

Integrated AI-Powered Remote Management & Patient Empowerment for Hypertension and Diabetes in Primary Care

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IHI brokerage platform:

- -Proposal sharing tool AI-CARE-PC
- -Participant profile <u>TARTUH</u>



Challenges and Objectives

- Hypertension and type 2 diabetes represent an escalating public health challenge
- Despite major advances in therapies, preventable complications remain far too common in Europe
- Reasons: low level of knowledge of patients, remote monitoring is poor, disease management systems are fragmented, absence of individual treatment plan, overburdened in primary care workload, aging population.
 - Only empowered patients take control of their health, and a digital solution is the best solution.

SO2 integrated fragmented health research and innovation, enable the development of tools, technologies for improved treatment and management of diseases

SO3 feasibility of patient-centered, integrated healthcare

- ✓ Improved treatment and adherence
- Reduced number of preventable complications in society
- ✓ Digital and data integration in primary care system
- ✓ Reducing in inequity and social determinants
- ✓ Integration of innovation and scientific research



Your approach to solve the problem

- Our proposal integrates a digital remote patient management system, including health indicators, and an empowerment toolkit for primary care professionals to support patients with hypertension and type 2 diabetes based on an individual treatment plan
- An Al-powered decision support system guides clinicians with personalized treatment recommendations, improving outcomes and fostering patient self-management
- By simplifying workflows, reducing clinician workload, and promoting continuous care and lifestyle change in patients
 - Our solution enhances treatment effectiveness and offers a more cost-efficient approach for European healthcare systems



Is your project suitable for IHI?

Industry partners are critical for expertise, technology, and scalability:

- Medical device companies contribute advanced monitoring devices
- Al and digital health technology company provides the algorithms, software platforms, etc.

Collaboration between

- private industry (Lifeyear OÜ),
- public partners (Tartu Applied Health Sciences University),
- o healthcare practitioners (primary health care setting from European countries),
- o patients (primary health care setting from European countries),
- o regulators (European primary care organisation, ministry of Social Affairs)

will ensure the solution is clinically **relevant**, **evidence-based**, and **feasible** in realworld settings.



Outcomes and Impact

- Implementation of a digital remote patient management system integrated with healthcare workflows in EU.
- Deployment of an evidence-based patient empowerment toolkit for clinicians.
- Al-powered decision support integrated into the daily clinical practice for the patient management system.
- Reduced risk of complications (e.g cardiovascular events) and improved long-term health outcomes.
- Cost-efficient care delivery for European healthcare systems by preventing the development of hospitalizations and complications.

Research to practice: through co-creation with patients and clinicians from primary health care settings, evidence-based design, and iterative pilot testing

Strengthens the EU **health industry** by developing AI-powered, patient-centred digital solutions for chronic disease management, creating scalable, interoperable tools that accelerate digital transformation across Europe.

Patients benefit from AI-powered, personalised care and remote monitoring: better disease control, early detection of complications, and increased engagement in their own health, particularly among innovative underserved populations.

Expertise and resources

We have:

- Clinical Expertise: primary health care providers in outpatient settings
- Patient Empowerment & Education: universities from the Netherlands and Denmark
- Digital Health & AI: Our technical team (Lifeyear OÜ)
- Research & Evaluation: experience in clinical research, quality improvement projects, and outcome evaluation (*Tartu Applied Health Sciences University*)

We are looking for:

- Industry partners for validated monitoring devices, integration and interoperability
- Health economics and policy expertise within Europe (cost-effectiveness analysis, and compliance with the European regulatory framework)



Additional information

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