

IHI Call Days | Call 9 SO 2

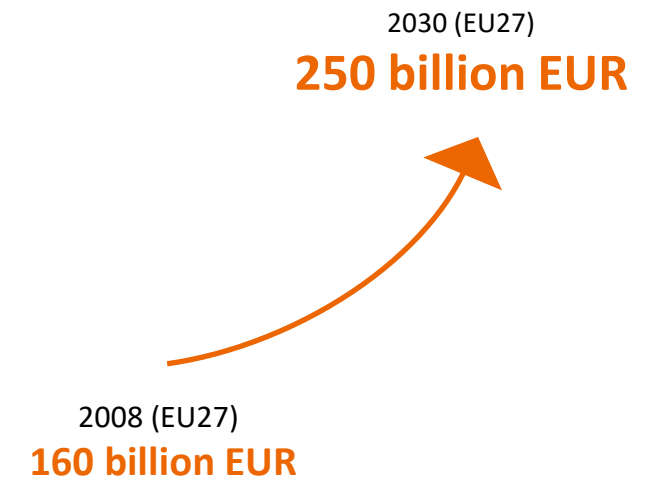
- Improving Access to care for Alzheimer's disease
ACCESS- AD

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Alzheimer's (AD) is highly prevalent, a leading cause of death and huge socio-economic burden in Europe



9.8M people in Europe living with dementia (2019), 18.8M by 2050. 60-80% of these are AD.

A is a **top 10** Leading Cause of Death in Europe

Economic cost is equivalent to GDP of Finland.

Regional Disparity: the prevalence of AD in rural areas appears to be at least twice that of urban areas. This is attributed to a large proportion of the older population residing in rural communities, and dementia prevalence tends to double after every five years among persons aged 65 and above.



Challenges

- **Despite significant advancements in disease-modifying therapies and diagnostic tools for Alzheimer's disease, substantial challenges persist in ensuring equitable access to care, especially for rural / underserved populations.**
- **Demographics and Disease Risk:** High densities of people at risk of developing AD and with pre-existing disease live in rural / underserved areas.
- **Specialist and Staffing Shortages:** Limited access to neurologists and geriatricians for Alzheimer's care; few trained nurses, diagnostic technicians and related support staff increase strain on primary care.
- **Screening and disease monitoring :** Access to appropriate care for early diagnosis, timely intervention, and management of disease progression.
- **Limited Training on New Therapies:** Primary care providers who are at the front line of care often lack knowledge of emerging Alzheimer's treatments and related diagnostics.
- **Inconsistent Follow-up:** Patients have difficulty maintaining regular follow-ups for disease monitoring.
- **Financial and Travel Barriers:** High costs and travel issues prevent patients from accessing needed care.
- **Health Literacy:** Limited access to information on Alzheimer's reduces awareness and engagement in care.

Project Objectives

ACCESS-AD: Improving Access to care for managing Alzheimer's disease

- Enhance Alzheimer's Disease care in rural/underserved areas for patients leading to better care management and outcomes.
- Harness the potential of **AI-based Technologies** to advance Alzheimer's Disease management
- Integrate industry solutions for **Coordinated Decision-making** and Efficient Alzheimer's Disease care for better Healthcare decisions with improved integrated data access
- **Standardize, harmonize and integrate in a federated manner**, ensuring data privacy

This addresses IHI-specific objectives and health needs:

- **SO2: Integrating fragmented health research and innovation efforts** by bringing together health industry sectors and other public stakeholders to facilitate care in areas where there is an unmet public health need.
- **SO3: Demonstrating the feasibility of people centered, integrated healthcare solutions**
- **SO4: Exploring technologies and infrastructure** that provides decentralized, cost-efficient, integrated and standardized care as well decision support to stakeholders while preserving data privacy and security.

Approach

- **Decentralized Diagnostics and Therapeutics:** Validate low-cost blood biomarkers and affordable imaging modalities for accessible AD diagnostics. Test AD therapy delivery in decentralized settings (e.g., home, doctor's office) vs. infusion centers. Providing educational resources for stakeholders.
- **Resource Optimization:** Use telemedicine, remote radiology, rapid scan protocols, and optimized workflows to address skill/resource bottlenecks and improve patient throughput.
- **Standardized Protocols:** Harmonize AD diagnosis and risk stratification protocols for consistent, cost-efficient, high-quality care.
- **AI-Driven Tools:** Train AI algorithms for precise AD diagnosis, monitoring, and therapy response, integrating multimodality data for improved decision-making and clinician/patient support.
- **Federated Learning:** Enable secure, private data sharing between patients, clinicians, and rural/urban areas to enhance care management.
- **Health Economics Modeling:** Model cost-effectiveness of diagnostic and therapeutic delivery changes to support implementation.

Outcomes and Impact

- **Increased Access:** Improved therapeutic and diagnostic care access for rural/underserved populations.
- **Improved Resource Utilization:** Overcome resource limitations, streamline workflows and shorten wait times for care.
- **Enhanced Care Quality:** Standardized and AI-supported tools improve accuracy and consistency in diagnosis.
- **Cost-Efficient Care:** Affordable diagnostic solutions make care more accessible and sustainable.
- **Public Health Improvement:** Better Alzheimer's care promotes social inclusion and enhances public health outcomes.

➤ Equitable access across different regions and healthcare systems can **reduce disparities, promote social inclusion, and enhance overall public health outcomes.**

Expertise and Resources

Potential Partners

- Academic and Research Institutions
- Healthcare Providers
- Pharmaceutical and Biotechnology Companies
- Medical Technology Companies
- Government and Public Health Agencies
- Non-Profit Organizations and Patient Advocacy Groups
- Technology and Data Analytics Companies

Duration : 60 Months

Estimated project volume: 22-25 Million€