The Langeland AED project
Incorporates emergency dispatch, FirstAED GPS technology, smartphones, first responders with distinct roles and an AED network

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Background – the Langeland Island
- Part of rural Denmark.
- ~12,000 inhabitants.
- Long distances to the nearest hospital (55 km).
- Long ambulance response times (40 % ≥15 minutes, 13 % ≥20 minutes).
- Bystander CPR provided by 215 trained first responders.
- 95 AED’s purchased by the population.
- All AED’s available around the clock.
- General “first responder” response times (8-10 minutes).

Methods:
- An IT-system combining ideas from the AED center and modern information and communication technology (FirstAED app).
- All first responders are provided with an rescuer smartphone (iPhone 4S/5).
- FirstAED organizes the three first responders in a team with distinct roles.
- FirstAED activate the AED cabinets (unlock, sound & flash light).

Key results of the first 17 months – 513 alarms
- 3 first responders On Site in 90 % of the cases.
- Arrival before ambulances in 95 % of the cases.
- Median time to First Person On Site (FPOS) time = 246 seconds = 4 minutes and 6 seconds.
- Median time to AED On Site time = 270 seconds = 4 minutes and 10 seconds.
- Estimated median time to Ambulance On Site time = 714 seconds = 11 minutes and 54 seconds.

Response times and arrival
- Estimated median time to ambulances/paramedics/ doctors 95 %
- Median time to First Person On Site (FPOS) time = 246 seconds = 4 minutes and 6 seconds.
- Median time to AED On Site time = 270 seconds = 4 minutes and 10 seconds.
- Estimated median time to Ambulance On Site time = 714 seconds = 11 minutes and 54 seconds.

Perspectives:
- The Langeland AED project developed the FirstAED in the hope to get shorter response times.
- The FirstAED GPS app technology entails a significant reduction in first responder median response times from more than 8 minutes before to 4 minutes 6 seconds after.
- FirstAED organizes the three first responders in a team with distinct roles.
- FirstAED activate the AED cabinets (unlock, sound & flash light).