

Comfortable wearable multi-sensor monitoring device for hospitalized patients



KEY ACHIEVEMENTS

- WearIT4Health has developed a wearable multisensor monitoring device that is comfortable for the hospitalized patients and compatible with the IT infrastructure of the different hospitals of Euregio Meuse-Rhine.
- The monitoring device monitors vital parameters data (i.e. Early Warning Score) continuously and analyzes it in order to help the medical team to optimize data interpretation. It is also able to inform of clinical deterioration via notifications.

KEY COMPETITIVE ADVANTAGES

- The monitoring device is now validated/demonstrated in a relevant in-hospital environment.
- Biocompatibility and Electromagnetic Compatibility tests have been successful on the prototypes.
- Implementation and validation of system security is compliant to GDPR and STRIDE threat modelling technique.

CHALLENGES

- Smarter and smaller casing (target IP65 or IP66 protection)
- Software validation based on acquired clinical data
 - Development of an early EWS score predictor
 - CE marking and FDA clearance to be done

In the hospitals and care centers, patients have to be hooked up to many devices in order to monitor vital parameters (e.g. heart rate, oxygen saturation, etc.) forming the EWS score. In addition, nurses have to perform multiple manipulations to collect and record this data in the Electronic Medical Record (EMR).

The challenge addressed by wearIT4health is to bring back the patient at the heart of the health care system, and guarantee an optimal follow-up during hospitalization. This will be achieved by continuous collection, integration and processing of the monitoring data.

The wearIT4health project is being carried out within the context of the Interreg V-A Euregio Meuse-Rhine programme, with EUR 2,3 million coming from the European Regional Development Fund (ERDF). With the investment of EU funds in Interreg projects, the European Union directly invests in economic development, innovation, territorial development, social inclusion and education in the Euregio Meuse-Rhine.

More information on : <http://www.wearit4health.com/>

PARTNERSHIP SOUGHT

- Research cooperation agreement
- Licensing agreement

INTELLECTUAL PROPERTY

Patent application pending but prior art for patents and analysis done