

How is EIT Health supporting AI integration into the health innovation eco-system

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ESC Workshop
13-14 of November 2024
Zurich

Agenda

- Introduction to EIT Health
- InHeart : Example of an EIT Health supported project
- Presentation of EdiHTA project in the context of the HTA Regulation
- Testing and experimenting Facilities in Health programme in the context of the AI Act
- Shaped project with HDABs in the context of EHDS Regulation
- Collaboration with Hospitals buyers.



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EIT Health – who we are

Our mission is to drive healthcare innovation and create positive societal impact in Europe

EIT Health is a **community of world-leading health innovators** and one of 9 **Knowledge and Innovation Communities (KICs)** of the **European Institute of Innovation and Technology (EIT)**, an EU body.

EIT Health has been established in 2015 based on the principle that when experts from **business, research and education work together as one**, an optimal environment for innovation is created.

To achieve this, we facilitate innovative solutions to:



Contribute to a sustainable health economy in Europe

Strengthen healthcare systems

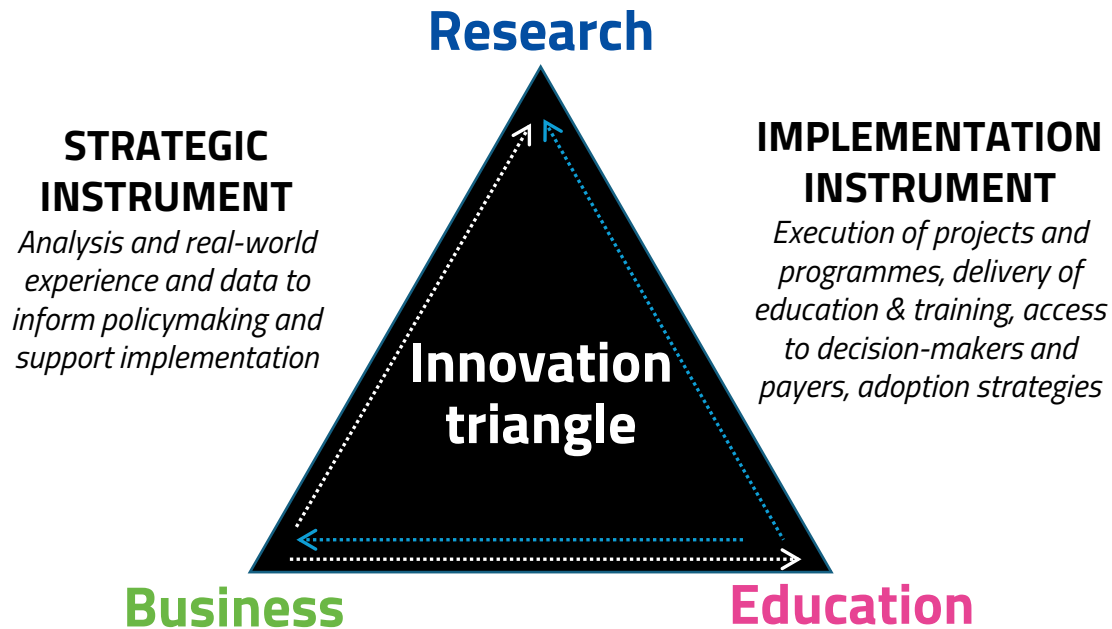


Promote better health of citizens



EIT Health | Transforming Healthcare

Strategic & Implementation instrument around the Innovation Triangle



- Alignment with EU Health agenda
- Support policymaking & best practices exchanges at EU, MS and regional levels
- Think Tank (roundtables, reports)
- Workshops & events



- Market intelligence, tech radar
- Business support services
- Access to investors, fundraising
- Innovation support & adoption
- EU large-scale initiatives (TEF Health, EP PerMed, IHI, Cancer mission...)
- Grants (EIT funding)



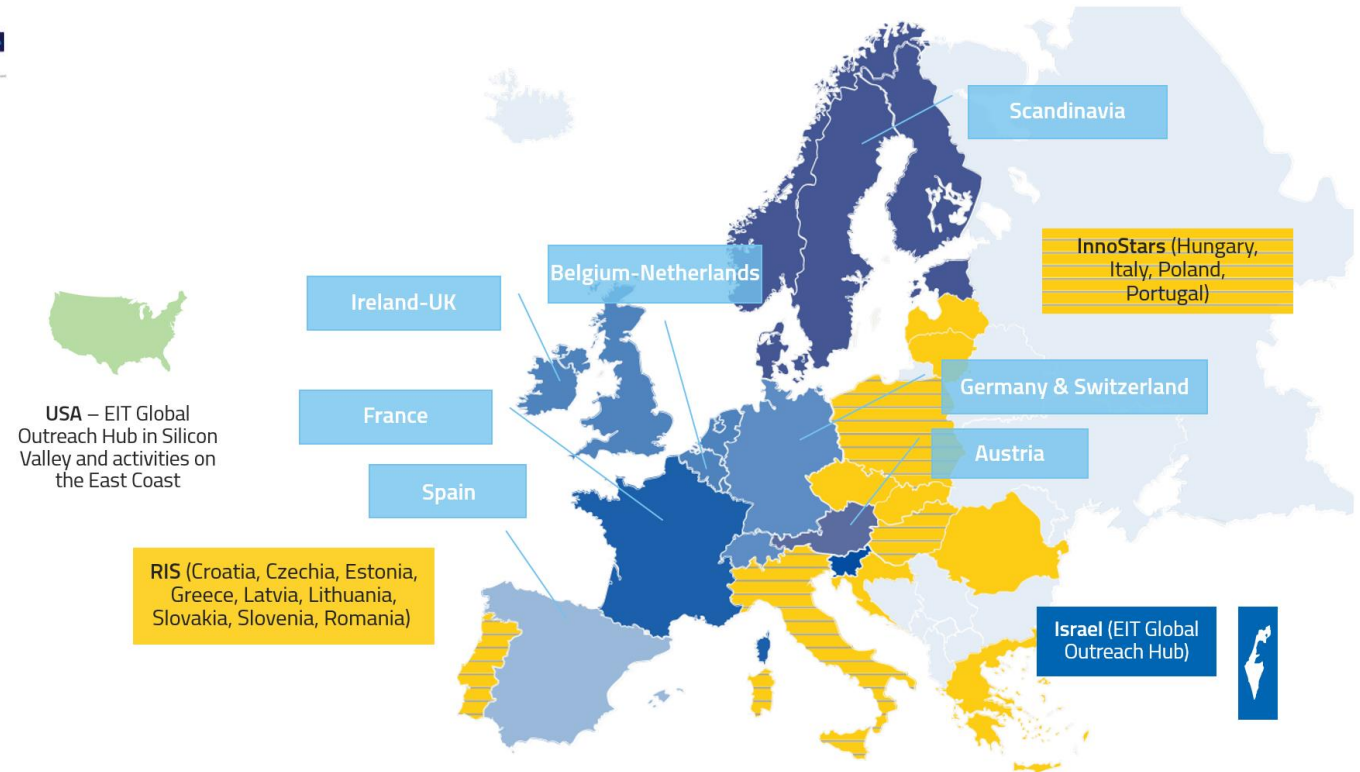
- EIT Health Academy (capacity building)
- Healthcare Industry Pact4Skills
- WorkinHealth Skills Observatory & skills gaps (AI-based SkillSync)
- Talent pools access (Career fairs, matchmaking)
- Grants (EIT funding)

EIT Health | Multi-stakeholder pan-EU Community

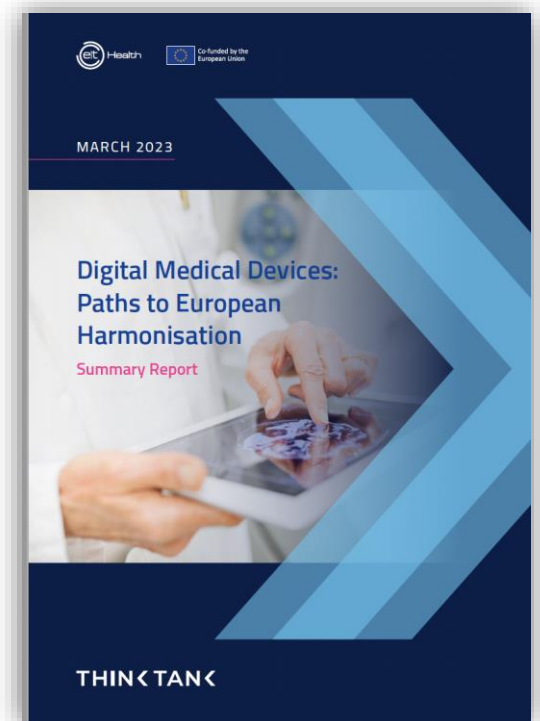
150+ Partners



An intelligence & implementation network
across the EU and beyond



EIT Health Think Tank



EIT Health alliances and collaborations



The MOU between EITH and IHI creates a collaborative innovation ecosystem that promotes entrepreneurship and innovation in healthcare, benefiting patients and society.

COLLABORATION: Collaborative workshops and events, coordinating calls between both organisations to contribute to each other's initiatives.



The MOU between EITH and EUREGHA utilizes regional and local health authorities, along with Co-Location Centres connecting with healthcare innovation experts.

COLLABORATION: Joint events/ workshops, Facilitating and guiding the regional-level adoption of the EHDS.



The MOU between EITH and the Biomed Alliance ensures a smooth cooperation between EITH activities and health professionals across Europe.

COLLABORATION: Open and transparent communication between partners and membership.

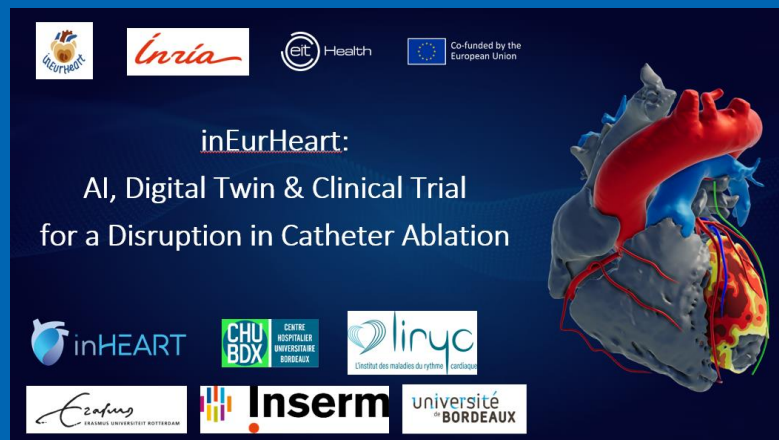
EIT Health, IHI and EUREGHA are kick starting an initiative to strengthen the initiatives from IHI and EITH with regional health authorities

Additional collaborations/networks :





- Member of the HERA Joint Industrial Cooperation Forum (JICF)
- Collaboration with EIC/ EISMEA on streamlining data, Fast Track, Business Accelerator
- Contribute to EFPIA Oncology Platform Sounding Board.
- Observer of the HTA Network

InEurHeart : Example of an EIT Health supported project




InHeart , INRIA,






The banner features a central 3D anatomical model of a human heart with a catheter inserted into the right atrium. The heart is rendered in realistic colors (red for oxygenated blood, blue for deoxygenated blood, and grey for the myocardium). The catheter is shown as a thin, flexible tube with a grid-like tip. The background is dark blue.

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inEurHeart:
AI, Digital Twin & Clinical Trial
for a Disruption in Catheter Ablation

   Unité des maladies du rythme cardiaque



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EdiHTA Project in the context of HTA-R





EDiHTA

The first **European Digital Health Technology Assessment** framework co-created by all stakeholders along the value chain

www.edihta-project.eu



 EDiHTA EU-project

 @EDiHTAproject













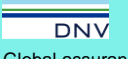





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Consortium

16 partners from 10 European Countries.

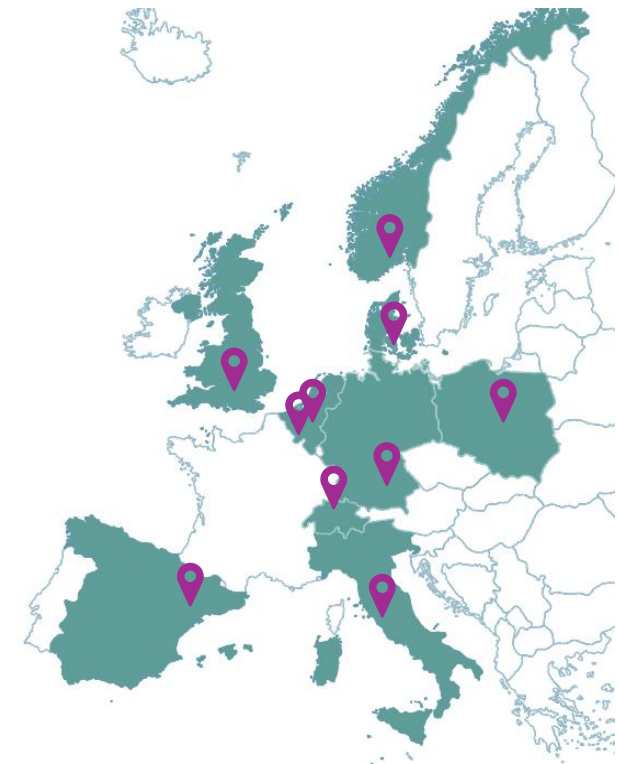
Key expertise in HTA research, 3 **HTA agencies**, 4 **hospitals** as end-users of DHTs, 1 **patient organisation**, 1 NGO specialised in HTA, 1 **global quality assurance** and risk management company and **notified body** for MDR certification, as well as the European **Institute of Technology**, the **European Patients' Forum** and the European Health Management Association (**EHMA**).

EDIHTA

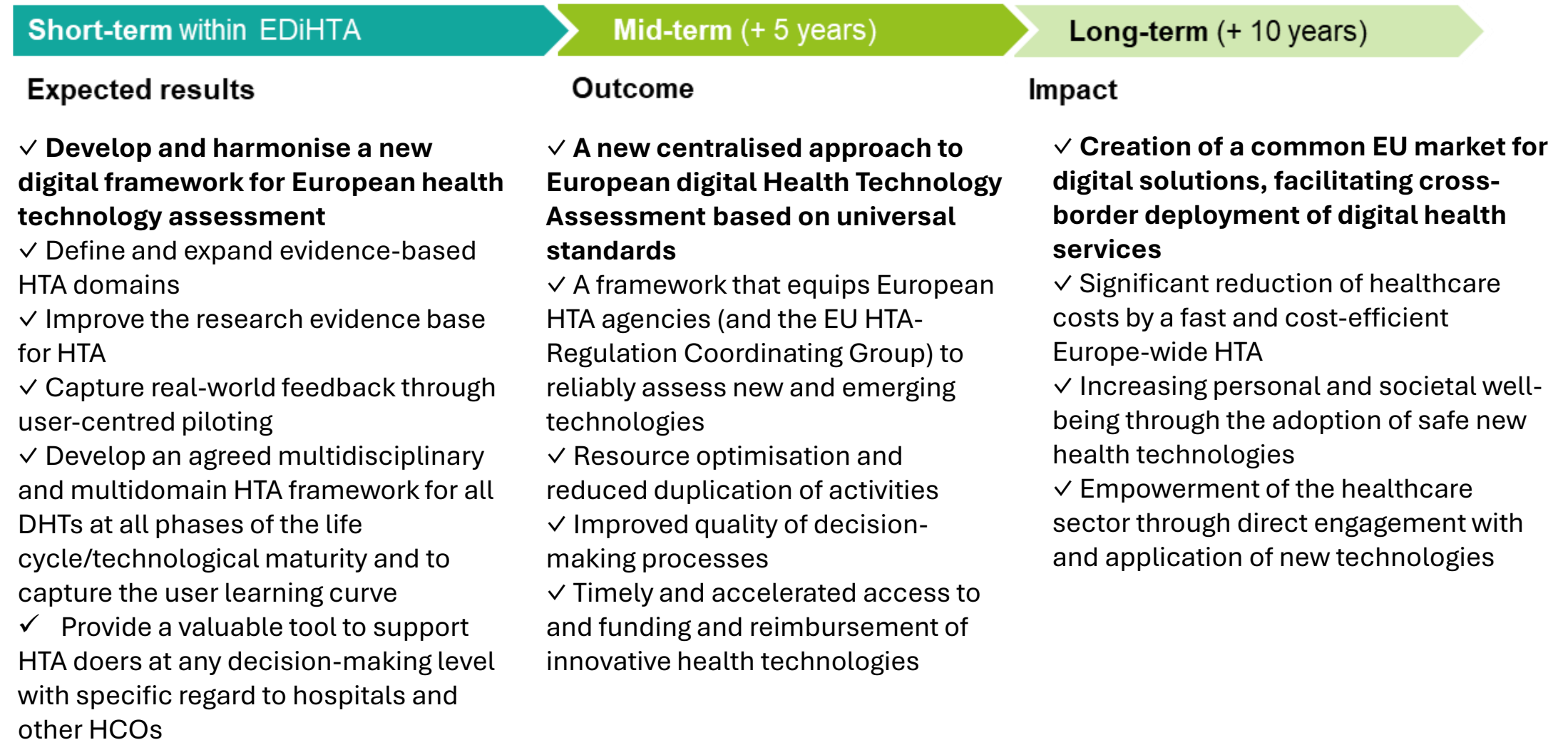
 HTA methods, hospital based HTA, health economics, AI, coordination, pilot site	 Integrated HTA, stakeholder engagement, early HTA, pilot site	 Telemedicine, health economics, organisational studies, pilot site	 Promotion and management R&I, innovation & technology assessment
 Developer and provider centred HTA, pilot site	 Hospital-based HTA, end-user engagement, pilot site	 Regulatory aspects, health care management, quality assurance	 RWE, evidence standard framework, HTA, professional / patient engagement
 Social science perspective on health and digital HTA, pilot site	 HTA, guidelines, evidence-based practice, real-world evidence	 Global assurance and digital solutions provider and notified body EU MDR	 Healthcare management, tech dev promotion, communication, harmonisation
 Industry representation / developer, health sector network, education / exploitation	 Patient engagement, communication, dissemination	 Health economics, clinical and cost-effectiveness, education	 EU project administration, communication, dissemination

Key:

Clinical / patients	HTA research	HTA agencies	Industry network	Health sector network	Management / R&I admin
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Road map and impact

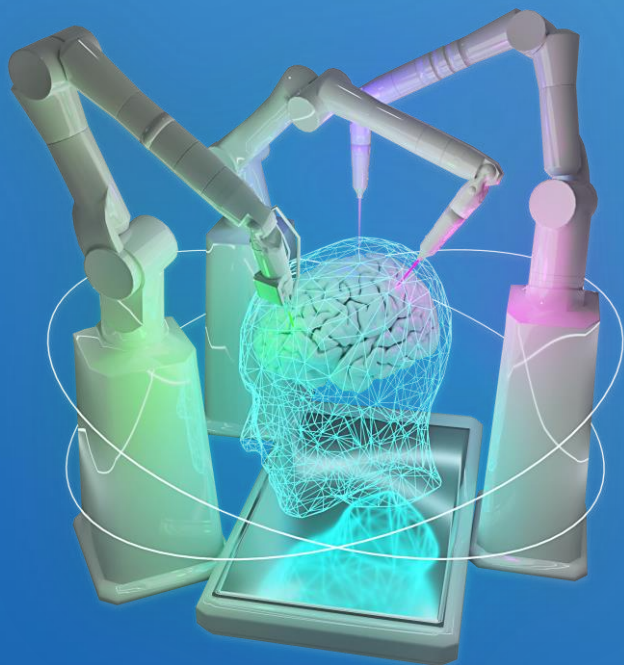




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TEF Health in the context of the AI Act





TEF-Health

Testing and Experimentation Facility
for Health AI and Robotics

info@tefhealth.eu

www.tefhealth.eu



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Ricardo Pires | Health Community Lead | ricardo.pires@eithealth.eu

Testing and Experimentation Facilities (TEF) for Health AI and Robotics

For producers of AI solutions
(start-ups, SMEs, industry)

Access to 50+ leading hospitals, Medical Universities, certification bodies.

Test AI Solutions in large-scale real –or realistic- environments

Receive **funding** (total 30M€ as reduction in fees)

Support in **market access** for intelligent technologies

Close the gap in AI Innovation Chain

Grow and scale

Validate AI solutions in real health environments

Match & connect

Facilitate market access for AI solutions in health

Train and Attract

Upskilling in Health AI for entrepreneurs & professionals

For Providers of facilities
(virtual or physical)

Access to 1500+ international start-ups, SMEs

Privileged and early **access to AI solutions** as well as data networks

Receive **funding** (total of 30M€)

Optimize investments and avoid duplication of facilities



TEF-Health AI: facts & figures

Aim

1. **Validate AI solutions** in real health environments

2. **Facilitate market access** for AI solutions in health

Consortium

51 partners from Germany, France, Sweden, Slovakia, Portugal, Belgium, Finland, Czech Republic, Italy

Labs at hospitals, universities (medical imaging, digital medical devices ...)

Notified bodies certification

EU-wide connectors
EIT Health (connect offer & demand)
E-Brains (transact data)

Funding

30 M€
EU Commission

30 M€
Member States

60 M€ in total

30 M€
Offer Side

30 M€
Demand Side
(discount fees for SMEs to use facilities)

Timing

2023-2028
(5 years)

Status:
selected for funding (draft grant agreement)



TEF-Health AI: consortium

- Partners
- State of Berlin
(Senate Dept. Economics)



- Partners
- Wallon gouvernement



- Ministère de l'économie
(acceleration AI strategy,
eHealth strategy)



- Partners



- IAPMEI (Agency for
competitiveness and
innovation)



Co-funding (MS)

Germany

Berlin CHARITE, BPWT, TÜV, KIPark
Braunschweig PTB
Erlangen FAU
München TUM, FHG

Belgium

Brussels COVARTIM
Charleroi ISPPC, CETIC, BIOWIN
Mol VITO
Mons MULTILEVEL
Namur Unamur, POLEM, CHUUC
Liège WSL, CHUL

France

Grenoble CHUGA, UGA
Lyon HCDL
Paris LNE, CEA
Rennes CHURENNES
Strasbourg IHUS

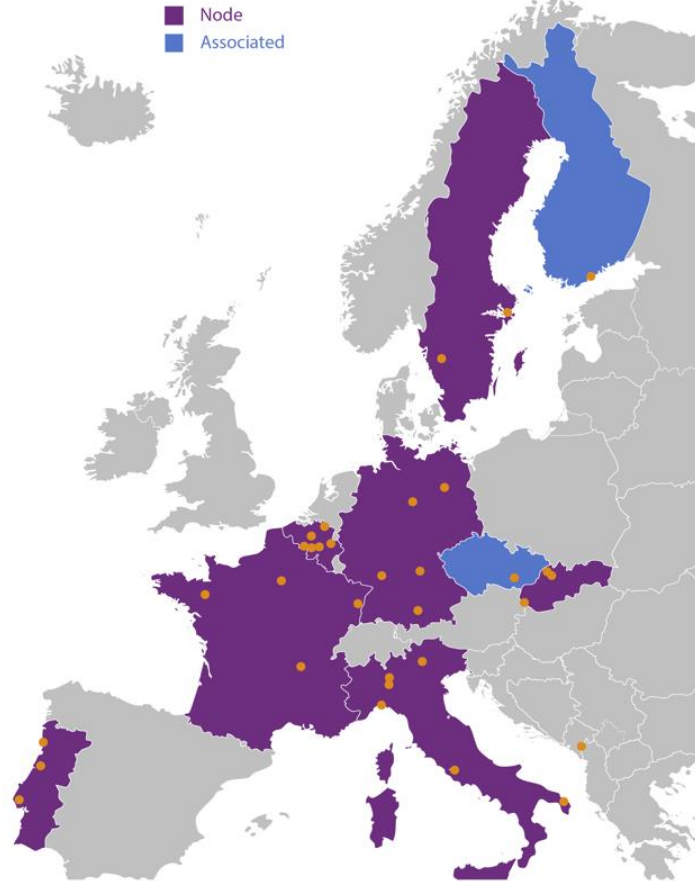
Italy

Genova Gaslini, IIT
Lecce INNOVAL
Milano PoliMI
Pavia UNIPV
Povo FBK
Roma ISS

Portugal

Coimbra IPN, CHUC, CC
Lisboa SPMS
Porto CHSJ, HCP

Partners



Lead: **Charité-BIH**, Berlin, Germany

Partners

Czechia

BRNO MU

Finland

Helsinki HUS, METROPOLIA, CHELISINKI

Slovakia

Bratislava UKBA, STUBA
Martin UHM
Zilina ZU

Sweden

Boras RISE
Stockholm KI

Pan-UE

Brussels EBRAINS
Heidelberg EITHSI
Lisboa Innostars
München EITHEV
Paris EITHFrance, HDH

Co-funding (MS)

-?

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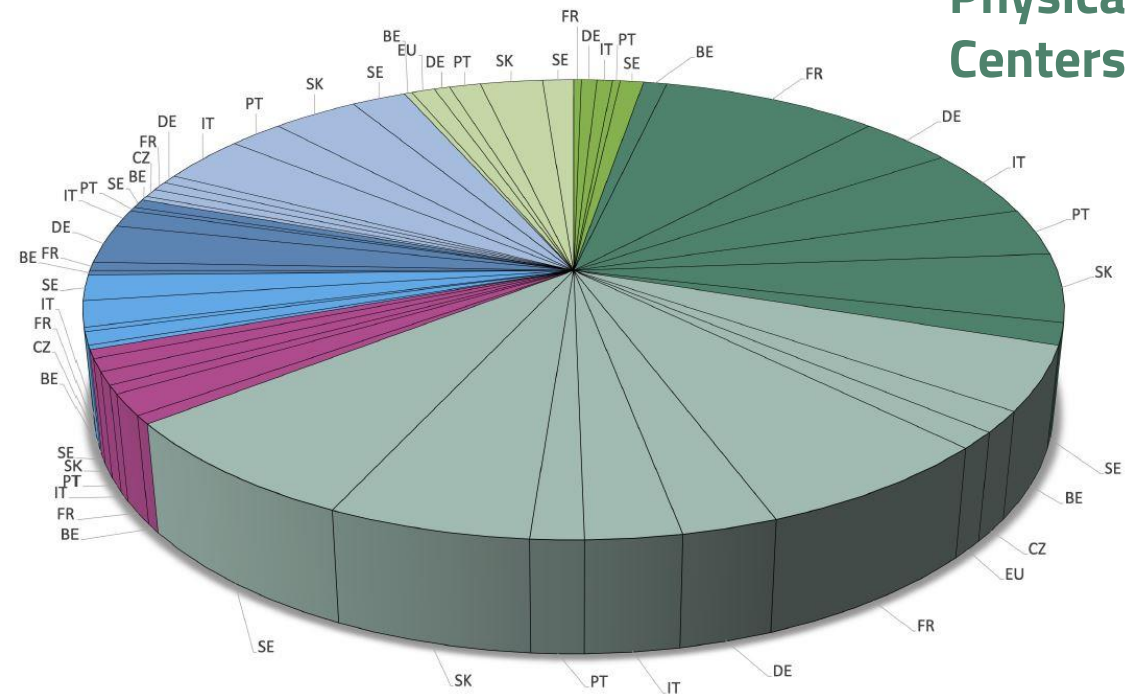
- Minister of
investment,
regional devt.
& information

- Vinnova



TEF Health AI: services across nodes

Ethics, Legal & Society
Physical Testing Centers
Virtual Testing Centers
Education & Dissemination
Standards & Quality
Certification
Clinic, AI & Robotics
Business dev & Integration



TEF-Health AI - KPIs

- **500 TEF users served**
 - 80% TEF users are SMEs
 - 70% cross border participation
- **500 solutions tested**
 - At least 50% started CE marking or in agile certification process
 - 2% adopted by health providers
 - 2% brought to market
- **Long term Business Plan:** fee-based services available to Industry





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Shaiped project in the context of the EHDS regulation



30 European players join forces to form a "European space for AI in healthcare"

With the adoption of the regulation for a European Health Data Space - EHDS - due at the end of 2024, the SHAIPEd consortium is a concrete expression of the European Commission's ambition to foster a network of dynamic players to exploit data on a European scale while complying with the highest standards of data protection.

With 30 partners from 11 Member States, the SHAIPEd consortium is the largest to date to include the future Health Data access Bodies of the EHDS. This project is a continuation of the pilot project for the EHDS, which was entrusted to the HDH by the European Commission and which aims to build a European infrastructure for the secondary use of health data.

The Health Data Hub (HDH) and its consortium have won a European call for projects with the SHAIPEd project, aimed at developing artificial intelligence (AI) solutions for medical devices. With a total budget of €4 million, this selection is the 10th of the HDH for European calls for projects, confirming its commitment to the development of digital health in Europe.

Meeting the challenges of AI in healthcare in Europe

In the age of artificial intelligence, a major challenge for medical devices (MDs) is access to real world data to train, test and validate these tools. Integrating these devices into healthcare information systems (HIS) and proving their clinical effectiveness are also major challenges. The SHAIPEP consortium is addressing these issues through several working groups, seeking to :

- Facilitating access to health data for AI-based medical devices,
- Validate the clinical effectiveness of these devices on a large scale,
- Integrating medical devices into European healthcare systems.

Three use cases will provide a framework for testing and validating the solutions developed by the consortium. These examples show the potential of AI to improve patient care and boost the efficiency of European healthcare systems.

- The first use case will focus on chronic kidney disease. Led by Aarhus University Hospital (Denmark), this project will explore the ability of existing AI models to adapt to cohorts of data from several European countries.
- The second will focus on the detection of metastases. In collaboration with the Centre Léon Bérard and the Health Data Hub (France), this use case will analyse cohorts of patients to assess the performance of AI in detecting lung metastases and mammograms.
- Finally, the third will focus on the prevention of heart failure. Led by Implicity (France), this last use case will evaluate AI software for preventing Heart failure hospitalizations in patients with Cardiac Implantable electronic devices (CIED).

THANK YOU