

EMS Stat & Operations



Top 10 Box Areas with the Highest Number of EMS Incidents FY 21

- 1. 14-50**
 - Incidents – 1297
 - Neighborhood/s
 - Carrollton Ridge – 1080 Incidents
 - New Southwest/Mount Clare – 212 Incidents
 - Union Square - 5 Incidents
- 2. 13-70**
 - Incidents – 1275
 - Neighborhood/s
 - Upton – 963 Incidents
 - Druid Heights – 159 Incidents
 - Madison Park – 85 Incidents
 - Sandtown-Winchester – 68 Incidents
- 3. 33-50**
 - Incidents – 1189
 - Neighborhood/s
 - McElderry Park – 550 Incidents
 - Milton-Montford – 448 Incidents
 - CARE – 60 Incidents
 - Patterson Place – 47 Incidents
 - Madison-Eastend – 43 Incidents
 - Middle East – 41 Incidents

Top 10 Box Areas with the Highest Number of EMS Incidents FY 21

4. 13-82

- Incidents – 1080
- Neighborhood/s
 - Penn North – 881 Incidents
 - Druid Heights - 198 Incidents

5. 51-1

- Incidents – 1052
- Neighborhood/s
 - Ellwood Park/Monument – 725 Incidents
 - Baltimore Highlands – 170 Incidents
 - Patterson Park Neighborhood – 82 Incidents
 - Orangeville – 51 Incidents
 - Orangeville Industrial Area – 15 Incidents
 - Madison-Eastend – 8 Incidents

6. 13-40

- Incidents – 1024
- Neighborhood/s
 - Upton – 935 Incidents
 - Madison Park – 70 Incidents
 - Bolton Hill – 15 Incidents
 - Heritage Crossing – 3 Incidents
 - Charles Village – 1 Incidents

Top 10 Box Areas with the Highest Number of EMS Incidents FY 21

7. 13-80

- Incidents – 1014
- Neighborhood/s
 - Penn North – 454 Incidents
 - Sandtown-Winchester – 287 Incidents
 - Druid Heights – 184 Incidents
 - Upton – 89 Incidents

8. 45-40

- Incidents – 982
- Neighborhood/s
 - Levindale – 799 Incidents
 - Mount Washington – 143 Incidents
 - Coldspring – 40 Incidents

Top 10 Box Areas with the Highest Number of EMS Incidents FY 21

9. 29-20

- Incidents – 932
- Neighborhood/s
 - Coldspring – 458 Incidents
 - Parklane – 387 Incidents
 - Cylburn – 82 Incidents
 - Greenspring – 5 Incidents

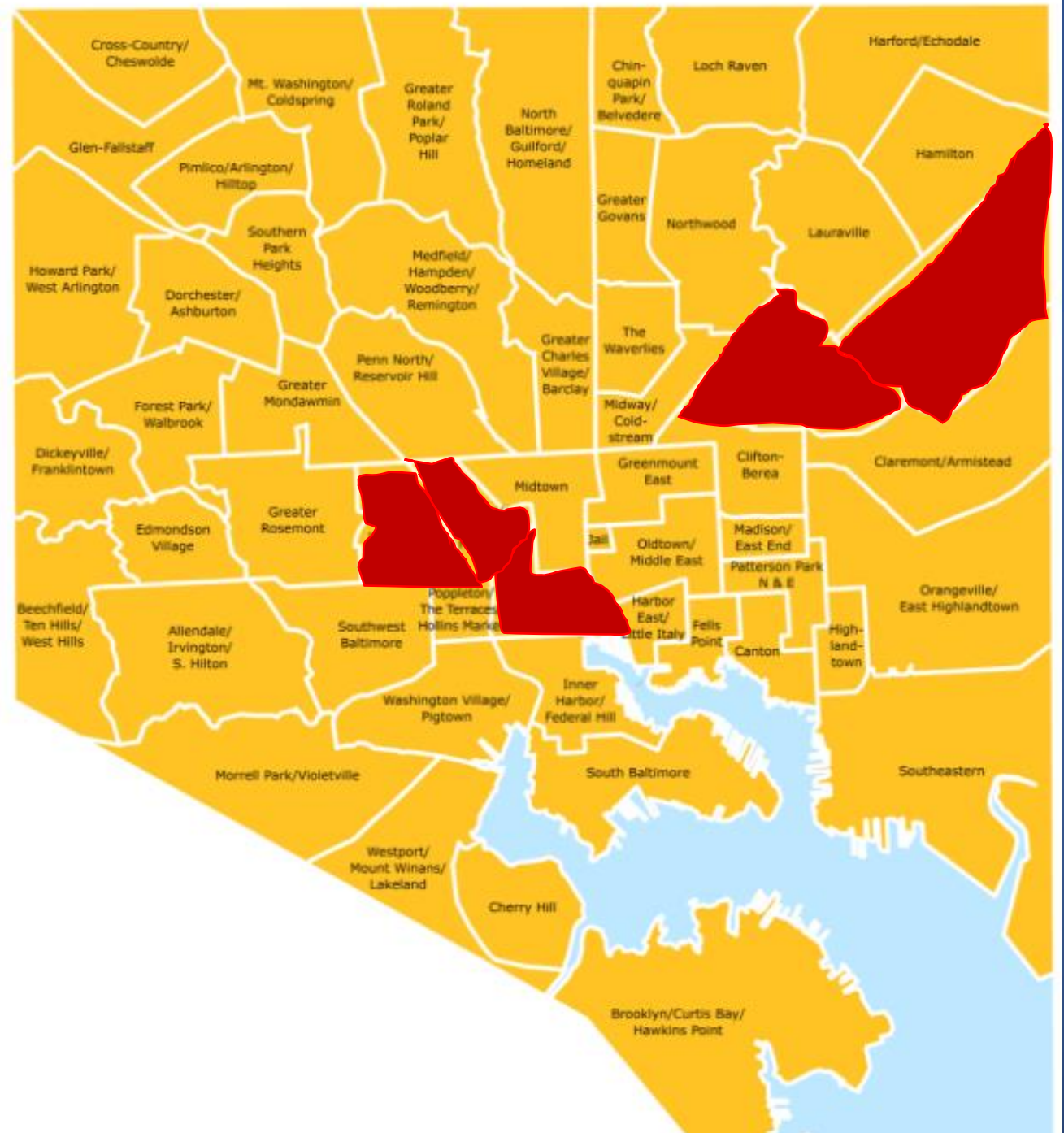
10. 8-1

- Incidents – 911
- Neighborhood/s
 - Sandtown-Winchester – 671 Incidents
 - Midtown-Edmondson – 119 Incidents
 - Harlem Park – 90 Incidents
 - Bridgeview/Greenlawn – 30 Incidents
 - Winchester – 1 Incidents

Top 10 Neighborhoods



Top 5 Neighborhoods



Top 10 Neighborhoods with the Highest Number of EMS Incidents FY21

- 1. Downtown – 4822 Incidents**
- 2. Frankford – 3635 Incidents**
- 3. Sandtown-Winchester – 3547 Incidents**
- 4. Upton – 3194 Incidents**
- 5. Belair-Edison – 2932 Incidents**
- 6. Brooklyn – 2344 Incidents**
- 7. Broadway East – 2086 Incidents**
- 8. Carrollton Ridge – 2029 Incidents**
- 9. Penn North – 1964 Incidents**
- 10. Cherry Hill – 1934 Incidents**

EMS Call Volume FY 21

Average calls for service: Daily, weekly and monthly

- Daily – 427 Incidents
- Weekly – 2,997 Incidents
- Monthly – 12,987 Incidents

Peak call volume: Time of day, day of the week, time of the month

- Time of Day – 12:00-17:59
- Day of Week – Monday
- Time of Month – End of month (thirds, range of 51,043-52,701)
- Month of Year - June
- Quarter of Year (Calendar) - 2nd

EMS Call Volume

FY 21 Average calls for service: Daily, weekly and monthly

- Daily – 427 Incidents
- Weekly – 2,997 Incidents
- Monthly – 12,987 Incidents

FY 20 Average calls for service: Daily, weekly and monthly

- Daily – 407 Incidents
- Weekly – 2,855 Incidents
- Monthly – 12,371 Incidents

FY 19 Average calls for service: Daily, weekly and monthly

- Daily – 433
- Weekly – 3,040
- Monthly – 13,171

Most frequent advanced life support calls for service FY 21 - TOP 5

06D02 (Difficulty
speaking between
breaths) – 7619
Incidents

31D02 (Overdose
Unconscious) – 4371
Incidents

31D03 (Overdose
Changing Color) – 2393
Incidents

23D01I (Overdose
Cardiac Arrest) – 2246
Incidents

10D02 (Chest Pain with
Difficulty Speaking
between Breaths) –
2120 Incidents

Most frequent low acuity calls for service FY 21 - TOP 5

**26A10 (Unwell / Ill)
5174 Incidents**

**26A01 (Sick No Priority
Symptoms)
2710 Incidents**

**26A02 (Abnormal Blood
Pressure / Asymptomatic)
1532 Incidents**

**26A11
(Vomiting) 1513
Incidents**

**26B01 (Sick Unknown
Reason) 1288 Incidents**

**EMS Unit
Response Time
on EMS Calls for
Service
FY 21**

Total Average – 9min 51sec

Medic Average – 9min 38sec

Ambo Average – 10min 16sec

Fire Suppression Response Time to EMS Calls for Service FY 21

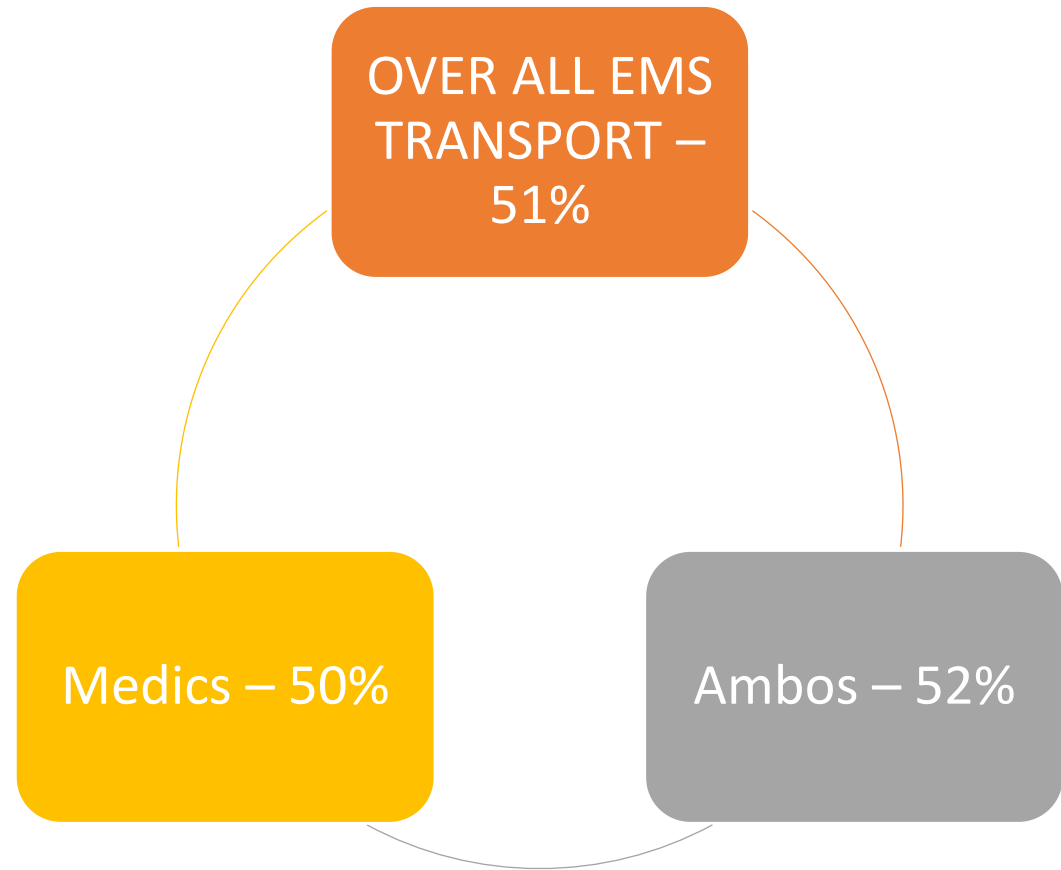
Suppression Response Time to EMS Calls - 6 Minutes and 3 Seconds

- *Definition: the difference in time between the first arriving suppression unit's time of dispatch and time of arrival on the scene*

Average Wait Time for EMS arrival - 8 Minutes and 26 Seconds

- *Definition: the difference in time between the first arriving suppression unit's time of arrival and the time of arrival of the first EMS transport unit*

EMS Fleet Utilization (UHU) FY 21



- *Definition: the % of time in which a unit is assigned on an incident*

EMS Fleet

28 First Line

4 Critical Alert

**Up to 4 Peak
Time Transport
Units (9a-9p)**

EMS Fleet – 1st Line OOS



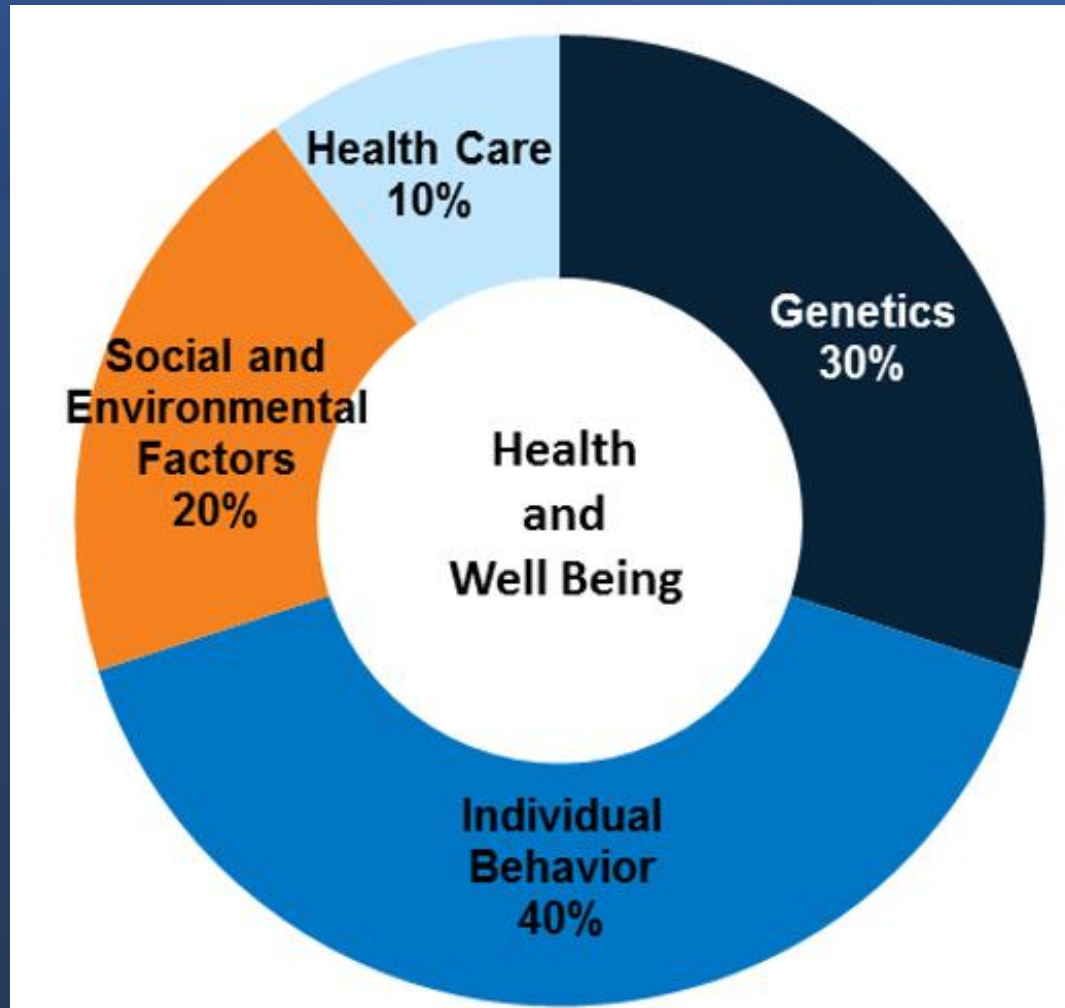
**This is a statistic generated by DGS
Fleet Maintenance.**



1st line unit OOS

2nd line unit is available

What Defines Health?



Impact of Different Factors on Risk of Premature Death

SOURCE: Schroeder, SA. (2007). We Can Do Better – Improving the Health of the American People. *NEJM*. 357: 1221-8.

Social Determinants of Health



Source: HealthyPeople2020.gov

Health Disparities

Lack of access
to healthcare

Poor individual
health literacy

High
unemployment

Low median
income

High HIV rates

Excessive
tobacco use

Lack of
transportation

Weakness in Primary Care Infrastructure

High rates of healthcare utilization

- ↑ EMS Responses
- ↑ ED Usage

Complexity of Patients

- Comorbidities
- Substance use, mental illness
- Low health care literacy

Lack of access to treatment

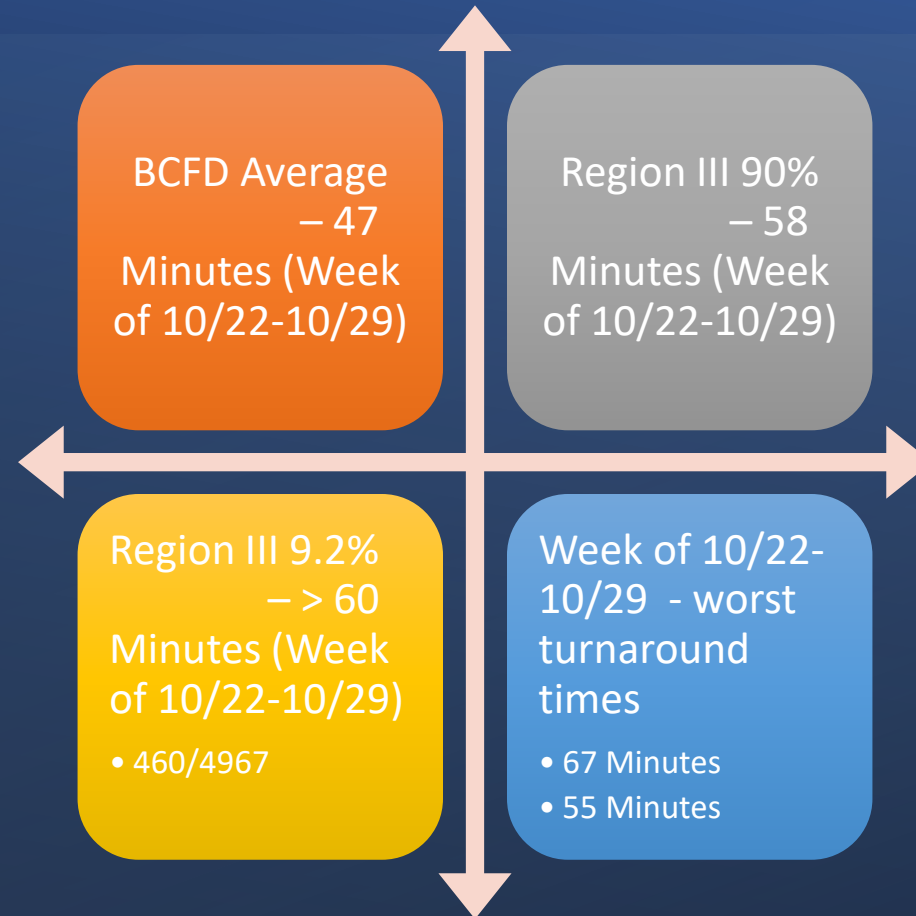
- Chronic conditions
- Homelessness
- Missed appointments
- Lack of medications

EMS Responses per 1,000 of the Population

EMS Agency	Medical Director	Population	Agencies	Providers	Responses	Responses/1000 popu
Baltimore	Ben Lawner	584,500	1	1,580	183,141	313
Cleveland	Tom Collins	400,000	2	1,065	110,000	275
St Louis	Scott Gilmore	300,000	1	686	82,000	273
Washington, DC	Robert Holman, Ryan Gerecht	689,545	1	1,930	163,998	238
Buffalo	Brian Clemency	550,000	10	500	130,000	236
South East Coast Ambu Svcs, England	Fionna Moore	4,500,000	1	2,975	1,050,000	233
Pittsburgh	Ron Roth	300,000	1	176	70,000	233
Miami City	Armando Clift, Paul Adams	453,579	1	732	104,094	229
San Antonio Region	Craig Manifold	400,000	16	320	90,000	225
Pinellas Cty, FL	Angus Jameson	1,000,000	20	1,900	221,000	221
Richmond	Joe Ornato	500,000	6	700	110,000	220
Detroit	Robert Dunne	850,000	9	1,400	175,000	206
Atlanta	Lekshmi Kumar, Jim Augustine	600,000	10	1,500	120,000	200
Oklahoma City, Tulsa	Jeff Goodloe	1,300,000	20	4,200	231,609	178
Philadelphia	Crawford Mechem	1,517,000	1	2,000	266,090	175

Note: This survey was conducted by the Eagles, which is a coalition derived from the Metropolitan Municipalities EMS Medical Directors Alliance, and it is comprised of most of the jurisdictional EMS Medical Directors for the 60 to 70 largest cities' 9-1-1 systems in the United States. EMS Responses per 1,000 of the Population by J. Augustine, 2021, Eagles.

Ambulance Offload Time



The Medical Duty Officer (MDO)



EMS Population Health Programs



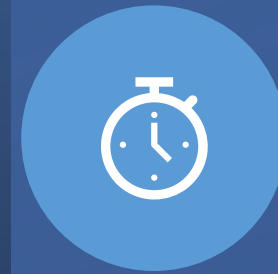
**POSITIVE IMPACT
ON SDOH**



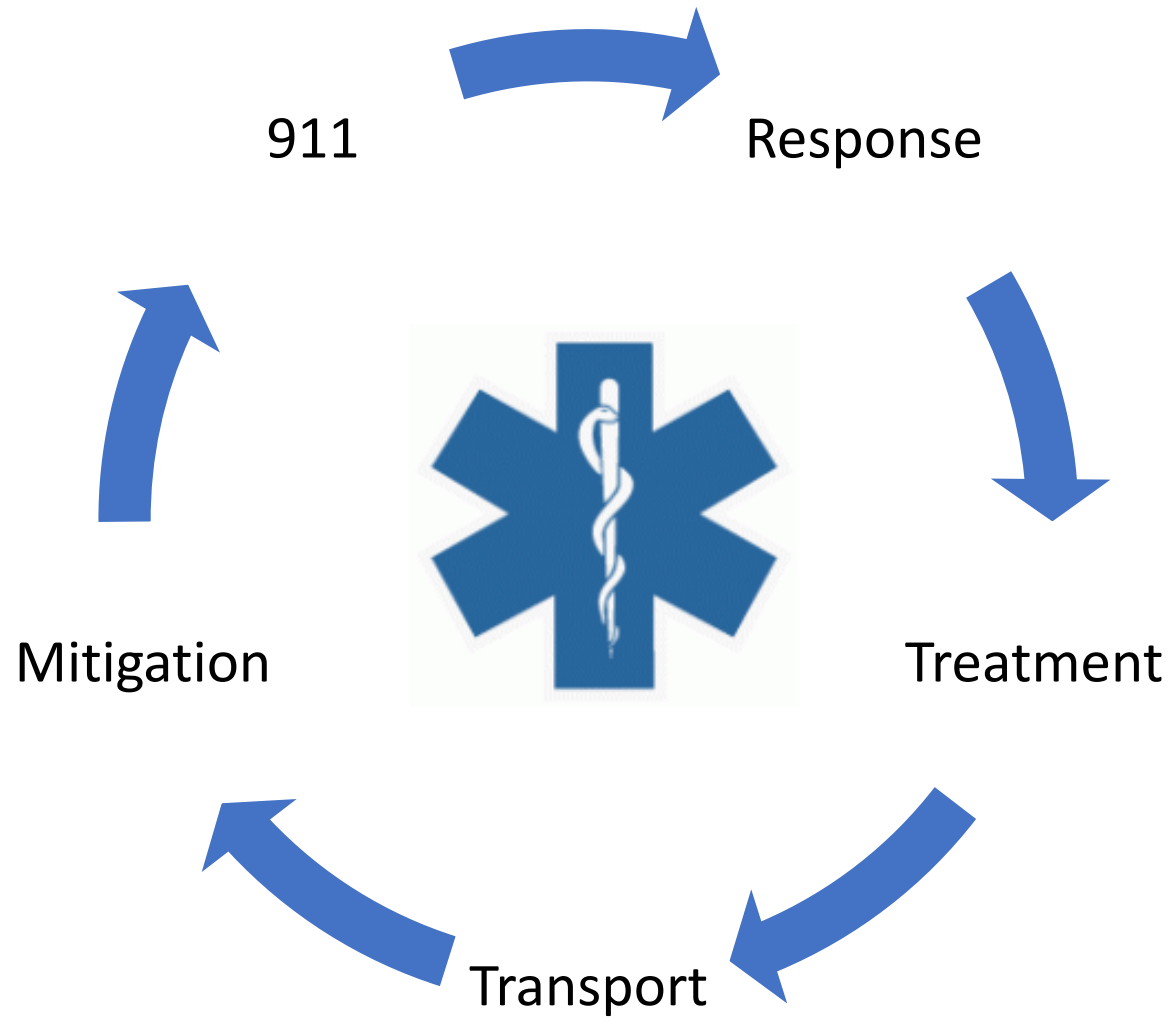
**REDUCED EMS
CALL VOLUME**



**BETTER PATIENT
OUTCOMES**

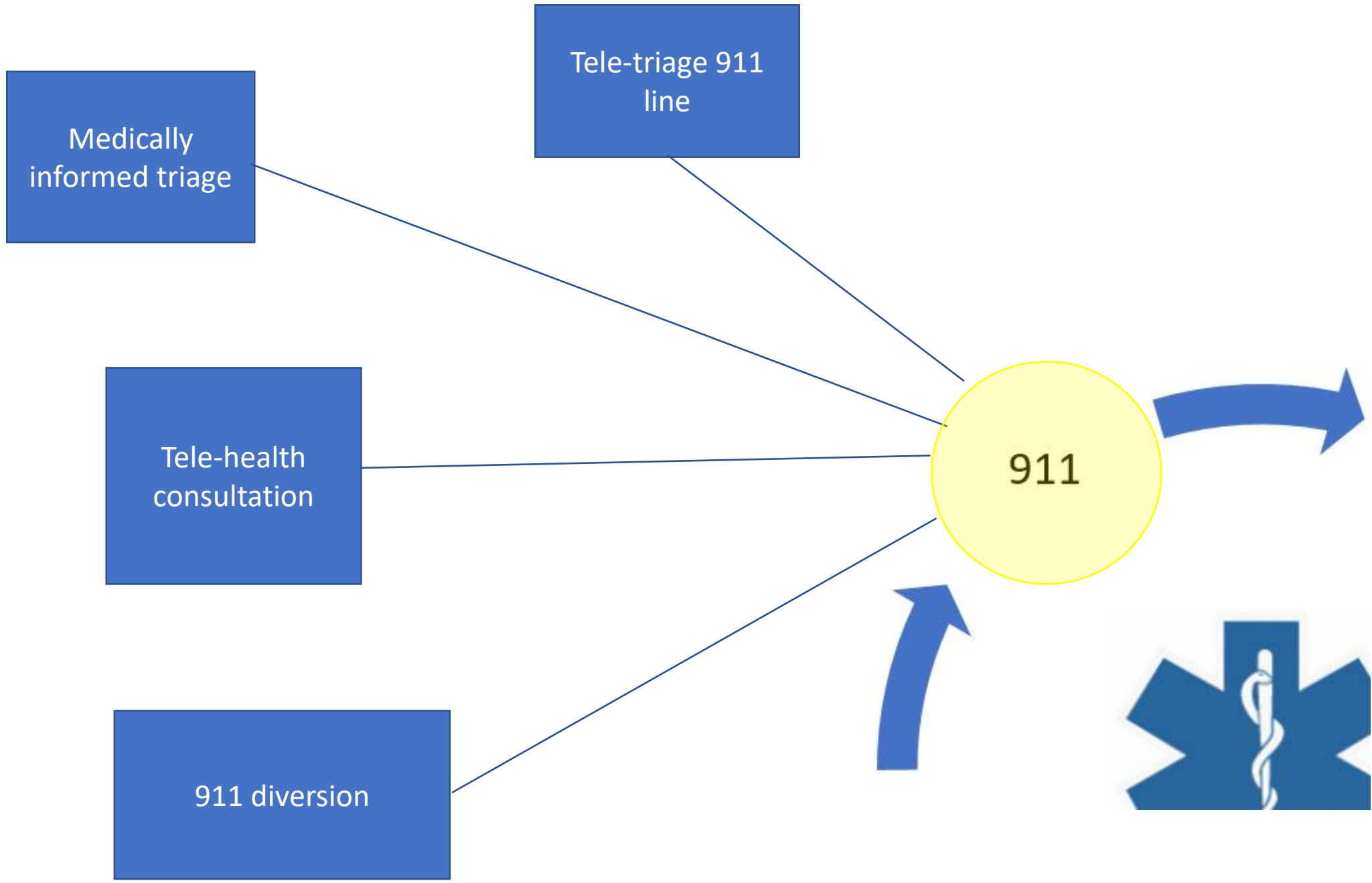


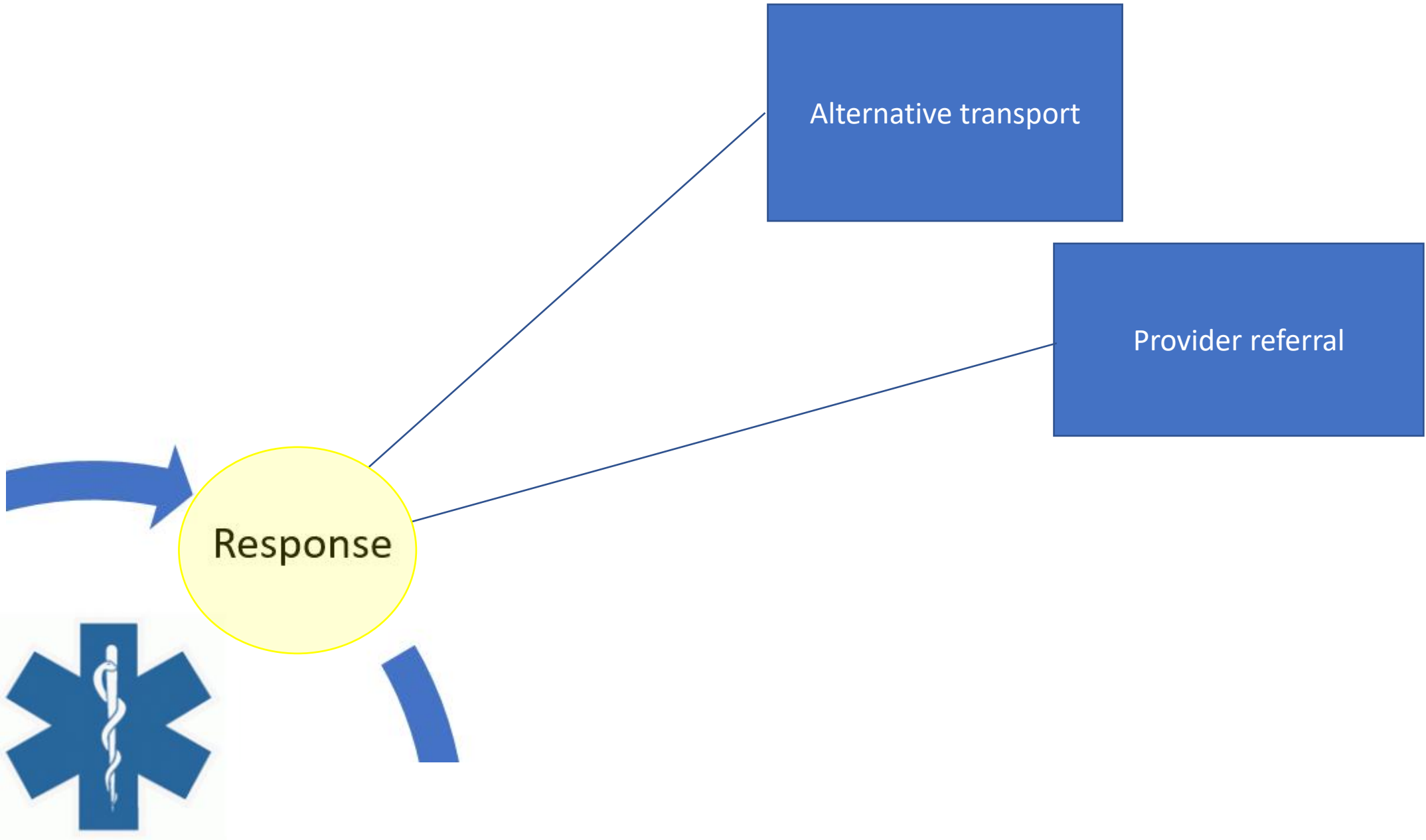
**IMPROVED
RESPONSE TIMES**

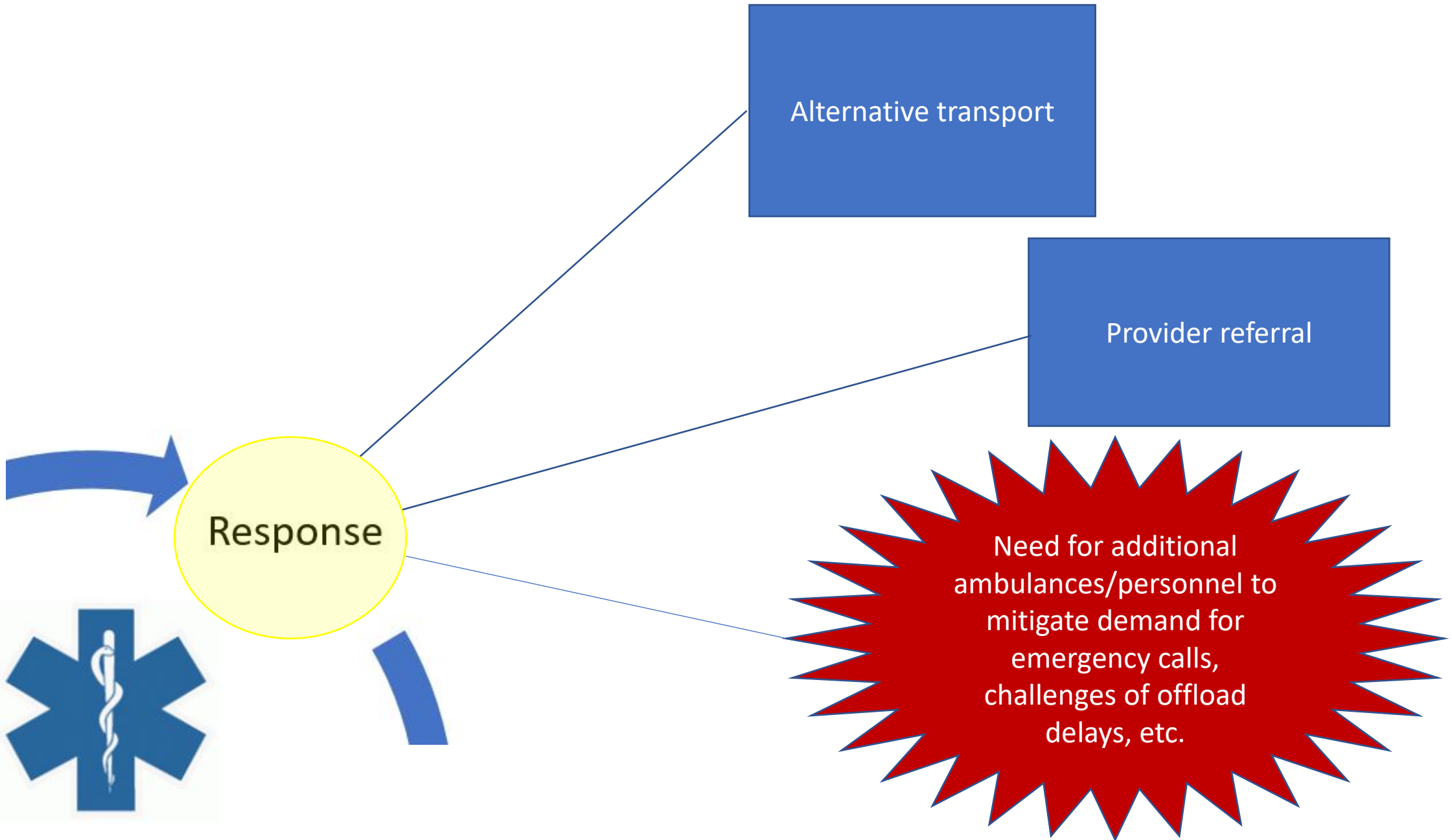


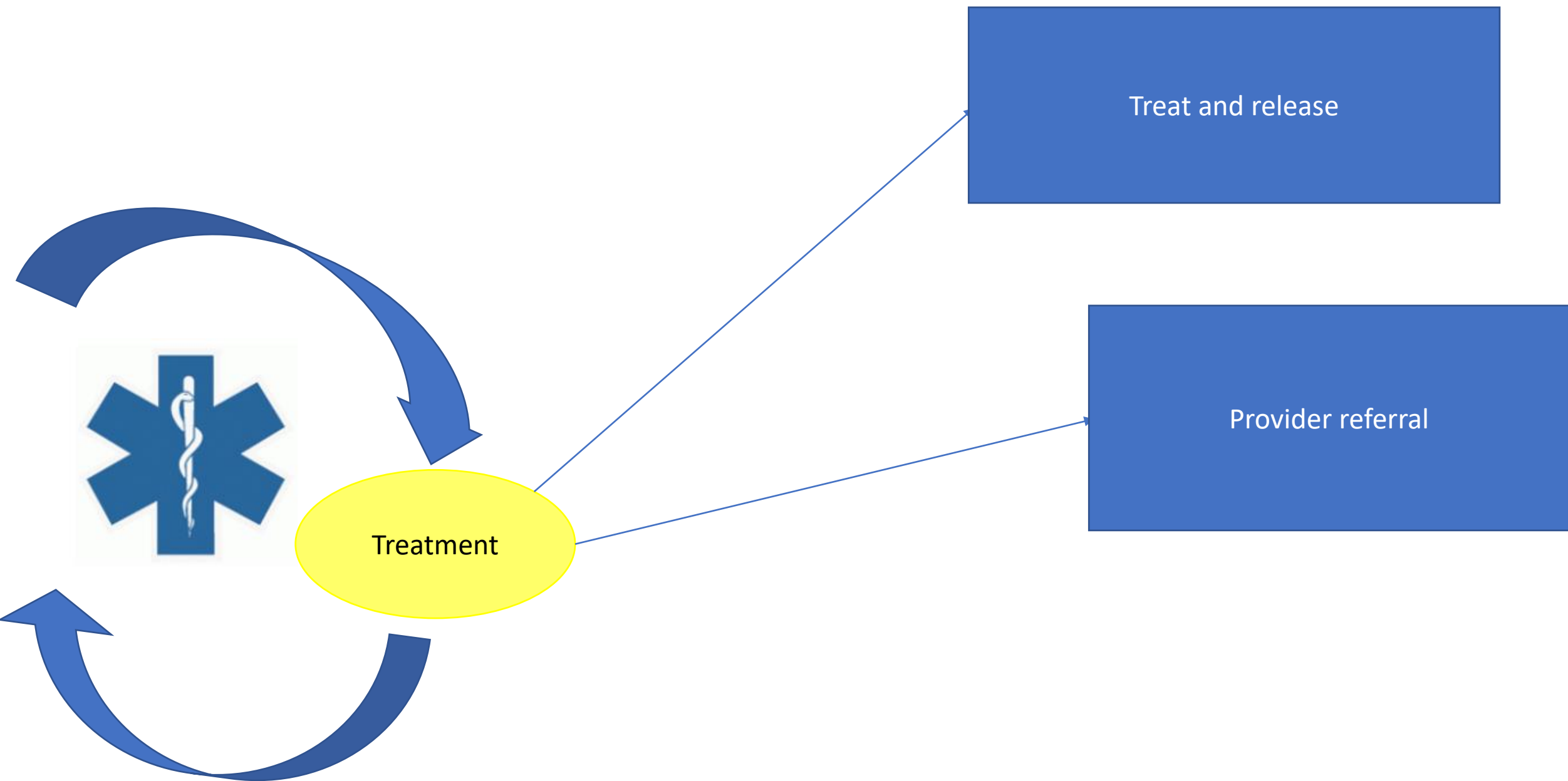
The future of 911:

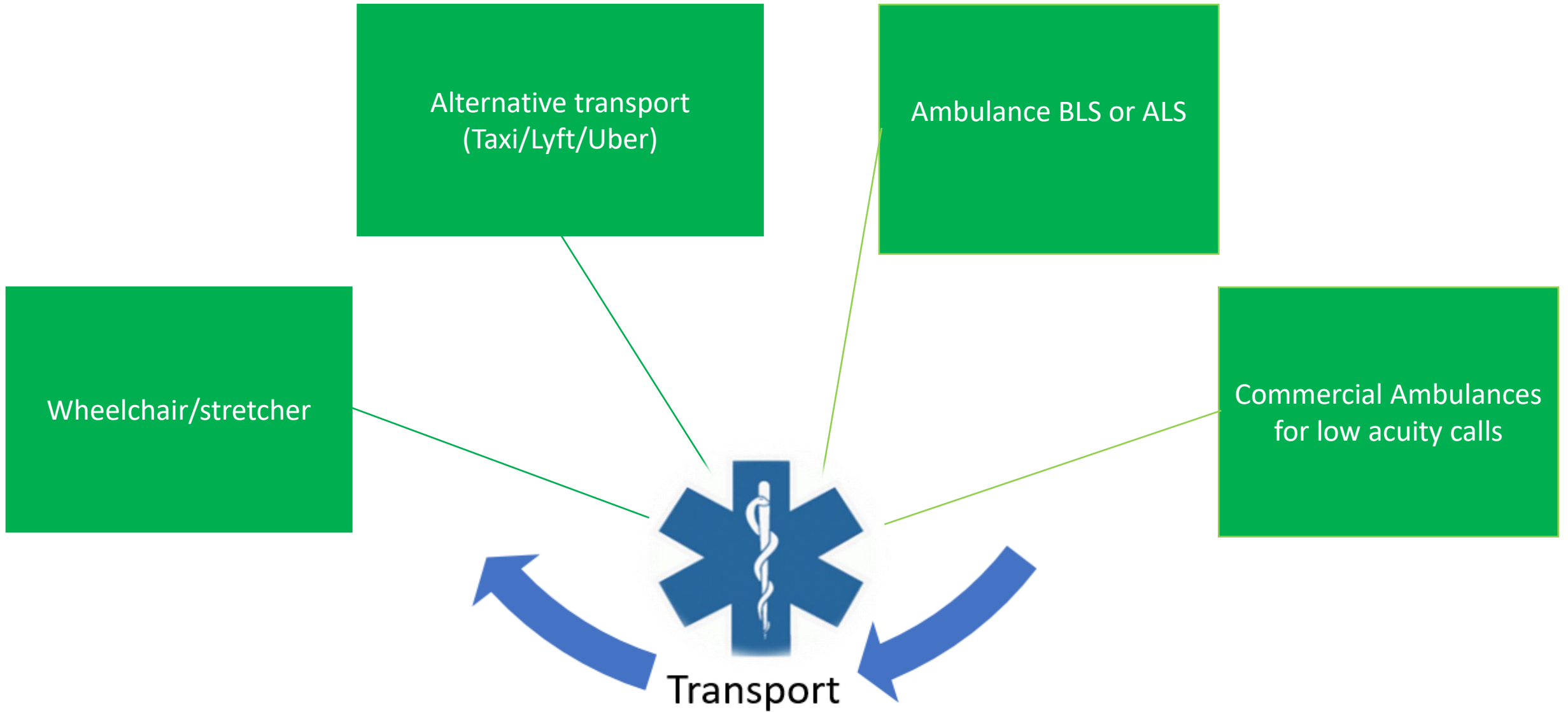
- Matches right patient to right resource
- Multipurpose
- Adaptable
- Versatile
- Multiple response profiles











Mitigation



Community
CPR/health classes

Vaccination
Mobile integrated health

Public education

The “Mitigation” phase of 911 response encompasses a broad spectrum of services targeted at reducing system use. The ideal mitigation strategy would prevent a crisis from escalating to the point of needing an emergent response

- Community education / community CPR
- First aid classes
- Community paramedic initiatives
- Chronic disease initiatives
- Vaccination clinics
- Public health partnerships

CURRENT STATE

Direct to triage

Limited transport to urgent care

Limited transport to stabilization center

Behavioral health diversion

Community paramedicine

Focused telephone triage line



FUTURE STATE

Direct to triage via alternative transport

Expanded alternative destination program to include physician offices, clinics, and other federally qualified community health centers

Integration with other behavioral resources and crisis teams

Integrated, comprehensive population health operation

Comprehensive nurse triage program to route low acuity calls to clinics

Alternative transportation

MEDICALLY INFORMED / SUPERVISED DISPATCH, TRIAGE, and TRANSPORT

Recruitment

Paramedic

EMT

**Continuously
Posted**

**July 8, 2021 -
October 8,
2021**

Recruitment - Marketing

- All local news stations
- AFRO American Newspaper
- The Baltimore Sun
- MOED
- City Hall
- City Council Members
- E-Blast to all community partners and those on job interest list
- Community Associations
- Placed on BCFD Social Platforms (Twitter, Facebook , Instagram and the BCFD Website)

Questions?

