Emergency dispatch, global positioning of first responders and AEDs a logistic solution to secure basic life support and defibrillation

Finn L. Henriksen[1], Henrik Schakow[1], Mogens L. Larsen[2]. [1]The AED center, department of Cardiology , Odense University Hospital, [2]Department of Cardiology, Aalborg University Hospital, Denmark.

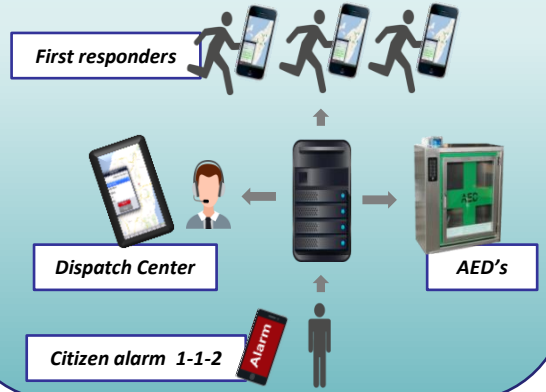
SDU UNIVERSITY OF SOUTHERN DENMARK

Cardiovascular Research Unit
Odense University Hospital
Region of Southern Denmark

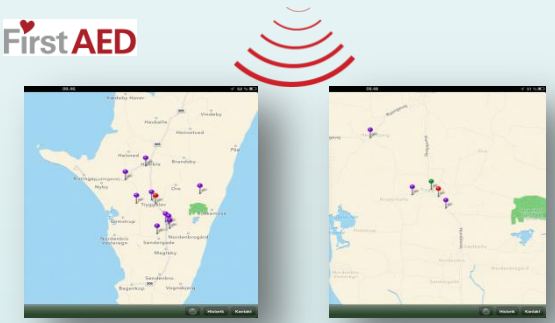
Purpose

- First responders and AED need to arrive within 5-6 minutes of the initial call
- Out of Hospital Cardiac Arrest – GPS tracking of 9 first responders & AED's
- Establish an emergency team of 3 first responders with distinct roles

Methods



Emergency Call - Dispatch Center – GPS tracking



Results

Emergency Call Median response time 34 months n = 1184	Time Seconds (sec.)
First Person On Site	249 sec. [1-1297 sec.]*
AED On Site	347 sec. [1-1996 sec.]
Ambulance On Site	802 sec. [93-2692 sec.]*
*P < 0.0001	

Arrival On Site	Team	
3 first responders	X	88.1 %
2 first responders	X	7.1 %
1 first responders		4.0 %
0 first responders		0.8 %

AED On Site	n	
Yes	1173	99.1 %
No	11	0.9 %

Cardiac arrests 34 months	Survival to hospital	Survival 30-days
13	8	5

Conclusion

- FirstAED GPS technology connect the dispatcher, the first responders and the strategic located AEDs.
- The GPS tracking technology is a logistic solution that secure basic life support, timely use of an AED and increase the survival rate.

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