Artificial Intelligence for Emergency Medical Services: a smart digital assistant for faster and more accurate cardiac arrest recognition during emergency calls

Fact Sheet

Project Information

AI4EMS

Grant agreement ID: 823383

Project website

DOI
10.3030/823383

Project closed

EC signature date
20 August 2018

Start date
1 August 2018

End date
31 January 2020

Funded under
INDUSTRIAL LEADERSHIP - Innovation In SMEs

Total cost
€ 2 055 976,25

EU contribution
€ 1 439 183,00

Coordinated by
CORTI APS
Denmark

Objective

Out-of-Hospital Cardiac Arrest (OHCA) is one of the leading causes of death worldwide. It is a time-critical condition with survival chances decreasing by 10%

with every minute of delay from collapse to defibrillation. Currently, Emergency Medical Services (EMS) dispatchers use guidelines to recognise OHCA during emergency calls prior to activating the emergency response system. EMS are struggling as emergency calls have increased in Europe from 100 million calls in 2003 to 320 million in 2016. Thus, assistant decision tools will be necessary to help EMS to faster identify OHCA situations.

Our solution, AI4EMS, is the first and only smart digital assistant for EMS dispatchers that supports the triage decision-making by: 1) processing and analysing emergency calls in real-time; 2) recognising OHCA in an evidence-based process from large amounts of historical data (unfeasible to humans); and 3) presenting the most important insights to the EMS dispatcher in a user friendly manner. AI4EMS allows for faster (reducing almost 3 minutes on average) and more accurate (increase from 73.9% human accuracy to 95%) OHCA recognition by leveraging advanced speech analytics and AI. We offer a user-friendly and secure SaaS solution capable of communicating using Natural Language, accessed via a Nvidia TX1-based device. We are directly supporting the eHealth Action Plan 2012-2020 and Digital Single Market (DSM) strategies, by providing a disruptive ICT technology to improve EMS dispatch efficiency and triage accuracy – which will impact the economy and society at large.

With the upgrade and commercialisation of AI4EMS we will disrupt the Artificial Intelligence (AI) market for healthcare taking a step further on our goal to become world leaders in EMS artificial intelligence. Forecasted sales will render revenues of €86.7 million in the first five years of commercialization and a total of 127 new jobs will be created by 2024.

Fields of science (EuroSciVoc)

natural sciences > computer and information sciences > **artificial intelligence**

medical and health sciences > clinical medicine > **emergency medicine**

Programme(s)

H2020-EU.2.3. - INDUSTRIAL LEADERSHIP - Innovation In SMEs MAIN PROGRAMME

H2020-EU.3. - PRIORITY 'Societal challenges

H2020-EU.2.1. - INDUSTRIAL LEADERSHIP - Leadership in enabling and industrial technologies

Topic(s)

EIC-SMEInst-2018-2020 - SME instrument

Call for proposal

H2020-EIC-SMEInst-2018-2020

See other projects for this call

Sub call

H2020-SMEInst-2018-2020-2

Funding Scheme

SME-2 - SME instrument phase 2

Coordinator

CORTI APS

Net EU contribution

€ 1 439 183,00

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€ 2 055 976,25

Address

BLEGDAMSVEJ 6
2200 KOBENHAVN
Denmark

SME

Yes

Region

Danmark > Hovedstaden > Byen København

Activity type

Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links

Contact the organisation

Last update: 17 August 2022

Permalink: https://cordis.europa.eu/project/id/823383