



Health benefits of green space

Depression, Anxiety

Obesity

Insomnia

Cardiovascular health

Diabetes

High blood pressure

Asthma

TIME



PRA nature
prescribed

- Research EMS time divisions

- Response time – time from dispatch to scene arrival
- On scene time – time spent on site stabilizing patient
- Transport time – time spent traveling from scene to hospital
- Prehospital time – time from event, to call, to dispatch, to hospital arrival

Figure 24: Total Response Time Continuum

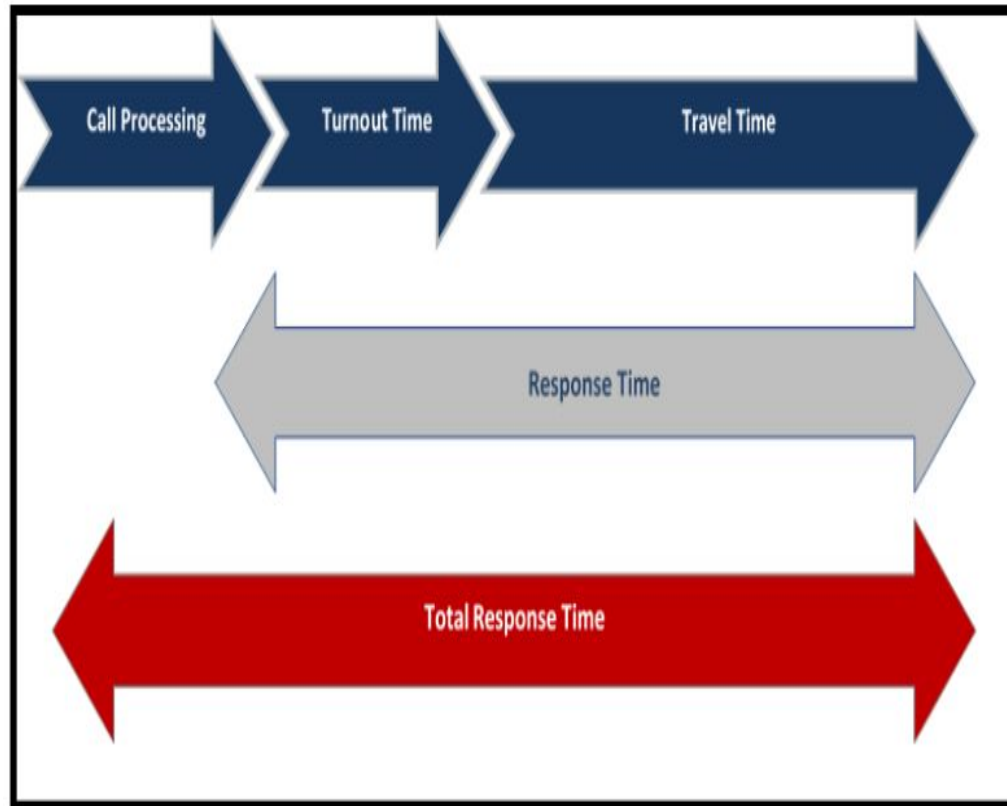
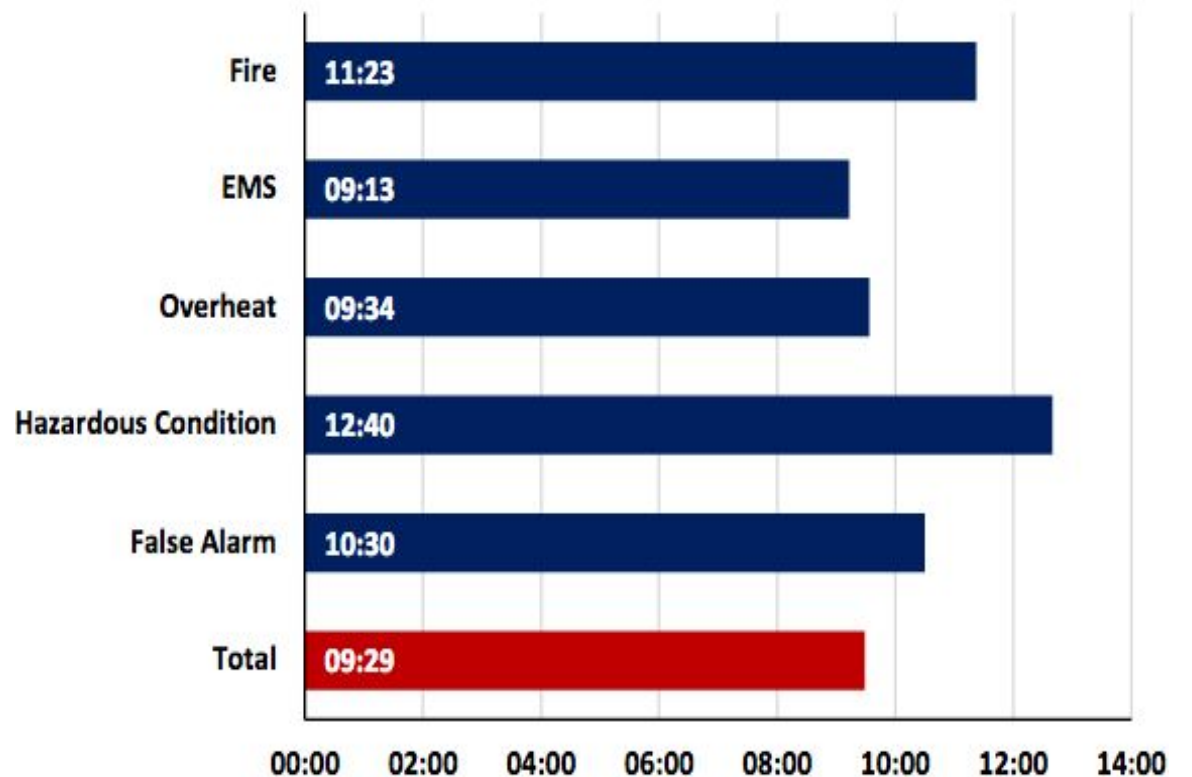
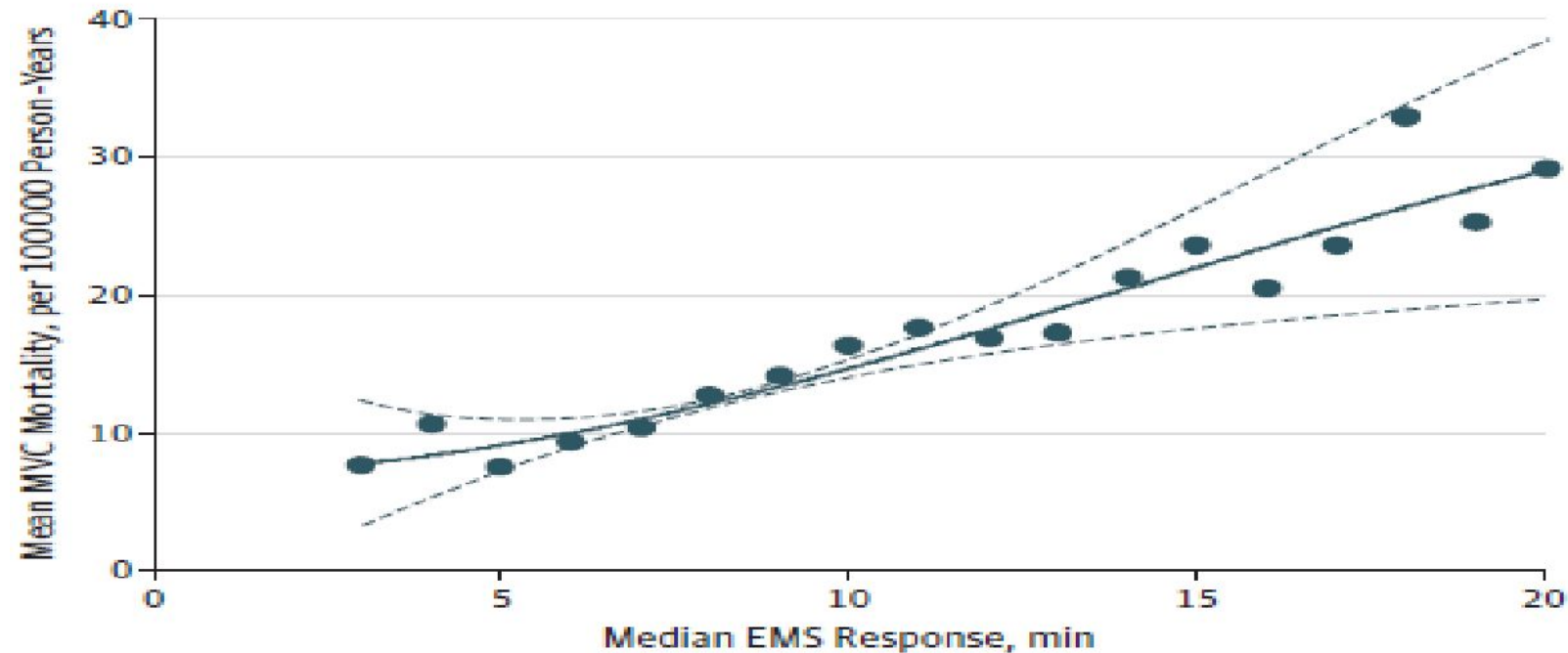


Figure 29: Response Performance 2020



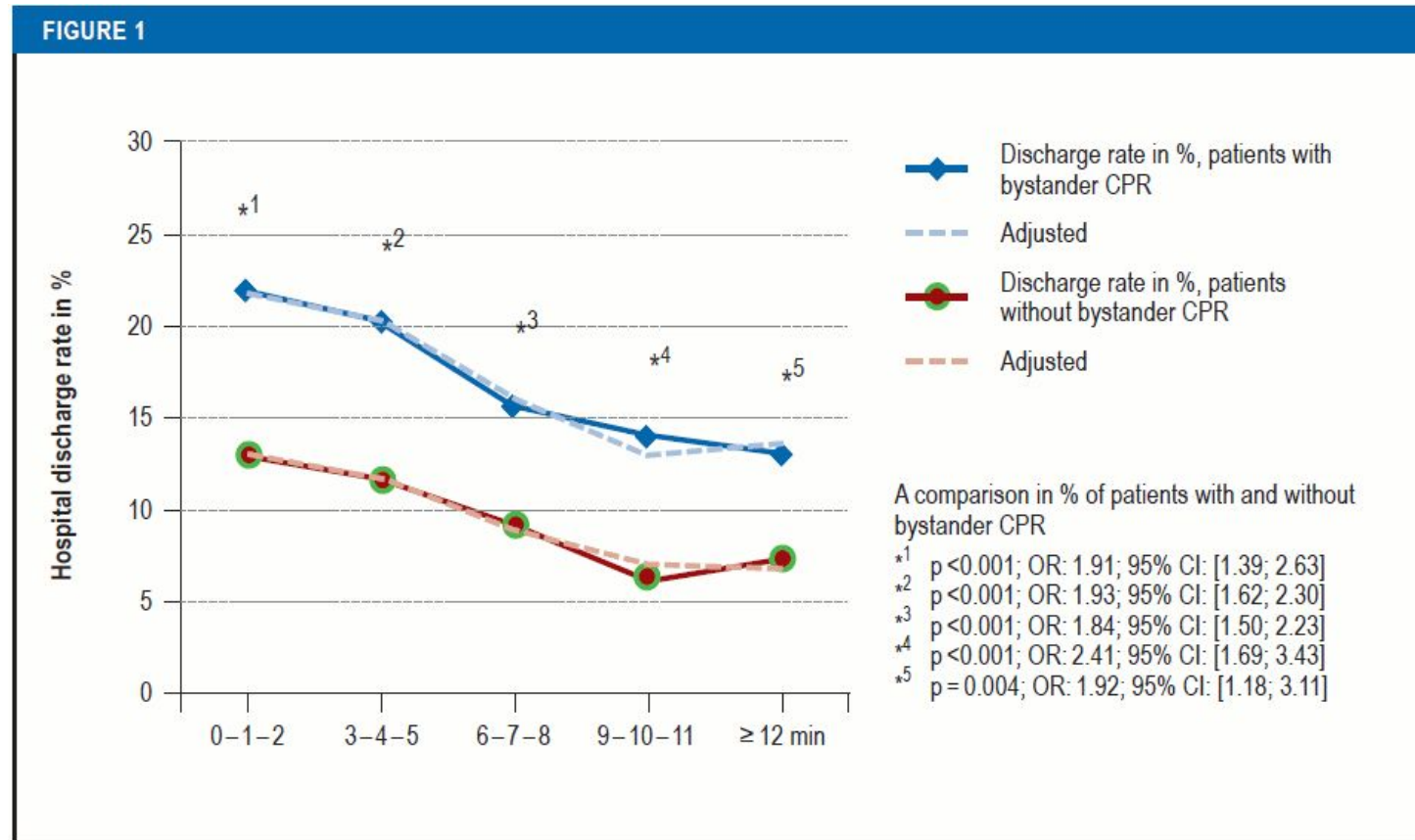
EMS response time/MVC mortality JAMA surgery 2019

Figure 2. Crude Association Between County Median Emergency Medical Service (EMS) Response Time and County Rate of Motor Vehicle Crash (MVC) Mortality



Blue circles represent the mean county MVC mortality rate associated with each incremental increase in county response time. Lines represent the best-fit polynomial to mean MVC mortality rates (solid line) and 95% CIs (dashed lines) associated with increasing county response times.

Out of hospital cardiac arrest mortality 2019



The effect of ambulance response time on the percentage hospital discharge rates of OHCA patients in emergency medical services (N = 10 853) depending on cardiopulmonary resuscitation performed by a bystander. Patients were assigned to five time categories; these categories were defined according to the time interval between “Raising of the alarm and arrival of the first vehicle.” The dashed lines show the discharge rates of these patients adjusted using a multivariate logistic regression model. Further statistical analyses was performed using the Chi² test with Bonferroni correction, odds ratio, and confidence interval; statistical significance was set at p < 0.01. CPR, cardiopulmonary resuscitation; OHCA, out-of-hospital cardiac arrest; OR, odds ratio; 95% CI, 95% confidence interval

Why a response time effect?

Figure 7: Service Demand by Incident Frequency (2020)

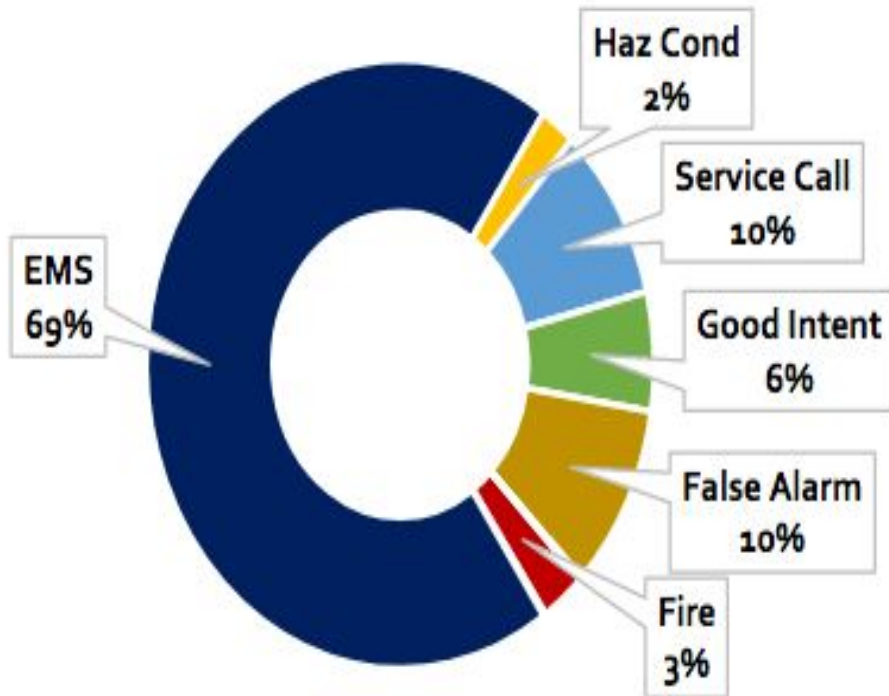
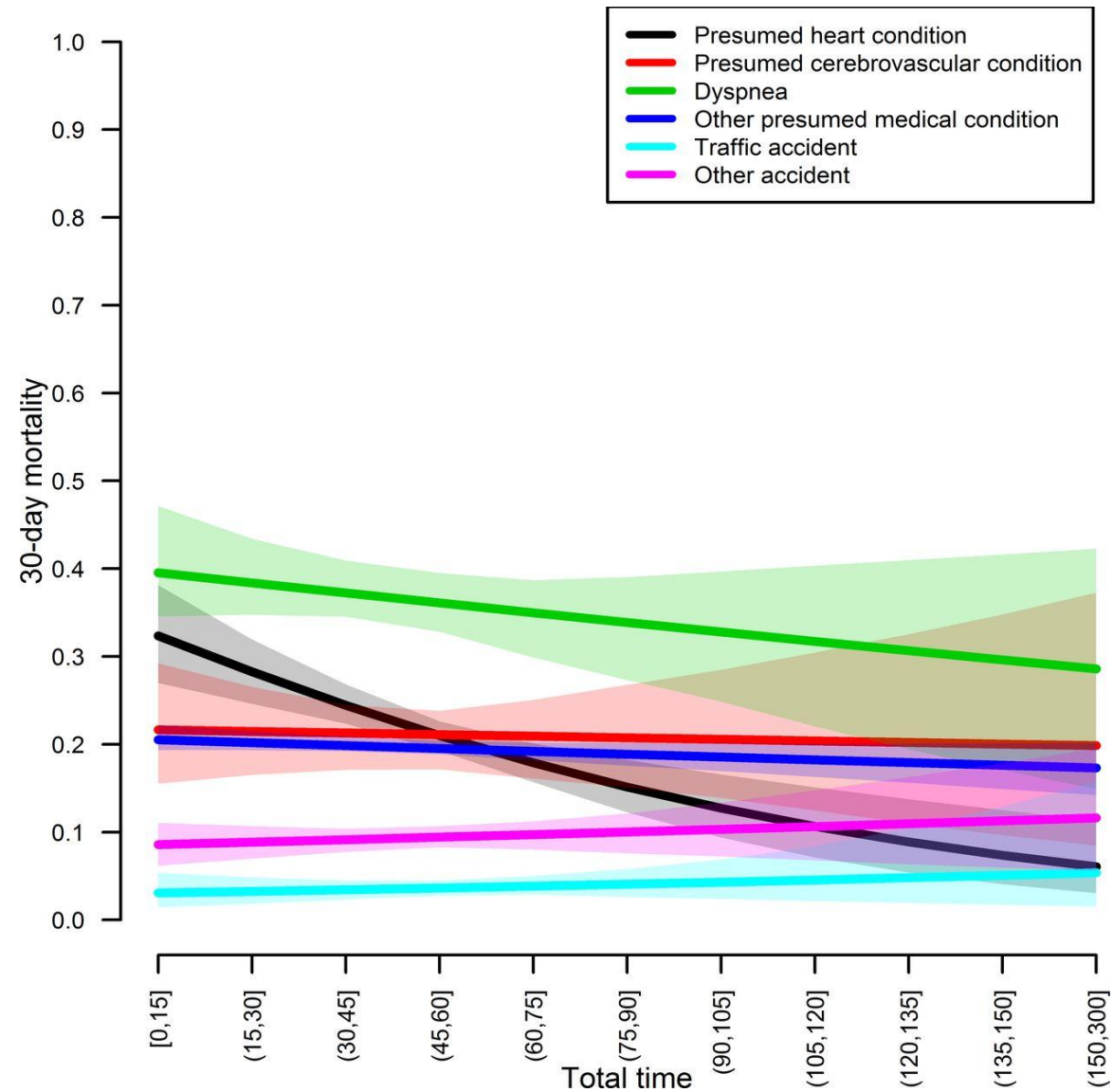


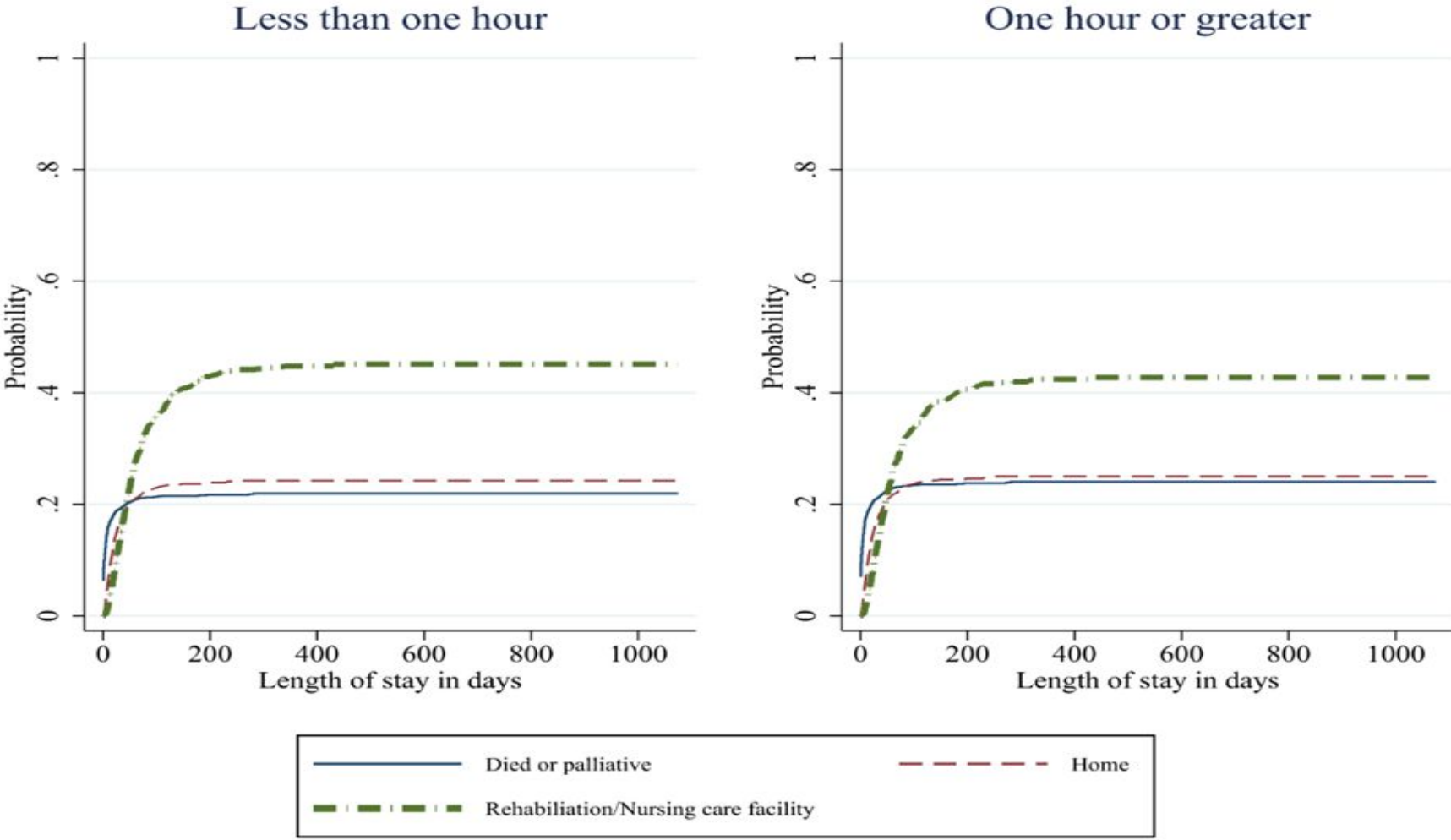
Figure 4: Stations, Apparatus and Staffing

Station	Apparatus / Staffing
Broadway	Engine 4: 1 Officer and 2 FF/EMTs Ambulance 4: 1 FF/Paramedic and 1 FF/EMT Forestry 4 Reserve Apparatus: Boat 4
Central	Tower 1: 1 Officer and 2 FF/EMTs Battalion Chief: 1 Battalion Chief Reserve Apparatus: Tower 2, Rescue 1, and UTV 1
Heights	Engine 7: 1 Officer and 2 FF/EMTs Ambulance 7: 1 FF/Paramedic and 1 FF/EMT Forestry Truck Reserve Apparatus: Engine 6
Manor	Engine 5: Officer and 2 FF/EMTs Ambulance 5: 1 FF/Paramedic and 1 FF/EMT Reserve Apparatus: Forestry 5, Tanker 1, Boat 5, Spare Engine 3, Spare Ambulance 2 Spare Ambulance 3

No effect of prehospital time on mortality BMJ 2019



No effect of transportation time in intracranial injury on mortality



Optimal Hospital Access Times

ECSC	Travel time	OR (95% CI)	p-value
Intracranial injury	71–80 min (ref: ≤ 70 min)	1.04 (1.03–1.05)	<0.0001
Acute myocardial infarction	31–40 min (ref: ≤ 30 min)	1.15 (1.12–1.18)	0.0093
Other acute ischemic heart disease	71–80 min (ref ≤ 70 min)	7.21 (1.97–26.34)	0.0028
Fracture of the femur	41–50 min (ref ≤ 40 min)	1.05 (1.03–1.07)	<0.0001
Sepsis	61–70 min (ref ≤ 60 min)	1.25 (1.06–1.47)	0.0067

* Adjusted for age, socioeconomic status, Carlson comorbidity index, ISS (only intracranial injury, fracture of the femur), urbanization, and hospital volume

OR, odds ratio; CI, confidence interval; p-value, probability value; min, minutes

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