

PARTICIPATING PROJECTS



HEALTH AND CARE CLUSTER

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AI in hospitals: are we ready for it?
Challenges and opportunities of AI deployment in hospitals



Will AI allow to go one big step further in home based and patient control therapies? The example of sleep disorders

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Sleep Disorders

A Global Health Challenge

High prevalence: 1 billion people between 30 – 69 years with **obstructive sleep apnoea (OSA)** worldwide

Problems:

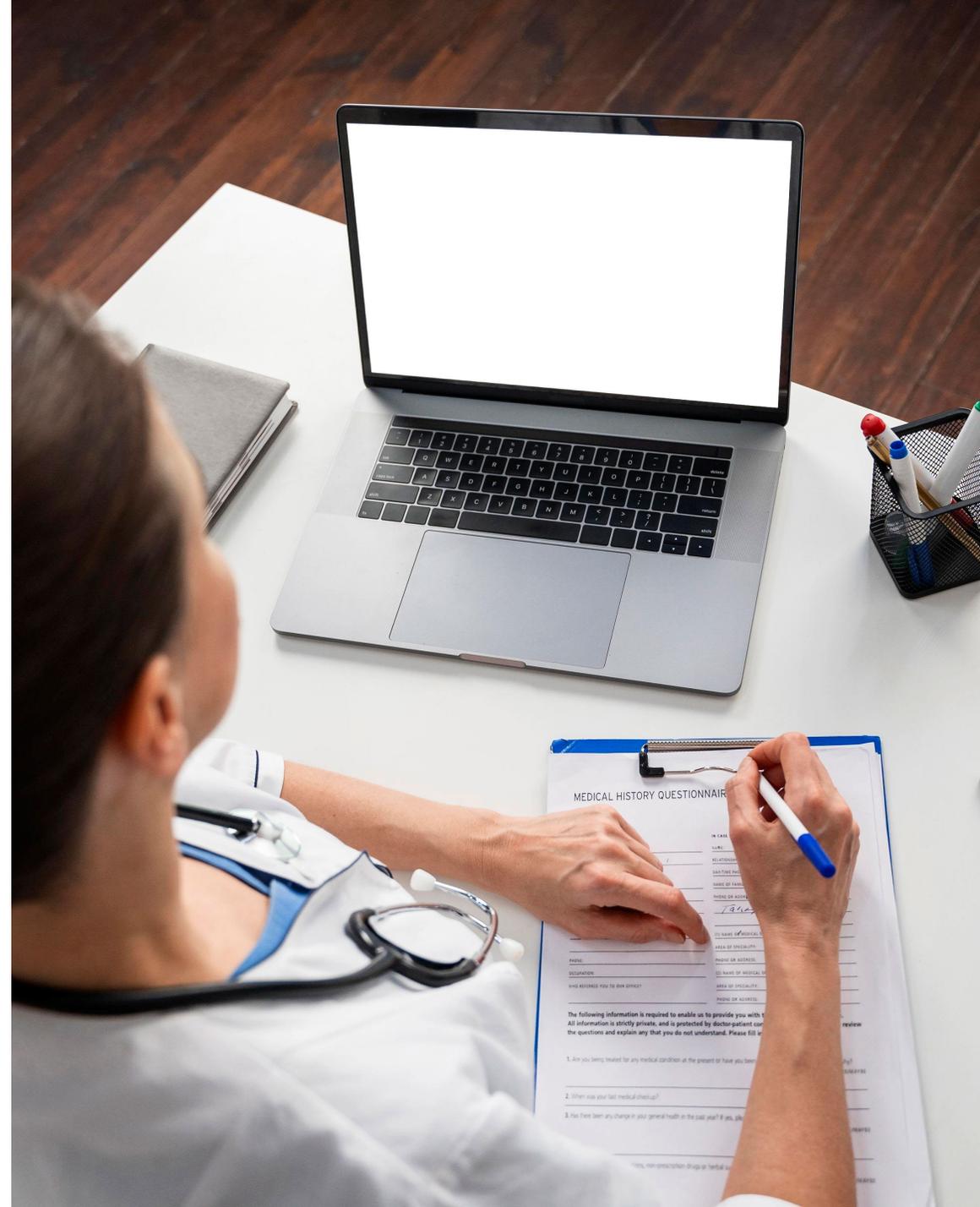
- Time consuming technique
- Inconvenience and unnatural environment
- Cost and accessibility
- >85% of people with OSA not diagnosed

Untreated OSA is associated with **significant comorbidities**, such as cardiovascular disease, metabolic disorder, stroke, and Alzheimer's disease



What if we could achieve remote and automated diagnosis of sleep disorders?

... and what if AI could assist in analyzing the collected sleep monitoring data?



The ODIN solution for Enhancing sleep Disorders diagnosis

A robust and generalizable **AI model for automatic assessment of sleep disorder** and disorder staging detection.

AI model trained by federated learning:

- Leveraging higher volumen and more diverse datasets
- Enabling cross-site training and validation
- Preserving privacy



AI has the potential to improve sleep disorder diagnosis, customize treatment plans, and reduce the workload for sleep technicians

