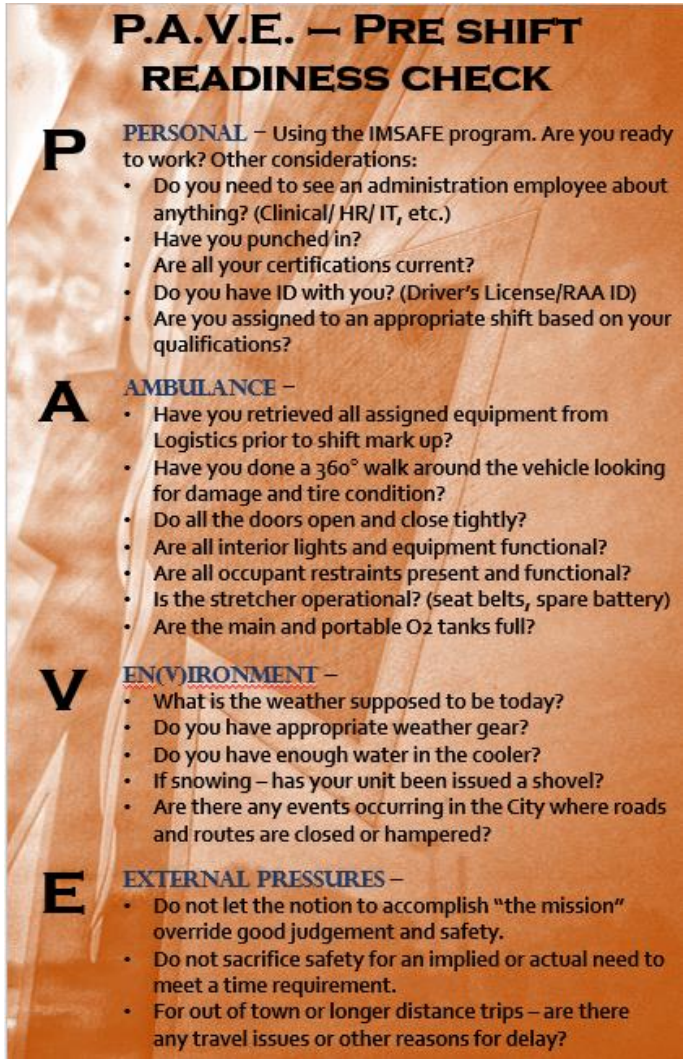
All emergency medical services vehicles of authorized providers shall be equipped and staffed to provide advanced life support services for life threatening emergencies and equipped and staffed to provide basic life support for non-life-threatening emergencies, except the following:

(1) Non ambulance vehicles used solely for wheelchair transport.
(2) Vehicles owned by a partnership of hospitals that was in existence and engaging regularly in emergency medical services transports as of January 1, 1991, while such vehicles are engaging in transports originating from a member hospital.

(Code 1993, § 10-63; Code 2004, § 34-104; Code 2015, § 10-81)

CISM & Peer Support Teams

- Burnout
- Next-Steps



Checklists that promote a culture of safety

Richmond Ambulance Authority

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Pinellas County EMS System

- Pinellas County is on the Gulf of Mexico in Tampa Bay, Florida!
- 1 Million Population plus 6 Million tourists annually – Best Beaches!
- 24 Cities – Clearwater, Largo, St. Petersburg.
- 18 Fire Rescue Departments and Countywide Ambulance
- 1,800 Fire/EMS Personnel
- 6 Hospital Systems, 13 Hospitals – Over 3,600 licensed beds
- 6 Freestanding Emergency Departments.
- 220,000+ Fire/EMS Responses and 175,000+ Patient Transports

Sunstar PARAMEDICS

sunstarcareers.com

Raising the EMS Industry

- "In the midst of every crisis, lies great opportunity" Albert Einstein

- While this is REALLY PAINFUL – the result will RAISE the EMS Industry to a new level.
- The public has now come to expect and rely upon a robust public safety system (911, Police, Fire, EMS).
- EMS Leaders need to clearly state what resources are needed in their Community to have an appropriate Level of Service.
- Nearly every EMS System Model has been under stating the financial and human resources needed since the beginning.
- I won't give examples but "own the history" in your own EMS System regardless of what service model is used – Volunteer, Private, Hospital Based, 3rd Service, or Fire Based.

Assessing Your EMS System

- Like an Orchestra Conductor – “Take it from the top” – begin again at the very beginning with the difficult questions.
  - How fast do we answer 911? Are our Dispatchers trained in EMD and giving pre-arrival instructions?
  - Do we have enough staffed Ambulances on the street each day? Are we meeting Response Times?
  - Are the personnel properly credentialed, trained, equipped, and compensated?
  - Is there an adequate amount of equipment – vehicles, medical equipment, and supplies?
  - Is there Medical Oversight, Training, Quality Assurance and Improvement?
  - Is there adequate Leadership, Financial Oversight, Fiscal Reserves, and Diversified Revenue Streams?

- EMS Systems stealing staff from each other is raising the bar and setting more competitive expectations – we need to raise the industry to the next level.

1973 to 2023 – Fifty Years

- EMS **is** an Essential Service.
- We need that law, charter, and ordinance in every EMS System and State regardless of Service Model.
  - 11 States – it should be ALL States and Territories.
- In 2023 modern Emergency Medical Services will be 50 years old
  - Is your EMS System operating to Industry Standards?
  - Accreditation? Standards of Care?
  - What EMS System components are lagging, need upgrade or are excelling?
  - We all have work to do.

What are we doing?

- Public Messaging
  - Fix it definitively, quickly and without raising alarm in the elected officials and the public whenever possible.
  - Stay on the high ground of the resources needed – funding and filling open positions.
  - We don't talk about turnover percentages – we stay positive and avoid negative rhetoric.
  - We are an employer of choice and provide an excellent service that we are proud of.
  - We serve our Patients and our Community.
  - All of Healthcare (and many industries) are experiencing staffing issues.
  - We must compensate EMTs and Paramedics above the minimum wage.
  - EMTs and Paramedics deserve a competitive wage and benefits - they deal with stressful work, have long hours including shift work, night shifts, weekends and holidays, are exposed to human tragedies that can cause post-traumatic stress, and subject to on-the-job illnesses and injuries.
  - We must "attract and retain" a highly skilled workforce that is ready when someone calls 9-1-1.

What are we doing?

- EMS Academy
  - All new Paramedics and EMTs (Fire Rescue and Sunstar) go through Pinellas County's EMS Academy.
  - Two-week classroom for Paramedics; one-week for EMTs.
  - Protocols, Equipment, Skills Training, Scenario based Training/Testing – Critical Thinking.
  - Field internship with a Paramedic or EMT preceptor – Shifts plus Skill Checks.
  - Recommendation from EMS Chief, Capstone Testing – Protocol Exam and Scenario with the Medical Director.
  - Mental Health First Aid on Day 1.
  - Continually refining and expanding this program – working on an Immersion Room.
  - Took the "pipeline" to produce a County Certified Paramedic from 120 days to 70 days.
  - Took the Capstone Testing success rate from 70% to 95%.
  - Adding 100s of new EMTs and Paramedics systemwide each year – no increase in Quality Assurance Reviews (i.e. inadequate treatment, medication errors, complaints, etc.)

What are we doing?

- Recruiting AND Retaining
  - Pay – Equipment – Mission Messaging
  - Support Partnerships with Schools
    - Pinellas County Schools – High School First Responder Program.
    - St. Petersburg Fire Rescue Cadet Program with Gibbs High School
    - St. Petersburg College – EMS Program, Fire Academy, Postsecondary Adult Vocational (PSAV).
    - School of EMS - EMT and Paramedic Scholarships
    - Workforce Development Funds
  - Stealing EMTs and Paramedics from Region, State and Nationally. EMS in Paradise!
  - Keep up the Fleet and Equipment (Power Load!)
  - Personal Protective Equipment – always job #1.
  - Take lots of pictures, give lots of awards and thank yous!
  - Feed people! Supervisors checking in daily.
  - Measure Employee Engagement and Satisfaction (85%)!

What are we doing?

- Mitigation Strategies
  - Peak Transport Units from Fire Rescue on overtime.
  - Peak Transport Units with Mixed Staffing – Sunstar Ambulance and EMT with Fire Rescue EMT or Medic
  - Utilizing ALS Rescue Units for Transport during peak periods.
  - Holding Non-Emergency Transports only when absolutely necessary – Hospital Discharges keep ERs flowing.
  - Ensure Minimum levels on duty.
  - Implement Priority Dispatch. Improve partnerships with Hospitals and other Public Safety.
  - Improve First Responder integration.
  - Look at shifting demand – i.e. changing non-emergency response times, scheduled pick-up times, etc.
  - Use of Mutual Aid for Long Distance Transports, Peak and Off-Peak Transports.
  - Downgrade transports without a medical necessity to Stretcher Van, Wheelchair Van, other means.
  - Mixed Staffing in your community – Paid/Volunteer, Clinical/Non-Clinical, Management/Field, etc.
  - Mandatory Overtime – very sad to say we are relying on Mandatory Overtime. Use it last, turn it off first.

Final Thoughts

- The future is a bit concerning, but we will prevail!
  - COVID-19 not ending or next wave.
  - Vaccine Mandate for Healthcare workers in Florida.
  - Inflation and Recession
  - Global Supply Chain Issues – Truck Parts, Computer Parts, Medical Supplies, Pharmaceuticals
  - Fuel Prices
  - Continued Staffing Issues after new Wage Plan
  - Burnt out Workforce
  - Keep trying to “work ahead” to reduce stress/failure points
    - Support personnel, maintain fleet/equipment, streamline, increase par levels, etc.

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AMERICAN AMBULANCE ASSOCIATION
Caring for people—first.

CATALDO AMBULANCE SERVICE, INC.

Solutions

The solutions we believe will help address the staffing shortage:

- Increased Training
  - Accelerated EMT Training (Earn as you Learn)
  - Traditional EMT Training
  - AEMT Training
  - Paramedic Training – New ALS Accredited Training Site
  - Career Track – CC → FR → EMT → Paramedic

- Compensation
  - Pay Rate Adjustments - EMT from $16.00 to $18.00
  - State Staffing Waivers – FR $17.00 / EMT $24.00

- Social Media/Community Outreach

- Retention efforts

- Association Involvement
  - Massachusetts Ambulance Association (MAA)
  - American Ambulance Association (AAA)
    - Meeting with State and Federal agencies to help address the reimbursement for ambulance services.

AMERICAN AMBULANCE ASSOCIATION
Caring for people—first.

CATALDO AMBULANCE SERVICE, INC.

The solutions we believe will help address the staffing shortage:

- Enhanced Referral Bonus

Your EMS referral could be worth more than $5000!*

REFER A NEW HIRE = $250

Your referral is worth $250 if hired by 12/31/21

AFTER 3 MOS: RECEIVE $250

AFTER 6 MOS: RECEIVE $250

Note: You and your referral must be employed, in good standing, and meeting minimum staffing requirements, at the time of these milestones. Managers are NOT eligible for this offer.

Payouts will begin in mid-January 2022.

"I have referred several people to Cataldo, and feel very good about it. It's a great way to contribute to building a strong team and bring relief to my colleagues at the same time."

Cataldo EMT

If you refer 3 or more people who are hired by 12/31, you will be eligible to win up to $5000!

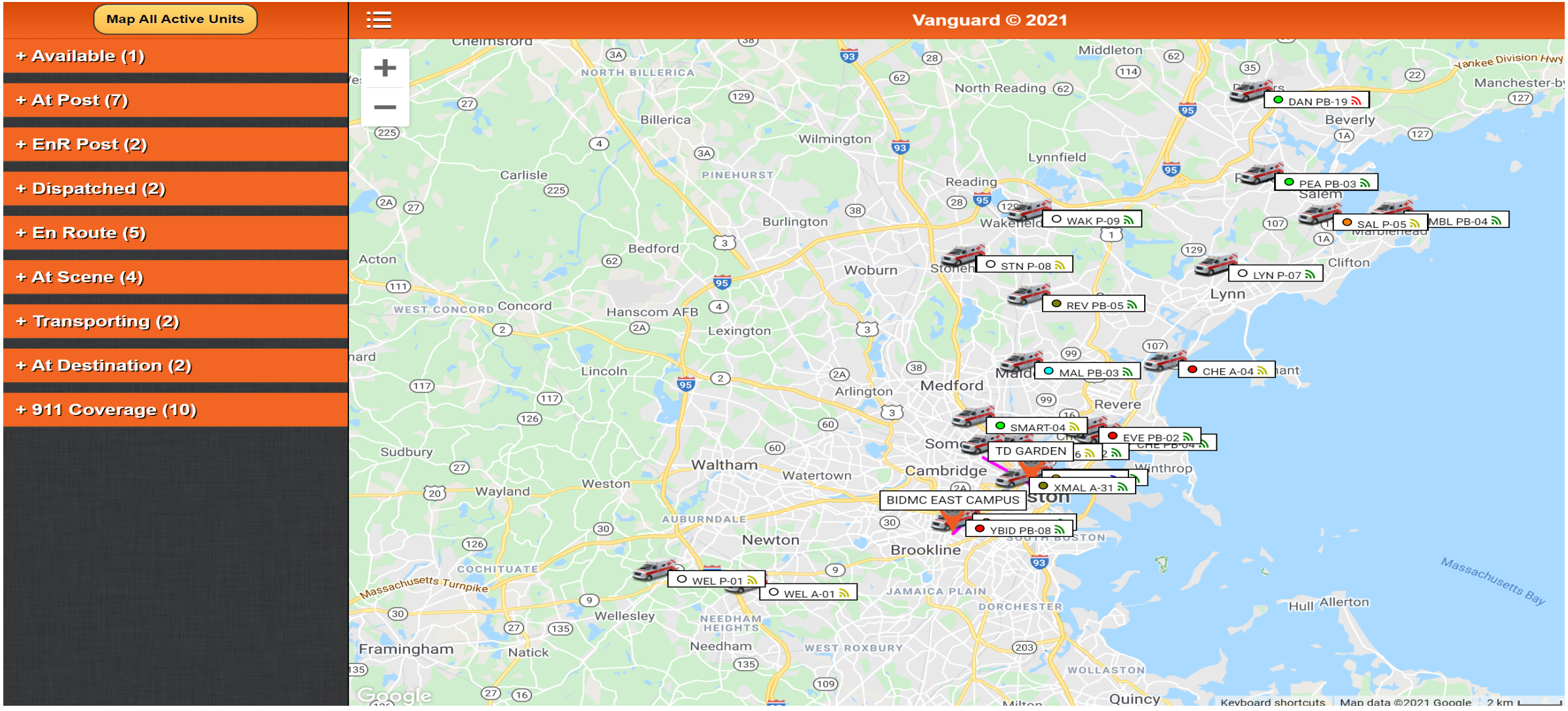
We'll put the names of all employees who have referred three or more people hired by 12/31/21 into a pool and award exciting cash prizes as an added bonus!
(1) $5000, (1) $1000, and (3) $500 prizes!

Ready? Here's how to get started:

1. Point your referral to "Careers" on the Cataldo website and have them select "Apply Now" from the drop down menu. This will take them to all open positions and they can select the one that best meets their interests.
2. Have them click on the application for a position and complete it. Be sure they include your name as a referral source.
3. Once they submit their application the hiring team will get to work. Feel free to send the team a heads up: humanresources@cataldoambulance.com

The solutions we believe will help address the staffing shortage:

- Technology Solutions - VLI



Ken Simpson
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About MedStar…

- Governmental agency (PUM) serving Ft. Worth and 14 Suburban Cities
  - Self-Operated
  - 1,016,963 residents, 434 Sq. miles
  - Exclusive provider - emergency and non-emergency
- 171,000 responses (10/1 – 9/30/21)
- 515 employees
- $52.5 million budget (FY 2021-22)
  - **No tax subsidy**
- Fully deployed Dynamic Resource Management
- Medical Control from 18-member Emergency Physician's Advisory Board (EPAB)
  - Physician Medical Directors from all emergency departments in service area + 7 Tarrant County Medical Society reps

Mitigation Strategy:
System (re)Design = Tiered Deployment

Tiered Ambulance Deployment Pilot Project

Overview:

The Tiered Response Task Force of the Metropolitan Area EMS Authority (MAEMSA) proposes a six-month pilot project to evaluate the clinical, operational and fiscal impact of transitioning from an all Advanced Life Support (ALS) ambulance deployment model, to a combination of ALS and Basic Life Support (BLS) ambulances for response to 9-1-1 medical calls in the MAEMSA service area (Tiered Deployment Model). The pilot is anticipated to start February 1st, 2021.

Evaluation Statement:

The current all ALS deployment model presents operational challenges related to staffing, response, outcomes, and cost-effectiveness. ***The goals of the Tiered Deployment Model pilot are to increase clinical and operational effectiveness and efficiency within the system*****.** Addressing both challenges requires determining where and how a different response model may enhance service delivery, while improving clinical proficiency and patient outcomes.

MEDSTAR MOBILE HEALTHCARE

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Tiered Response Task Force Members:

- Dr. Veer Vithalani, System Medical Director and Chief Medical Officer, Office of the Medical Director
- Chief Mike Christenson, Lake Worth Fire Department
- Christopher Cunningham, MedStar
- Chief Casey Davis, Burleson Fire Department
- Chief Jim Davis, Fort Worth Fire Department
- Dwayne Howerton, Office of the Medical Director
- Chief Brandon Logan, White Settlement Fire Department
- Dr. Al Lulla, Office of the Medical Director
- Chief Kirt Mays, Haslet Fire Department
- Dr. Faroukh Mehkri, Office of the Medical Director
- Dr. Brian Miller, Office of the Medical Director
- Kristofer Schleicher, Metropolitan Area EMS Authority
- Ken Simpson, MedStar
- Chief Doug Spears, Saginaw Fire Department
- Matt Zavadsky, MedStar

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EMD D..	Incidents	% of Total Calls	ALS?	Transported?	L&S?	Critical?	Vital?
4B01	1,752	1.3%	2.6%	48.7%	2.3%	0.1%	2.6%
4D05	189	0.1%	2.6%	35.4%	7.5%	0.5%	2.6%
16A01	101	0.1%	3.0%	52.5%	1.9%	0.0%	3.0%
20B02	193	0.1%	2.6%	51.8%	0.0%	0.0%	4.7%
23B01	276	0.2%	0.7%	77.5%	2.8%	0.4%	3.6%
24B01	138	0.1%	0.7%	96.4%	3.8%	0.0%	2.9%
24B02	166	0.1%	2.4%	75.9%	1.6%	0.0%	2.4%
24C03	205	0.2%	2.9%	94.1%	0.0%	0.0%	2.0%
24D03	405	0.3%	0.5%	95.1%	3.9%	0.0%	3.2%
25A02	419	0.3%	2.4%	67.8%	1.4%	0.0%	2.1%
25B03	1,672	1.3%	2.6%	54.5%	1.3%	0.2%	2.0%
25O01	510	0.4%	1.4%	75.5%	1.3%	0.0%	2.5%
25O02	326	0.2%	1.2%	81.9%	0.0%	0.0%	0.6%
26A06	147	0.1%	2.0%	83.7%	2.4%	0.0%	3.4%
26O28	111	0.1%	1.8%	89.2%	1.0%	0.0%	0.9%
29A02	201	0.2%	3.0%	26.9%	1.9%	0.0%	1.0%
29B01	7,193	5.5%	2.6%	33.8%	2.8%	0.1%	1.5%
29B03	713	0.5%	2.9%	40.1%	4.5%	0.3%	2.1%
29B05	2,386	1.8%	2.4%	28.1%	4.5%	0.3%	1.5%
32B03	2,432	1.9%	2.8%	24.1%	4.3%	0.8%	2.4%
Grand ..	19,535	14.9%	2.5%	42.1%	2.6%	0.2%	2.0%

Incidents, % of Total Calls, ALS?, Transported?, L&S?, Critical? and Vital? broken down by EMD Determinant. The data is filtered on EMD original and EMD Card. The EMD original filter keeps 412 of 813 members. The EMD Card filter excludes 33 and 37. The view is filtered on average of Critical?, average of Vital?, average of ALS?, distinct count of Incident Patient Care Report Number and EMD Determinant. The average of Critical? filter ranges from 0.0% to 1.0%. The average of Vital? filter ranges from 0.0% to 5.0%. The average of ALS? filter ranges from 0.0% to 3.0%. The distinct count of Incident Patient Care Report Number filter ranges from 100 to 7,193. The EMD Determinant filter keeps 20 members.

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BLS Response Report Summary - BLS Eligible Determinants

Through: **10/10/2021**

**BLS Response Determinants w/BLS Unit Response*

Determinant	Responses	Patients Assessed	Transports	Transport Ratio
01A03 - Abdominal Pain / Problems - P3	9	7	6	66.7%
04B01 - A - Assault - Assault - P2	52	43	25	48.1%
04B03 - A - Assault / Sexual Assault / Stun Gun - Assault - P2	7	6	4	57.1%
04D05 - A - Assault - Assault - P1	5	4	1	20.0%
05A01 - Back Pain (Non-Traumatic or Non-Recent Trauma) - P3	5	5	5	100.0%
10C01 - Chest Pain / Chest Discomfort (Non-Traumatic) - P2	8	8	8	100.0%
16A01 - Eye Problems / Injuries - P3	4	4	3	75.0%
20B02 - H - Heat / Cold Exposure - Heat exposure - P2	23	10	7	30.4%
20O01 - H - Heat exposure - Heat exposure - P3	4	2	1	25.0%
23B01 - Overdose/Poisoning/Ingestion	1	1	1	100.0%
24B02 - Pregnancy/Childbirth/Miscarriage	0	0	0	
24C03 - Pregnancy/Childbirth/Miscarriage	0	0	0	
24D03 - Pregnancy/Childbirth/Miscarriage	0	0	0	
25A02 - Psychiatric / Abnormal Behavior / Suicide Attempt - P3	14	13	12	85.7%
25B03 - Psychiatric / Abnormal Behavior / Suicide Attempt - P2	39	31	29	74.4%
25O01 - Psychiatric / Abnormal Behavior / Suicide Attempt - P3	33	28	25	75.8%
25O02 - Psychiatric / Abnormal Behavior / Suicide Attempt - P3	26	23	21	80.8%
26A06 - Sick Person (Specific Diagnosis) - P3	12	12	10	83.3%
26A10 - Sick Person (Specific Diagnosis) - P3	58	42	35	60.3%
26C02 - C - Sick Person (Specific Diagnosis) - Suspected coronavirus illness - P2	19	17	13	68.4%
26O28 - Sick Person (Specific Diagnosis) - P3	13	12	11	84.6%
29A02 - V - Traffic Collision / Transportation Incident - Multiple patients - P3	48	37	9	18.8%
29B01 - V - Vehicle vs. vehicle - Multiple patients - P2	237	203	80	33.8%
29B02 - V - Vehicle vs. vehicle - Multiple patients - P2	4	1	1	25.0%
29B03 - V - Vehicle vs. vehicle - Multiple patients - P2	48	41	8	16.7%
29B05 - Traffic Collision / Transportation Incident - P2	283	197	71	25.1%
32B03 - Unknown Problem (Person Down) - P2	107	37	21	19.6%
Total	**1059**	**784**	**407**	**38.4%**

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Evaluation Goals & Metrics:

Monthly, for the duration of the pilot, the MAEMSA Tiered Response Task Force will evaluate the outcomes of the pilot using clinical, operational and fiscal metrics that relate to the goals of the transition from an all ALS deployment model to a Tiered Deployment Model. These evaluation metrics will be reported to the MAEMSA Board, the Emergency Physicians Advisory Board (EPAB), and the First Responder Advisory Board (FRAB).

Goal – Enhance Paramedic ALS Skill Utilization

- Measure
  - % of calls assigned to an ALS unit that result in an ALS intervention
    - Cohort 1: % of ALS unit patient contacts that resulted in an ALS intervention Post-implementation
    - Control group: % of ALS unit patient contacts that resulted in an ALS intervention Pre-implementation

Goal - Increase staffed ambulance unit hours available for 9-1-1 response

- Measure
  - Number of staffed ambulance Unit Hours (UH) available for 9-1-1 response
    - Cohort 1: Number of staffed 9-1-1 ambulance UHs post-implementation
    - Control Group: Number of staffed 9-1-1 ambulance UHs pre-implementation

Goal - Reduce or maintain overall ambulance response times

- Measure
  - Cohort 1: System-Wide average and fractile response times for P1, P2 and P3 calls post-implementation
  - Control Group: System-Wide average and fractile response times for P1, P2 and P3 calls pre-implementation

Goal - Reduce overall unit hour expense

- Measure
  - Cohort 1: Average operational cost per unit hour post-implementation (*field ops, comm, fleet, logistics costs*)
  - Control Group: Average operational cost per unit hour pre-implementation (*field ops, comms, fleet, logistics costs*)

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Mitigation Strategy:
System (re)Design = Selective Response

BLS Response Report Summary - BLS Eligible Determinants

Through: **10/10/2021**

Determinant	Responses	Patients Assessed	Transports	Transport Ratio
04D05 - A - Assault - Assault - P1	5	4	1	20.0%
20B02 - H - Heat / Cold Exposure - Heat exposure - P2	23	10	7	30.4%
20O01 - H - Heat exposure - Heat exposure - P3	4	2	1	25.0%
29A02 - V - Traffic Collision / Transportation Incident - P3	48	37	9	18.8%
29B02 - V - Vehicle vs. vehicle - Multiple patients - P2	4	1	1	25.0%
29B03 - V - Vehicle vs. vehicle - Multiple patients - P2	48	41	8	16.7%
29B05 - Traffic Collision / Transportation Incident - P2	283	197	71	25.1%
32B03 - Unknown Problem (Person Down) - P2	107	37	21	19.6%
Total	**1059**	**784**	**407**	**38.4%**

First Response, or QRV Only on Initial Response?

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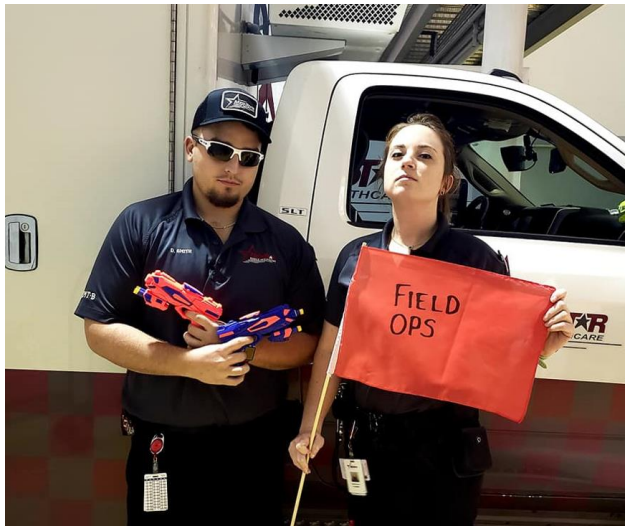
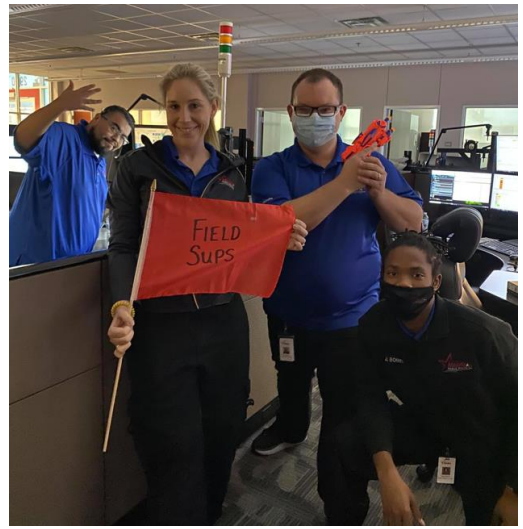
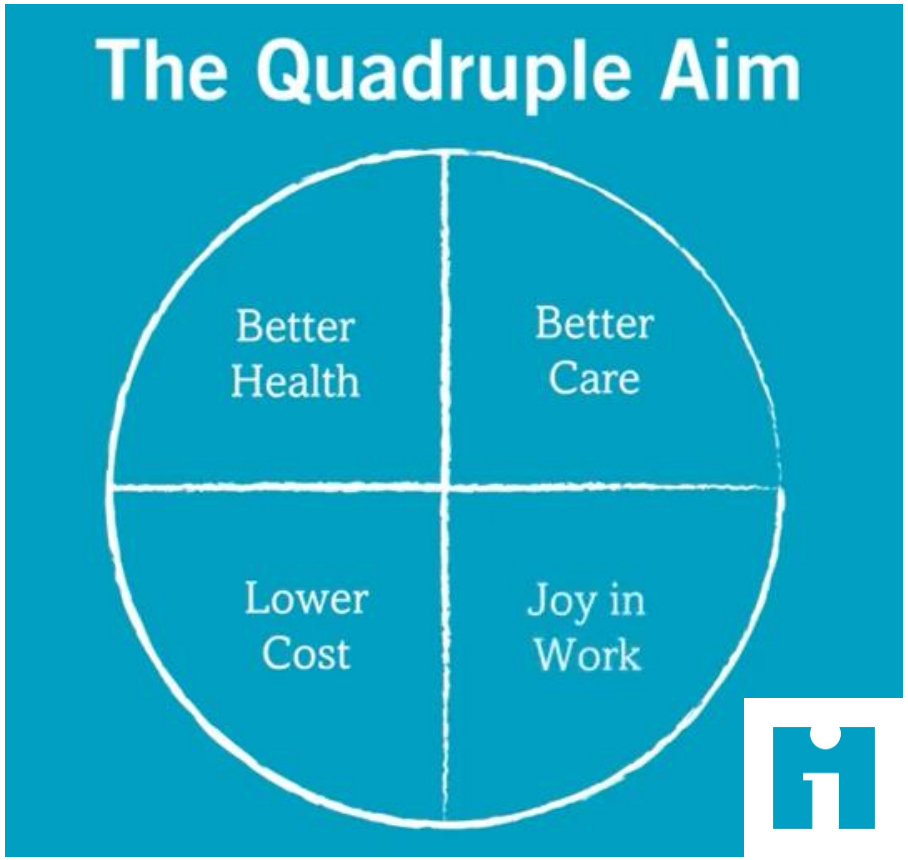
Mitigation Strategy: Create JOY at Work







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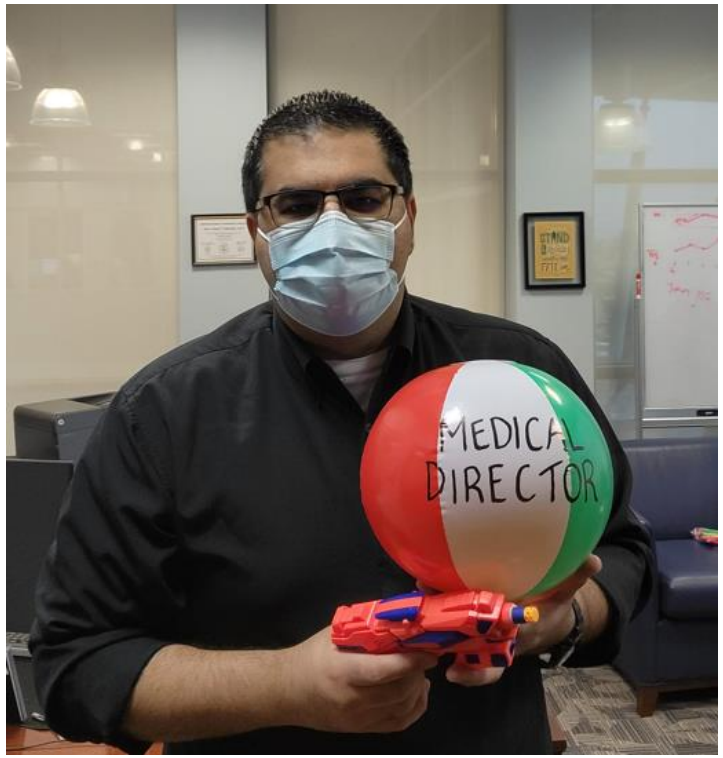
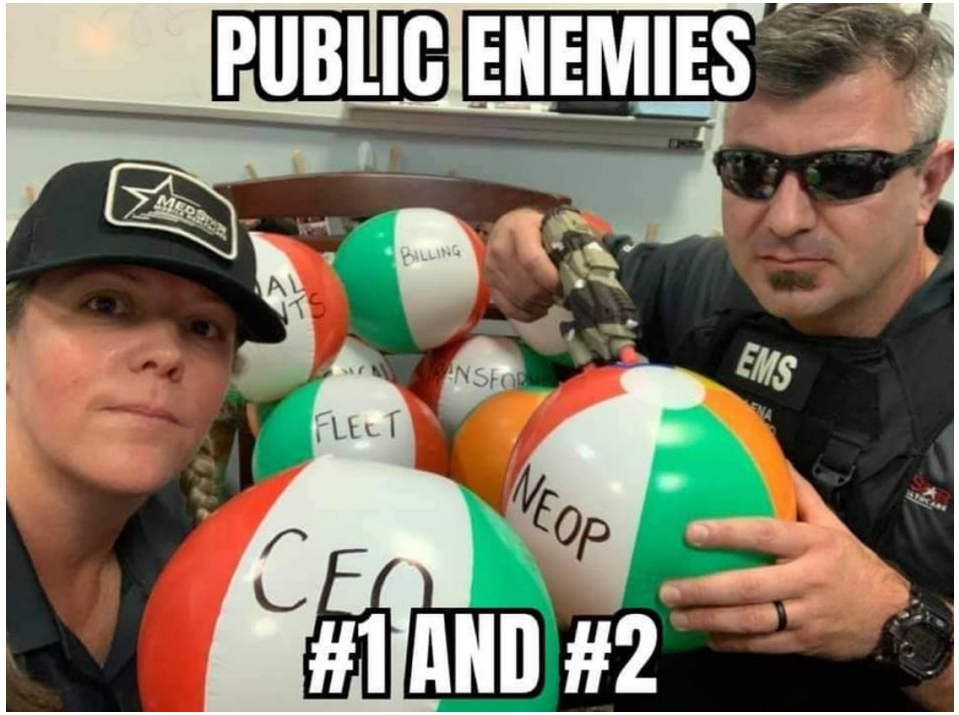
FLEET
NEOP


OPS
Sups


MEDICAL
DIRECTOR


PUBLIC ENEMIES
BILLING
FLEET
NEOP
CEO
EMS
#1 AND #2

Other Retention Strategies:

- **Shift differentials built into base rates**
- **Retention / Performance bonuses**
- **Waive benefits?**
  - Build into base rate?
- **Innovative scheduling**
  - School, childcare, self-scheduling

Assign	310		900148	Crandall, Tyler (SS) *	Advanced		04:30	16:30	12:00
Assign	310		900750	Michaels, Brandon	Basic	Carranzana, S, TCC	04:30	16:30	12:00

- **Peer Support Programs**

HOPE SQUAD
HOLD ON. PERSUADE. EMPOWER.

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Jon Studnek
Deputy Director of Operations
Mecklenburg EMS Agency
Charlotte, NC | jonst@medic911.com

MEDIC
Mecklenburg EMS Agency

OUR PATIENTS

OUR PEOPLE

OUR STEWARDSHIP

System Design in a Post – COVID World

System Design Elements

- Lyft for low acuity transport
- Patient Option Introduced – No Transport (POINT)
- Response Configuration Change – Sierra Calls

Lyft Call-taker Patient Guide

Call-taker accepting hand back

Based on the information you provided 911 and the nurse your best option is to utilize our free ride share service option like Uber or Lyft (similar to a taxi) to get you to the emergency room.

I'm going to transfer you to our transport specialist to get a driver on the way.

[Place caller on hold and notify specialist]

(Caller resistant) What is your biggest concern about this option?

(Safety) I understand your concern. I will be able to monitor your transport until you arrive at the hospital. Can I get the driver started for you?

(Cost) I understand your concern. This service is at no cost to you. An ambulance could cost more than $1000 which may or may not be covered by your insurance. Can I get the driver started for you?

(Response time) I understand your concern. I can get your driver started right away while an ambulance may not be available for up to 90 minutes. Can I get the driver started for you?

(Seen in ER faster) I understand your concern. Arriving to the ER in an ambulance does not ensure being seen faster. A driver with our ride share service may be able to transport you to the ER quicker than an ambulance. Can I get the driver started for you?

(Unsure of process) I understand your concern. From here I will transfer you to a transport specialist who will collect some basic information and reserve your driver. We will handle the set-up and will monitor your progress until you arrive at the emergency room. Can I get the driver started for you?

(Still refusing) Refer to TRANSPORT ONLY process on the OMEGA Referral Script

(Patient permits) Place caller on hold, notify specialist, and place "Lyft" in RP field in CAD

DOCUMENT REASONS FOR EXCLUSION OR REFUSAL IN CAD COMMENTS

Updated 10.13.2021

Lyft Transport Draft Process

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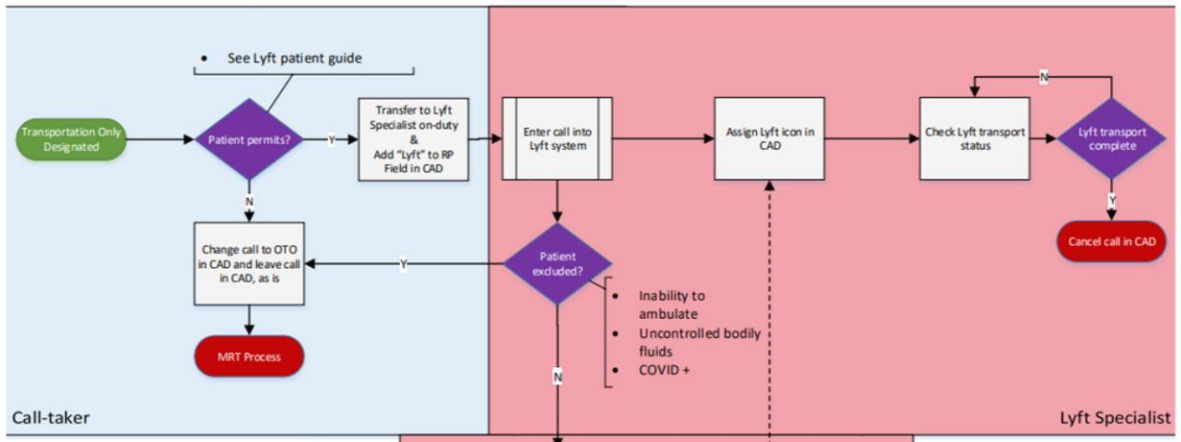


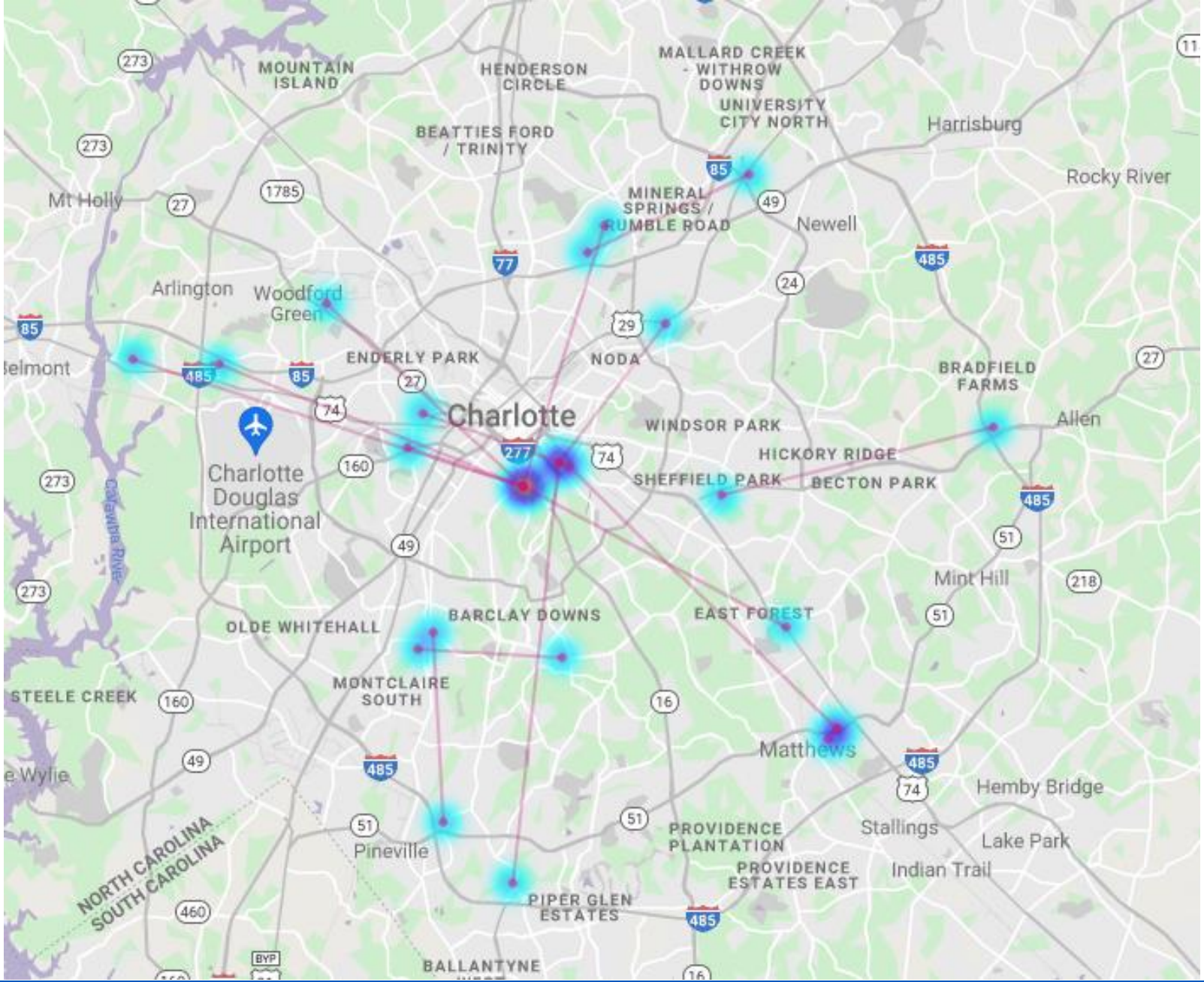
Circulation Rider Limits

Ride Price Warning: $25
Ride Price Ceiling: $50
Ride Distance Warning: 10 miles
Ride Distance Ceiling: 30 miles
Max # of cancellations per ride: 2
Rebooking window: 30 minutes

Lyft Transport Specialist

- Any supervisor
- Any NET team member
- Other trained telecommunicator designated by the on-duty supervisor

Updated: 10.13.2021


MOUNTAIN ISLAND
HENDERSON CIRCLE
MALLARD CREEK - WITHROW DOWNS
UNIVERSITY CITY NORTH
Harrisburg
BEATTIES FORD / TRINITY
Rocky River
Mt Holly
MINERAL SPRINGS / RUMBLE ROAD
Newell
Arlington
Woodford Green
ENDERLY PARK
NODA
BRADFIELD FARMS
Allen
Charlotte
WINDSOR PARK
HICKORY RIDGE
SHEFFIELD PARK
BECTON PARK
Charlotte Douglas International Airport
Mint Hill
OLDE WHITEHALL
BARCLAY DOWNS
EAST FOREST
MONTCLAIRE SOUTH
STEELE CREEK
Matthews
Hemby Bridge
Stallings
Lake Park
Indian Trail
PROVIDENCE PLANTATION
PROVIDENCE ESTATES EAST
Pineville
PIPER GLEN ESTATES
NORTH CAROLINA
SOUTH CAROLINA
BALLANTYNE

POINT

- Phase 1 Objective: Allow providers to explain their assessment findings to patients and recommend against ambulance transport to an emergency department

  - Capture:
    - Initial estimate: 12k transports/year
    - Small-scale test: ~30 transports/day
  - Performance improvements:
    - Reduced transports
    - Reduced transport time and HTAT
    - Reduced demand for unit hours

POINT Protocol

Inclusion

- BLS level patients only
- Over 18 or accompanied legal guardian
- GCS 15 or at confirmed baseline
- Vitals signs within normal thresholds for age
- Primary Impressions:
  - Low acuity trauma with minor wounds or no injuries
  - Low acuity general illness: N/V/D, mild intoxication with responsible party, chronic complaint with no new changes

Exclusion

- Spinal motion restriction
- Administration or need for EMS medications
- Administration or need for 12-lead ECG
- Medium or high risk for bacterial infection (MBIS 1 or 2)
- Any physician ordered transport (SNFs, Urgent Care, Physician's Office)

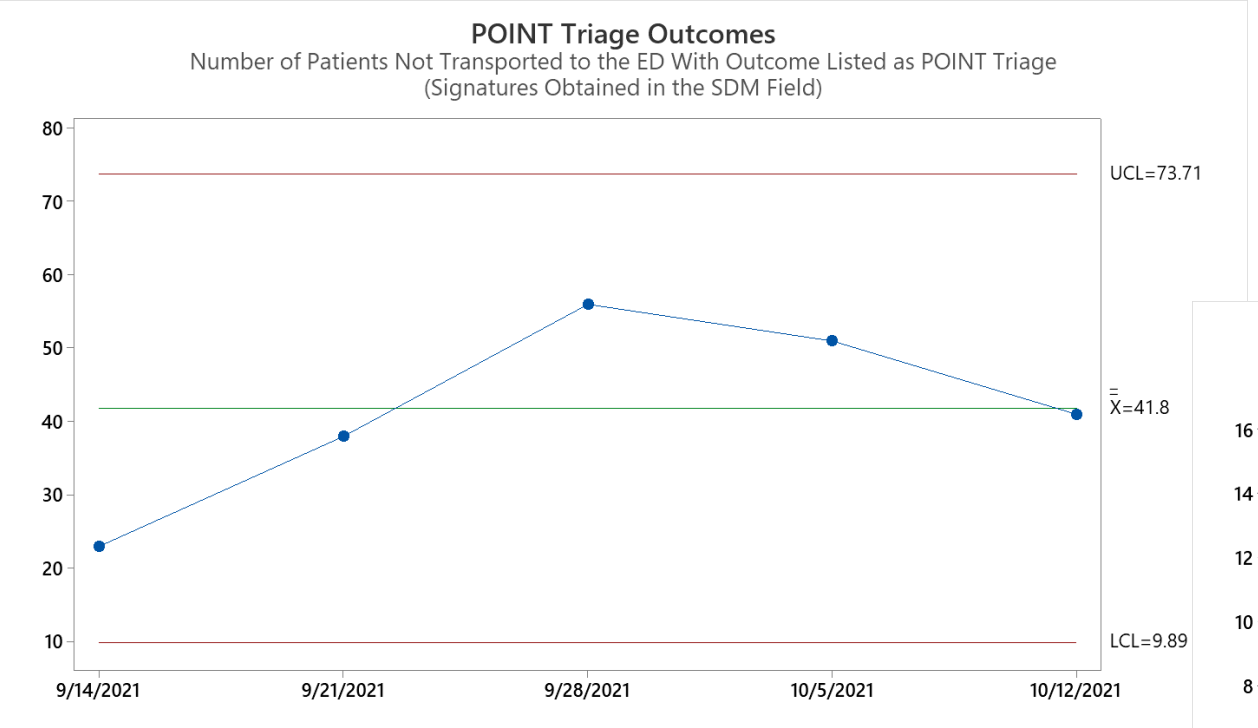
Patients who meet exclusion criteria may still self-select to refuse without prompting

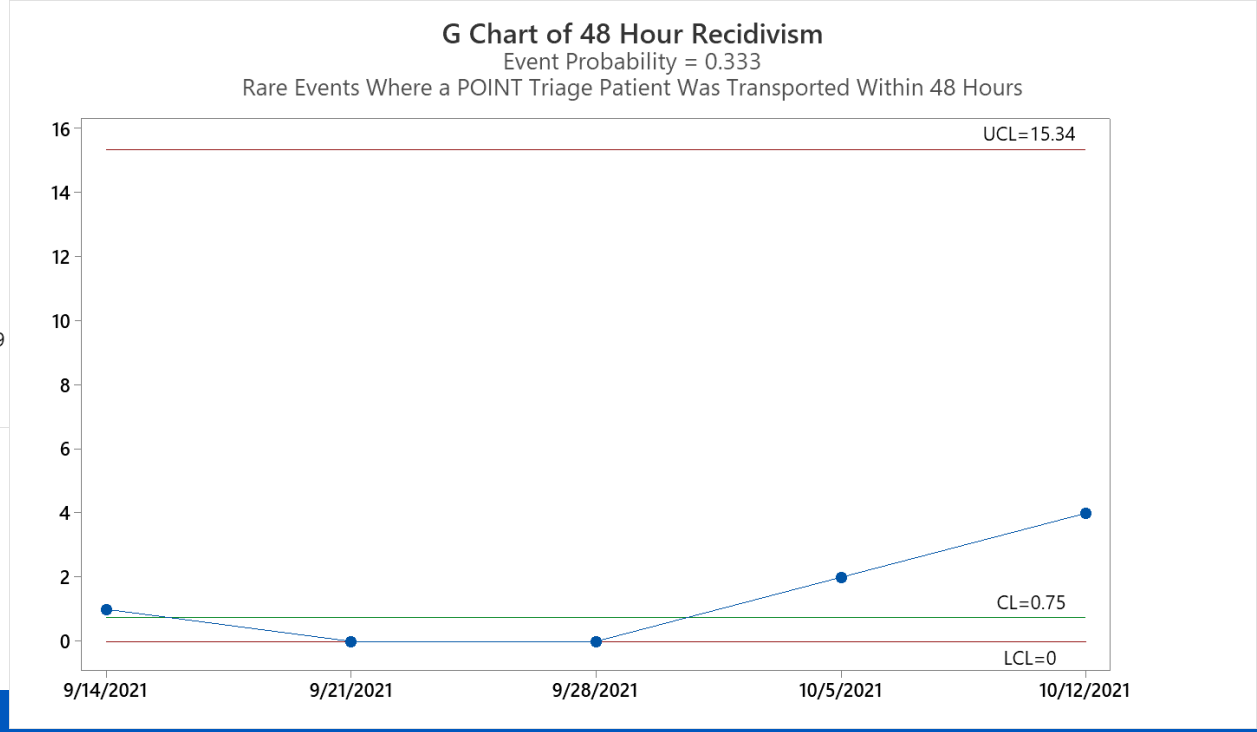
POINT Protocol

- How are we facilitating these conversations?
  - Full assessment including vital signs obtained
  - Is patient eligible for Point Triage?
  - Discussion regarding assessment findings is initiated
    - Patient is informed what transport by ambulance can offer their condition
  - Any questions patient might have will be answered
    - No recommendation of alternate destination, but potential alternate destinations can be discussed
  - If patient continues to request EMS transport, Pt is transported

- **This conversation is not to exceed 5 minutes**

POINT Data





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Response Configuration Change

- 156,212 total responses (107k Transports)
  - 6% of transports are life threatening (Priority 1)

- Current Configuration
  - E/D 10:59 – FR RL&S; Ambulance RL&S
  - C/BH 12:59 – FR RL&S; Ambulance RL&S – (>100,000 resp.)
  - BC/A 20:00 – No FR; Ambulance No RL&S
  - OTO 60:00 - No FR; Ambulance No RL&S

C/BH Call Safety Analysis

- Two Year Look Back
  - 200,658 P2 (Charlie/Bravo-Hot) Calls
    - 68,607 (34.2%) did not have an MPDS Determinant
    - 132,051 (65.8%) had MPDS Determinant
      - 60,558 had P1 transport rate <2%

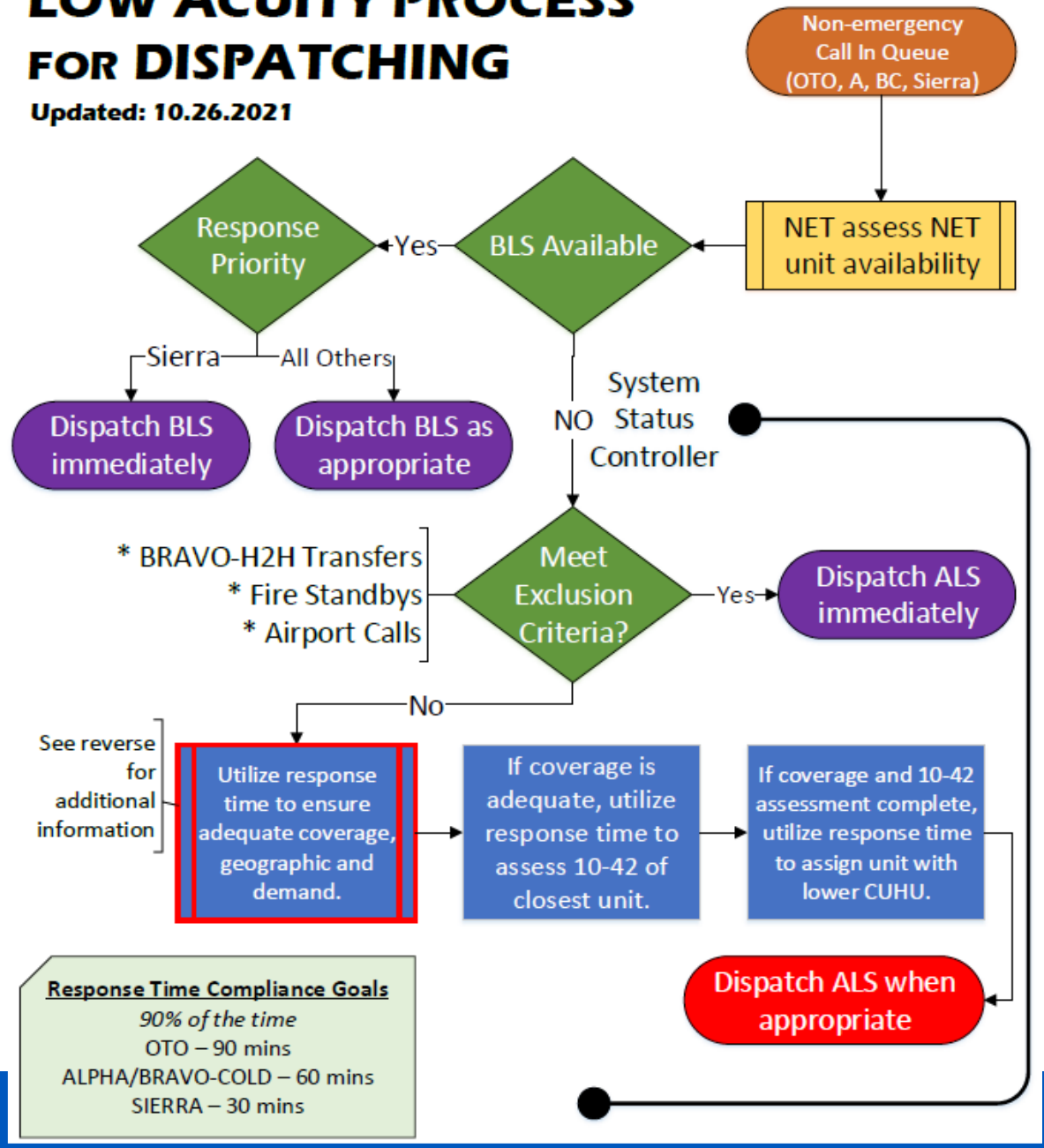
- Final list of Sierra calls
  - Approximately 25,000 responses per year

Response Configuration Change

- New Configuration
  - E/D 10:59 – FR RL&S; Ambulance RL&S
  - C/BH 12:59 – FR RL&S; Ambulance RL&S
  - **Sierra** **30:00** – FR RL&S; **Ambulance No RL&S**
  - BC/A **60:00** – No FR; Ambulance No RL&S
  - OTO **90:00** - No FR; Ambulance No RL&S

LOW ACUITY PROCESS FOR DISPATCHING

Updated: 10.26.2021



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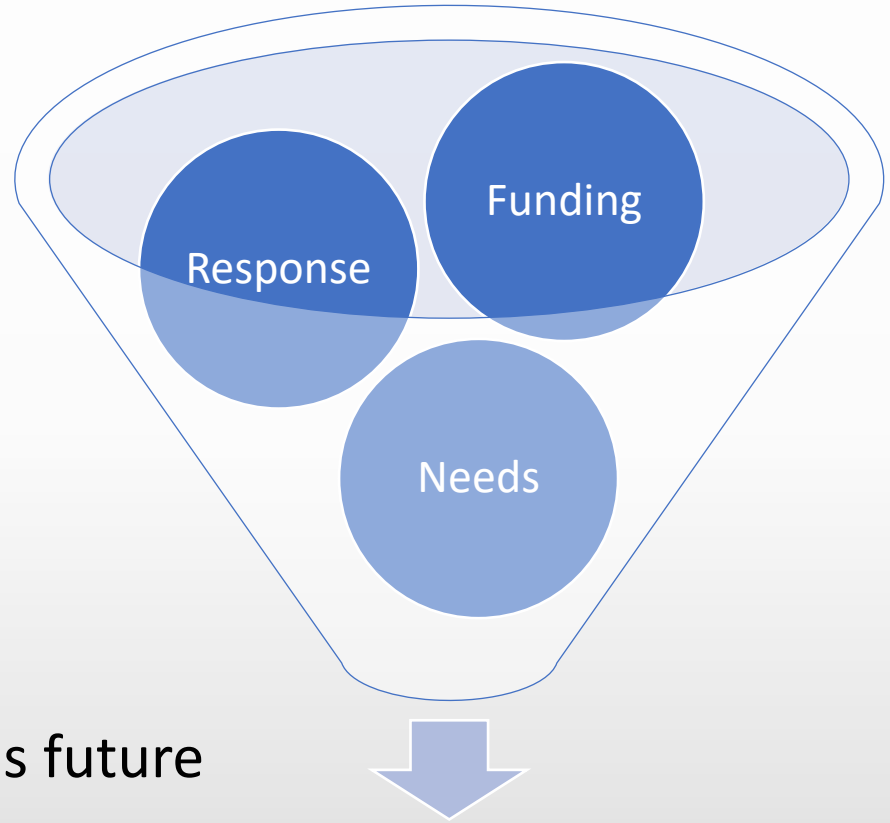
MAINE EMS

Managing Expectations

Encouraging Community Self-Determination

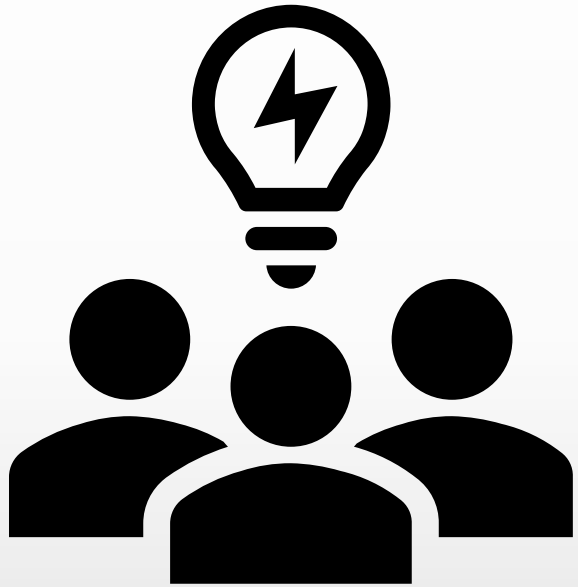
- Purpose
  - Guided/organized process
  - Inform
    - Survey and Evaluation
  - Explain options for service in future
    - Response/Staffing/Operations
    - Funding
  - Discuss best way to choose options
  - Community engagement to determine consensus future
  - Community decision making



MAINE EMS

What Does the Community Deem Acceptable?

- Service organization and reliability?
- Service capability- BLS / ALS?
- Service efficiency and response time?
- Community Paramedicine
- % of ALS Mutual Aid Calls?
- How does this fit with hospital needs?
- Cost
- Scale (Examples) – St. George, NorthStar/Franklin County Health, Rockport/Camden/PBMC



MAINE EMS

EMS in Maine – Snapshot

- National/Maine
- Vocation vs profession
- Rural/Urban
- Volunteer, Call, Full-Time
- US – 20-30% turnover annually (AAA, 2019)
- Occupational Injury, Fatality, Suicide, PTSD > other public safety
- US – Fatality rate for COVID-19 4x higher than other public safety
- Salary

MAINE EMS

Sustainable Funding

- Good news: MaineCare = Medicare
  - But does not include rural (3%) or super rural (22.6%) modifiers
  - With few exceptions, reimbursement is connected to transport.
    - ET3 = alternatives for emergency calls
    - CP = scheduled and coordinated with PCP
  - Covers 60-80% of costs
- Medicare Cost-Data Reporting
  - Starting in 2021 – will be > 5 years before applied
  - Significant obstacles for rural services
- LD 2105
  - Surprise billing; reimbursement rates; contract issues

MAINE EMS

Interventions

- Emphasis on recruitment and retention research
- Increased funding and support for training and education
- Creation of a career ladder
- Mental health support resources
- Reimbursement changes
- Expanding services/capabilities for sustainability
- Ambulance staffing requirements

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MAINE EMS

What was your organization's position on testing and vaccinating and how did the employees respond?

Flash Poll Results: EMS Agency Mandatory Vaccines

1. **Is your agency *currently* mandating COVID vaccines for your workforce?**

Yes	52
No	195

2. **If you have implemented mandatory COVID vaccines, what was the reaction your workforce?**

No big deal, most/all got the ...	18
Lots of teeth gnashing, but ev...	10
We lost a few employees	27
We lost a lot of employees	15
Other	52

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4. If you have *NOT* implemented mandatory vaccines, but are considering it, on a scale of 1-5, with 5 being most concerned, how concerned are you about your employees jumping ship if you mandate COVID vaccines?

186
Responses

4.11
Average Number

5. If you mandate COVID vaccines, and employees do not comply by the deadline, will you:

Terminate their employment	22
Consider their non-complianc...	42
Place them on unpaid admin l...	42
Do nothing	28
Other	62

How much impact do you think the change in educational standards (accreditation, etc.) has played in the staffing shortage?

How long do you think this staffing shortage will continue?

What is the long-term solution to this issue?

For each panelist, if you were to pick one thing that you think would have the biggest impact on mitigating staffing shortages, what would it be?

Participant Questions

Best Practices for Mitigating the EMS Workforce Shortage

THANK YOU!

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