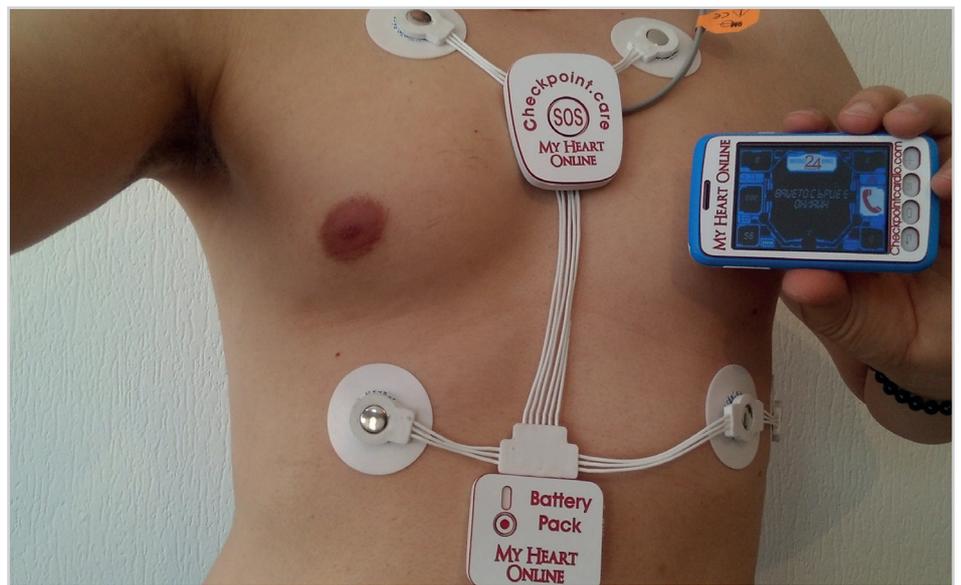
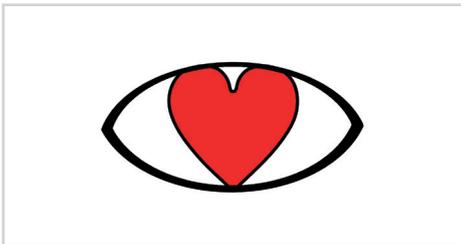


# Digital Wellbeing AIWatch



## Safe and independent: AI-assisted cardio monitoring

Cardiovascular disease is involved in 45% of all deaths in Europe and costs the EU economy over €200 billion a year. More than half of this consists of health care costs. Although mortality is starting to fall, the absolute number of cases has increased over the last 25 years.

High-risk cardio patients need permanent monitoring, making a normal life difficult or impossible. AIWatch allows them to leave the hospital and live independently, yet safely, with a unique telemonitoring service.

With a wearable sensor, high-risk cardio patients can return to their familiar environment while staying safe. Specifically trained nurses watch their ECG real-time and employ pre-arranged escalation procedures in an emergency, reacting as fast, or faster, as hospital staff. Thousands of patients already trust this growing service.

AIWatch is adding another layer, diving between the data and the cardio nurses to allow the monitoring to scale up to more patients, all over Europe. Implementing trusted algorithms and always leaving the final decision in human hands, the AI assists the experts by pre-detecting known pathologies and alerting about unusual patterns.

## Competitive Advantages

- Many types of vital parameters monitored (12-lead electrocardiogram, photoplethysmogram, respiration, digital stethoscope, acceleration)
- Wearable Sensor still a portable device with high usability and comfortable connection via Smartphone
- Highly scalable due to the AI component pre-filtering incoming data, yet still offering the safety of permanent monitoring
- CheckPoint Cardio's system complies to all EU regulations, including ethical and data privacy regulations

## Target Markets

- Patients with a history of cardiovascular diseases and/or high risk of developing a medical condition
- Starting from Bulgaria, further countries all over Europe are to be addressed

## Status/ Traction

- The successful telemedical service of CheckPoint Cardio is limited to the Bulgarian market for now
- Each cardio expert at CheckPoint Cardio can monitor 20 patients at maximum, a bound selected to ensure a high quality of diagnostic decisions made by the cardio experts
- The German Research Center for Artificial Intelligence (DFKI) is adding a layer of artificial intelligence (AI), to detect heart arrhythmias and other cardiovascular anomalies in the transmitted patient data and to alert the cardio experts, if a patient enters a critical condition
- Cardio experts will thus be able to monitor more patients at a time, supported by AI in their scope and decision finding
- Additionally, project partner RISE will further improve the physical aspects of the sensors provided by CheckPoint Cardio for achieving high data quality with overall better performance of the telemedical recording device

## Road Map

### 2019

- Technology experimentation and integration

### 2020

- Expansion of business model into the Austrian market

## Connect



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