

IMPACT SUCCESS STORIES



Revolution of sleep diagnostics and personalized health care based on digital diagnostics and therapeutics with health data integration.

“ The SLEEP REVOLUTION project is introducing an approach based on machine learning to assess Obstructive sleep apnea (OSA) severity and treatment needs. OSA remains poorly diagnosed and ineffectively treated. Through a set of wearables and a digital management platform, the project aims to bring together researchers, patients and healthcare professionals to provide an up-to-date method of accurate OSA diagnosis and optimal treatment. ”



SLEEP
REVOLUTION

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1. Describe your project through three key words / key phrases that identify it.

- Sleep research
- Innovation
- Personalised Medicine

2. In terms of impact, what are the most concrete results your project has or will achieve?

Our project revolutionizes sleep studies by allowing individuals to conduct self-applied sleep studies at home over three nights, providing more accurate and adaptable results compared to single-night hospital studies. People can do everything at home, and this saves a lot of time and money for healthcare professionals while getting a better profile of the person's sleep and information.

We've developed a digital questionnaire, the European Sleep Questionnaire, and an accompanying app to track sleep patterns, daily activities, and cognitive performance over a three-month period. By incorporating smartwatches and utilizing machine learning algorithms for data analysis, we streamline the process, reduce costs, and significantly decrease the time required for expert review from 2-3 hours to just 30 minutes. This innovative approach not only improves the efficiency of sleep studies but also enhances the quality of data collected, leading to better-informed healthcare decisions.

3. Please describe your project overall impact at the European level

The project has 39 partners, with 38 located in Europe, including the European Sleep Apnea database, European Sleep Research Society, and support and connection with the European Respiratory Society. Leveraging this network of key opinion leaders and the support of experts, we anticipate significant clinical impact across Europe. As we validate our findings, we aim to influence clinical practice, leveraging the expertise within our network to drive tangible change in the field of sleep health

4. As an applicant, what advice would you have wanted in the Horizon project design process? What support did you receive from National Contact point (NCP) and your organisation, and what improvement of support would you benefit from?

As an applicant, we didn't seek support from the National Contact Point (NCP) as we were unaware of its existence. While our organization's research office helped, we primarily wrote the application ourselves. The EU project design process was unfamiliar territory, and had we known its complexity beforehand, we might have hesitated to proceed. More guidance on EU-specific aspects would have been beneficial, as the platform can be challenging to navigate. Despite the hurdles, receiving the grant was a pleasant surprise.

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