ENVISION

Intelligent plug-and-play digital tool
for real-time surveillance of COVID-19 patients
and smart decision-making in Intensive Care Units

BACKGROUND

Over 90 million confirmed cases of COVID-19 and over two million deaths worldwide by the end of 2020 show the tragic course of the disease since a pneumonia of unknown cause has been reported to World Health Organisation (WHO) on 31 December 2019. The continuously rising patient numbers put medical personnel and hospitals' Intensive Care Units (ICUs) under increasing pressure.

COVID-19 PATIENTS AT ICUS

Approximately 10% of those infected are admitted to hospital and treated at the ICU. Due to the rapidly and often changing health conditions of COVID-19 patients, some of the biggest challenges for intensivists and other medical staff working in ICUs involve monitoring patients, predicting possible changes in their health status and launching necessary interventions.

OBJECTIVE

ENVISION aims to deliver an innovative and powerful digital tool – the Sandman.ICU – for real-time monitoring of COVID-19 patients and smart decision making. The intelligent new app will make the course of the disease more predictable and ease the burden on medical staff.

KEY FACTS

DURATION

01.12.2020 – 31.07.2022

BUDGET

5.6 million euro

FUNDING PROGRAMME

SC1-PHE-CORONAVIRUS-2020-2B

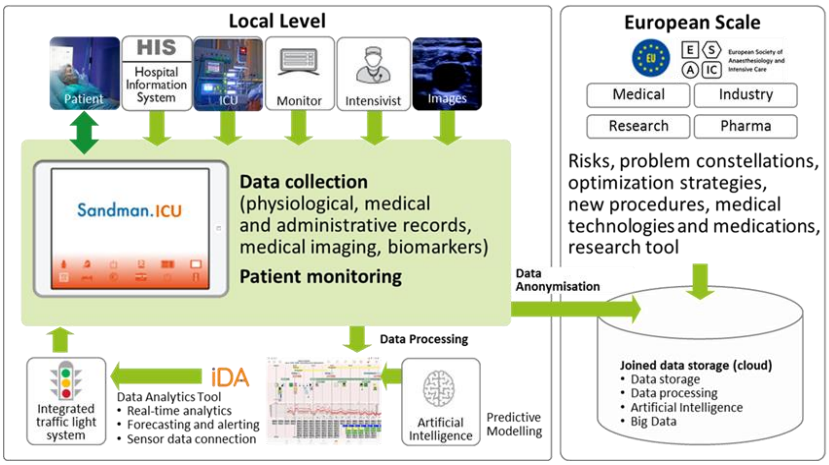
This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101015930.

PROJECT PARTNERS

In ENVISION, 21 partners from 13 European countries come together to collect data and increase our knowledge of the disease in order to develop the Sandman.ICU. This innovative digital tool enhanced by Artificial Intelligence will be validated at our 13 clinical partners and made available soon afterward.

CONCEPT

The Sandman.ICU is distinguished by the integration of data on physiological changes, crucial medical events and administered medications during the intensive care of COVID-19 patients. Such a tool is crucial to support informed decision-making, prediction and treatment. COVID-19 patient data gathered from many data sources in ICUs and their intelligent analysis will provide insights into how the disease develops and affects the human body.



IMPACT

Whereas the surveillance tool - the Sandman.ICU – will be easily adaptable to the needs of other clinical departments, its multi-layer ICT architecture with its integrated data analytics technology will also be set up in a way to make it useful in other sectors and industries. The predictive models established in the ENVISION project can be trained and used for any disease and indication, thereby serving millions of patients.

ENVISION

COORDINATOR

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PROJECT WEBSITE

For more information visit our website

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