

Logistics Strategies for Emergency Medical Services

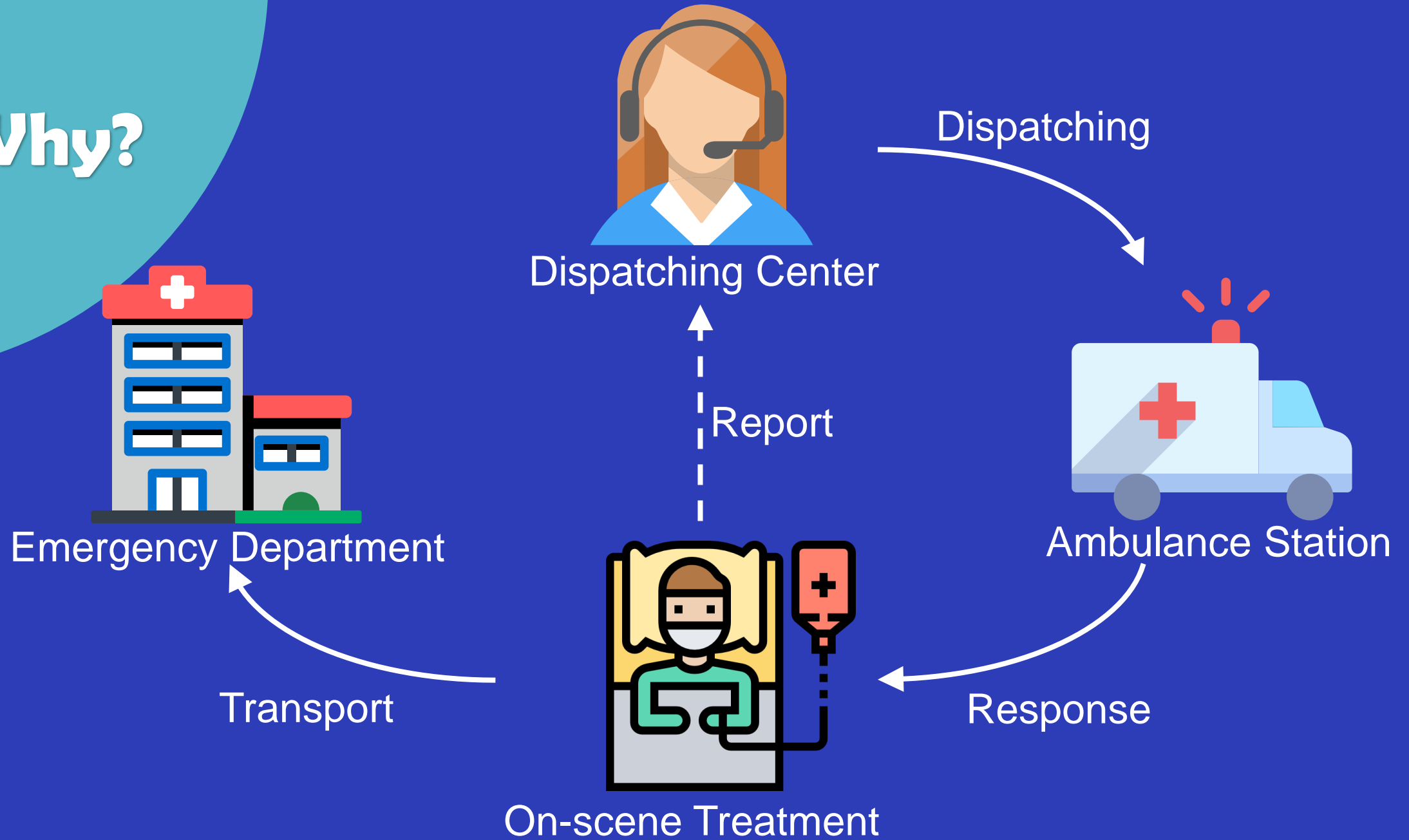
iMOVE Conference 2024



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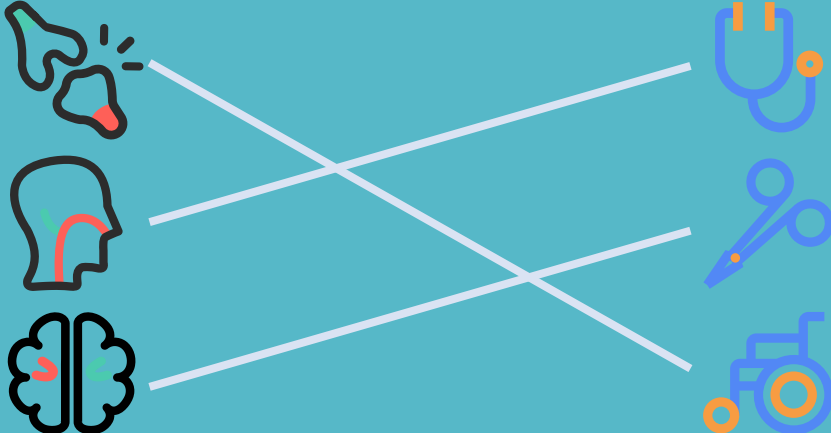


Why?

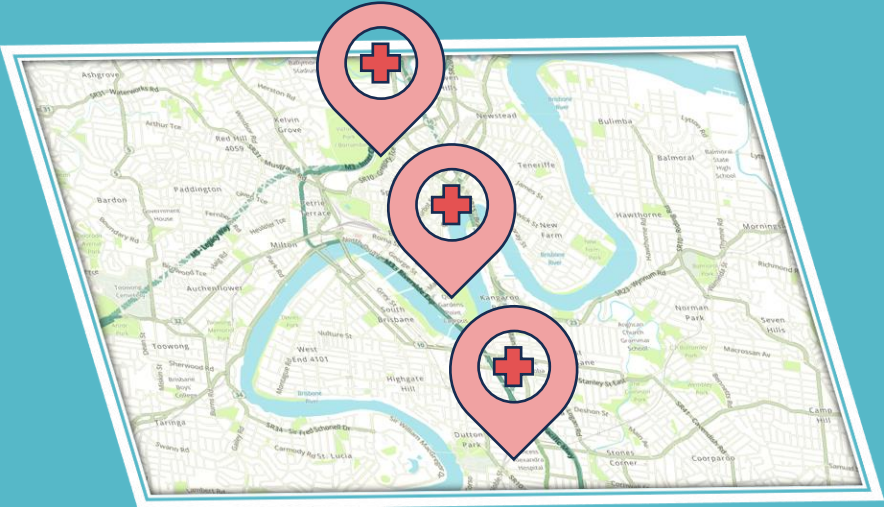


How?

Demand Match



Resource Location



Service Delivery



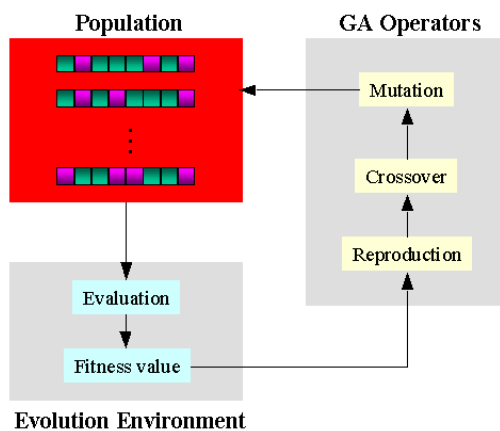
What?

Demand Match



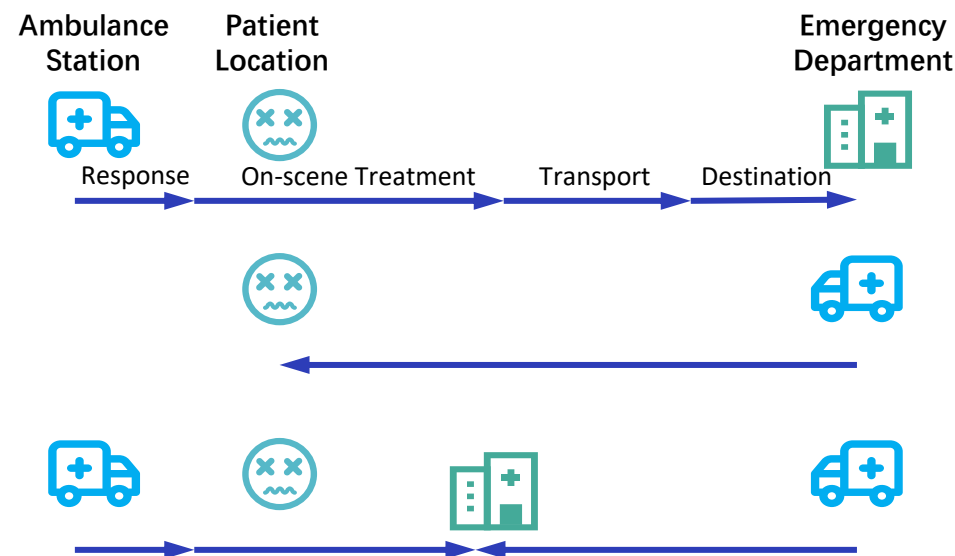
Resource Location

$$\max \sum_{n \in N} (\beta_1 \cdot \text{Survival Rate}_n - \beta_2 \cdot \text{Response Time}_n)$$



Genetic Algorithm Evolution Flow

Service Delivery



Result

ABC News (03 July 2024):

Pre-hospital ECMO — extracorporeal membrane oxygenation — which is currently being trialled by NSW Ambulance in Sydney.

Traffic modelling by the University of Sydney showed the unit could reach 90 per cent of Greater Sydney within 40 minutes if it was based at Homebush.

The 53-year-old's heart stopped for an hour, but that machine kept his brain and vital organs functional. Mr Rivers said he was grateful the technology was in Sydney.



Thanks!

END

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