myAirCoach
Project ID: 643607
Funded under: H2020-EU.3.1.4. - Active ageing and self-management of health

Analysis, modelling and sensing of both physiological and environmental factors for the customized and predictive self-management of Asthma

From 2015-01-01 to 2018-06-30, closed project | myAirCoach Website

Project details

<table>
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<tr>
<th>Total cost:</th>
<th>Topic(s):</th>
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<tr>
<td>EUR 4 581 378</td>
<td>PHC-26-2014 - Self management of health and disease: citizen engagement and mHealth</td>
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<th>EU contribution:</th>
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<td>Greece</td>
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<th>Call for proposal:</th>
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<td>H2020-PHC-2014-single-stage</td>
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<th>Funding scheme:</th>
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<td>RIA - Research and Innovation action</td>
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Objective

"myAirCoach aims to develop a holistic mHealth personalised asthma monitoring system empowering patients to manage their own health by providing user friendly tools to increase the awareness of their clinical state and effectiveness of medical treatment. This will be achieved through a multi-disciplinary approach aiming at the development of an ergonomic, compact and efficient sensor-based inhaler that will be in continuous communication with a mobile device. This sensing infrastructure will have the capability of automated monitoring of several clinical, behavioural and environmental factors in realistic conditions. A pipeline of advanced analysis, processing and computational modelling techniques, dealing with raw measurements, extracted features, indicators, and personal profile data representation will ensure clinical state awareness and a timely optimal treatment. Besides, a "personal mHealth guidance system" will empower patients to customize their treatment towards personalised preset goals and guidelines, either automatically or driven by healthcare professional in a telemedicine manner. In this context, myAirCoach will give to clinicians early indications of increasing symptoms or exacerbations, while making an important contribution in successfully self-management of asthma. The myAirCoach framework will be quantified and evaluated in two test campaigns with carefully designed cohorts of patients in three testing sites. Besides the obvious necessity of the test campaigns to ground the myAirCoach patient models and framework with data, the objective formal validation of the results is expected to lead to increased confidence in the myAirCoach approach and in ICT decision support and self-management systems in general. The impact of such a holistic and innovative approach is huge and the foundations laid here are expected to result in a widespread adoption of sensor-based self-management systems not only in asthma, but also in other respiratory diseases.

Related information

Result In Brief
Next-generation asthma inhalers
Coordinator

ETHNIKO KENTRO EREVNAS KAI TECHNOLOGIKIS ANAPTYXIS
CHARILAOU THERMI ROAD 6 KM
57001 THERMI THESSALONIKI
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EU contribution: EUR 873 125

Activity type: Research Organisations
Contact the organisation

Participants

IMPERIAL COLLEGE OF SCIENCE TECHNOLOGY AND MEDICINE
SOUTH KENSINGTON CAMPUS EXHIBITION ROAD
SW7 2AZ LONDON
United Kingdom

EU contribution: EUR 622 282,50

Activity type: Higher or Secondary Education Establishments
Contact the organisation

IHP GMBH - INNOVATIONS FOR HIGH PERFORMANCE MICROELECTRONICS/LEIBNIZ-INSTITUT
FUER INNOVATIVE MIKROELEKTRONIK
IM TECHNOLOGIEPARK 25
15236 FRANKFURT ODER
Germany

EU contribution: EUR 626 217,50

Activity type: Other
Contact the organisation

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UNIVERSITY CAMPUS RIO PATRAS
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EU contribution: EUR 451 000

Activity type: Higher or Secondary Education Establishments
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EU contribution: EUR 400 250
Activity type: Higher or Secondary Education Establishments
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Activity type: Private for-profit entities (excluding Higher or Secondary Education Establishments)
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EU contribution: EUR 403 611,75
Activity type: Higher or Secondary Education Establishments
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EUROPEAN FEDERATION OF ASTHMA & ALLERGY ASSOCIATIONS IDEELL FORENING
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EU contribution: EUR 117 875
Activity type: Other
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EU contribution: EUR 96 578,75
Activity type: Other
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**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

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**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

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Sweden

See on map

**Activity type:** Private for-profit entities (excluding Higher or Secondary Education Establishments)

Contact the organisation

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