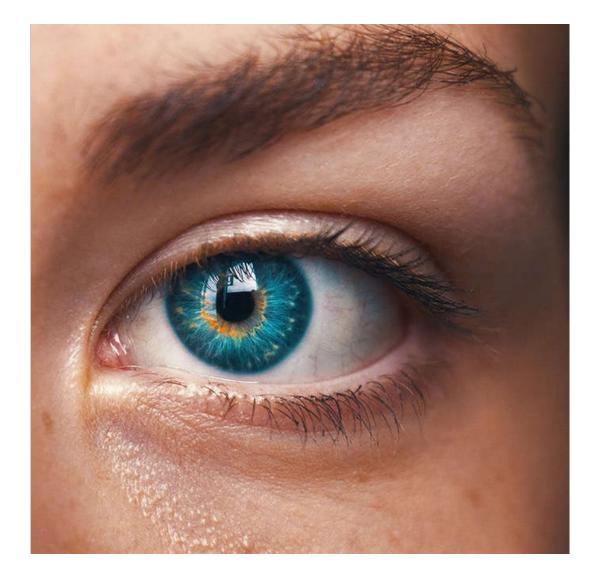


## Together for Healthier Lives in Europe

Morning Health Talk

25 September 2020

Prague





# MORNING HEALTH TALKS **NETWORKING & BREAKFAST**

FOR FUTURE THINKING HEALTHCARE PROFESSIONALS





## **About EIT Health**

EIT Health is a vibrant community of some of the world's leading health innovators backed by the European Union.

Working across borders, we harness the brightest minds from business, research, education and healthcare delivery to answer some of Europe's biggest health challenges.





## The challenge

#### Europe is facing a turning point in healthcare.



A growing ageing population



An increase in infectious diseases, pandemic threats and antimicrobial resistance



Chronic diseases are the leading cause of mortality and morbidity in Europe<sup>1</sup>



Rising costs of healthcare delivery alongside spending constraints



Social and healthcare systems are typically slow to change and adapt

Based on current trends, the cost of healthcare is expected to double by 2050.<sup>2</sup>



## **Our approach**

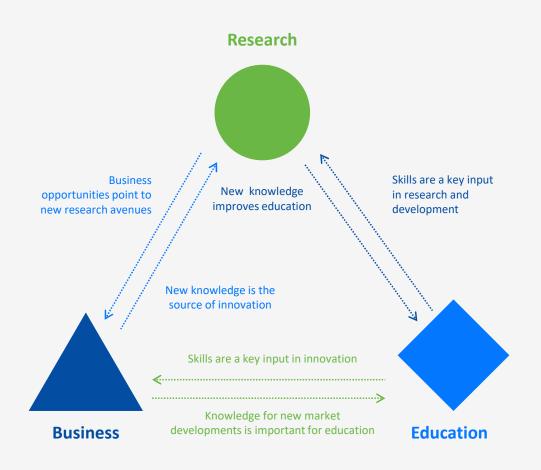
We identify unmet needs and initiate innovation to solve Europe's biggest health challenges today, and in the future.

Our community includes approximately 150 world-class partner organisations, and works across borders to connect business, research and education.

We call this meeting point the 'knowledge triangle', where lifechanging innovation happens.

We create an environment where the brightest minds can explore new ideas, allowing a new type of healthcare to thrive for the benefit of citizens.

We empower a network of innovators to break down barriers, challenge convention and take action to put life-changing products and services into citizens' hands.









**Expertise from all areas** 

### **Classification of European countries by innovation capacity**



## **EIT Health supports cross-border** collaboration.

#### Six regional innovation hubs

Operate as strong clusters of relevant actors collaborating as a thriving ecosystem.

#### InnoStars

Headquartered in Budapest, EIT Health InnoStars spans several geographic regions in Hungary, Italy, Poland and Portugal.

#### **EIT Health Regional Innovation Scheme (RIS)**

14 EIT Health Hubs in 13 countries to close the gap between regions that are healthcare innovation leaders and those with more moderate innovation.

#### **Beyond Europe**

Further hubs in the United States and Israel, connect innovators across Europe to other key thriving ecosystems beyond the EU.



Innovation Leader

Moderate Innovator Modest Innovator

Strong Innovator





## **Our programmes: Accelerator, Campus and Innovation**



## Accelerator

A catalyst to business growth to deliver transformative products and services.

Shortens the time-to-market for entrepreneurs, start-ups and SMEs, while creating new jobs and contributing to a thriving health economy.



#### Campus

Bridges the gap between academia and enterprise to upskill professionals on new innovative techniques, providing the practical knowledge and inspiration to deliver future innovation.

Engages learners across society, from citizens to established healthcare professionals.



## Innovation

Connects bold approaches to the people who can make them a reality by turning them into a commercially-viable product or service.

Builds a task force of world-class experts from business, research and education.



## **EIT Health's Impact**





EIT Health is supported by the EIT, a body of the European Union

## EIT Health impact in 4 years: 2016 - 2019





## **Innovation in action**

Better@Home is harnessing telemedicine to provide at-home care and ease hospital pressure

Hospitals are facing huge pressures with growing multi-morbidity and chronic disease in people across Europe.

Meanwhile, the number of hospital stays is increasing and there is urgent need to find a cost-effective alternative to ensure the quality of care for all, while enabling healthcare professionals to give more time to emergencies.

## Cutting hospital costs, relieving hospital pressures and enhancing patient care.

Better@Home provides an integrated solution that uses technology to improve the care of patients hospitalised at home. Patients will be monitored using devices that measure their vital signs and report back to a healthcare professional who will follow up with the patient remotely.

Better@Home will be able to monitor and treat a variety of conditions that require hospitalisation, from chronic obstructive pulmonary disease (COPD), to pneumonia, infections and heart failure. EIT Health brought together five key partners from the worlds of education, research and healthcare delivery to enable Better@Home to come to life.

3

Better@Home will be developed and implemented at the Hospital Infanta Leonor in Madrid, joining together all the vital pieces of the jigsaw to make this pioneering innovation a reality.





## **Regional Innovation Scheme**



EIT Health's RIS programme started in 2017 with the following goals



**KNOWLEDGE TRANSFER** 

Integrate countries that have moderate or modest innovation performances according to the European Innovation Scoreboard (RIS eligible countries) into EIT Health activities.



Ensuring knowledge transfer towards EIT Health RIS regions to **promote entrepreneurship and innovation**.



EitHealth



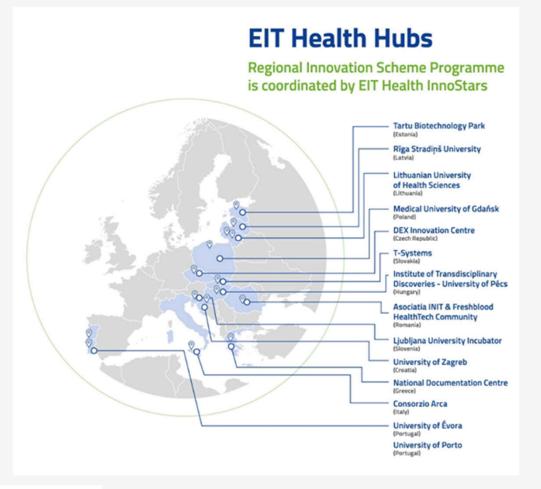
**ECOSYSTEM DEVELOPMENT** 

Provide comprehensive support and mentoring services for RIS regions to **enhancing innovation capacity** by mobilizing local KTI actors, working out joint development strategies and implement joint local innovation projects.



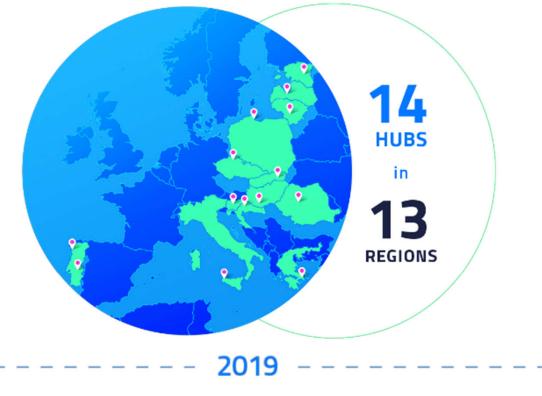
## There is a strong need for bridge function







## GATEWAY TO UNTAPPED POTENTIAL



# 12

consortia

supported

new healthcare

50

accelerated

start-ups

900

innovators

equipped in

new skills

over 100

workshops and trainings in regions

EitHealth



## **Top 15 selected projects**

## 1. LATVIA

AI driven IP intelligence engine for early stage drug discovery

## **2. LITHUANIA**

Patches for psoriasis treatment

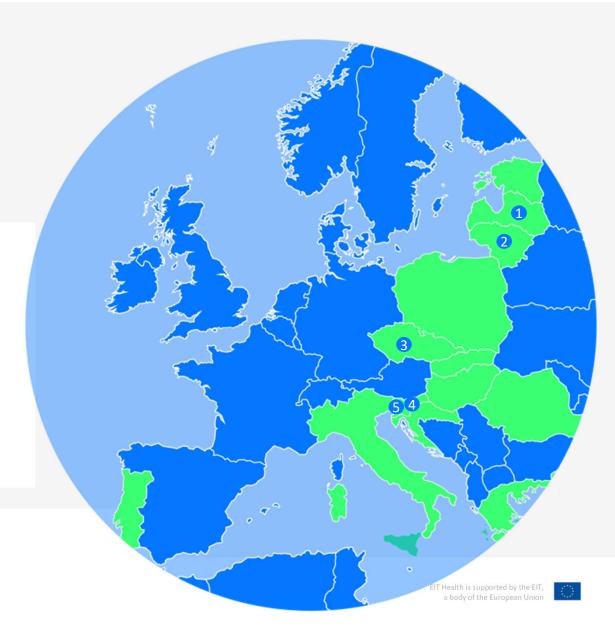
## **3. CZECH REPUBLIC**

HepaMATRIX - Active 3D cell culture system for primary hepatocytes

## 4-5. SLOVENIA

Strengthening intergenerational playing cards Remote therapy management in chronic heart failure patients







#### 6-7-8-9. ROMANIA

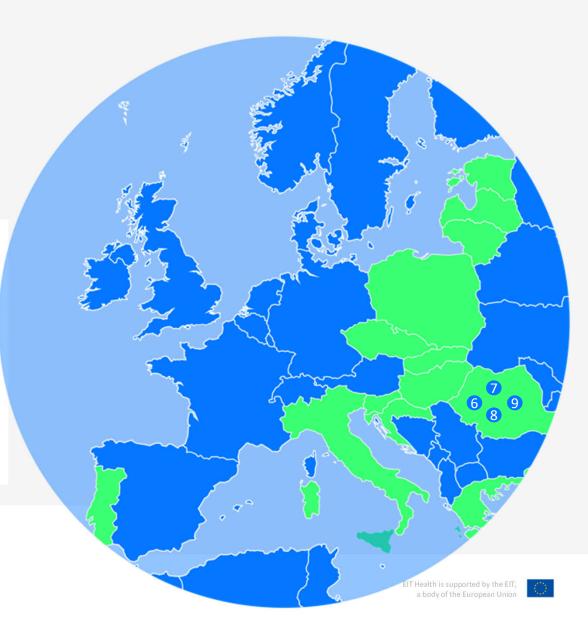
Diagnosis and follow-up system based on artificial intelligence algorithms and transthoracic ultrasound image analysis for diffuse lung diseases

TULLY - Wearable device for emotion monitoring and control for children diagnosed with ADHD (Attention-Deficit/Hyperactivity Disorder)

HEAL4LIV - Innovative robotic system for cancer treatment

Improvements of an existing 3D freehand ultrasound periodontal scanner prototype using bidimensional neural networks driven segmentation techniques







### **10. CROATIA**

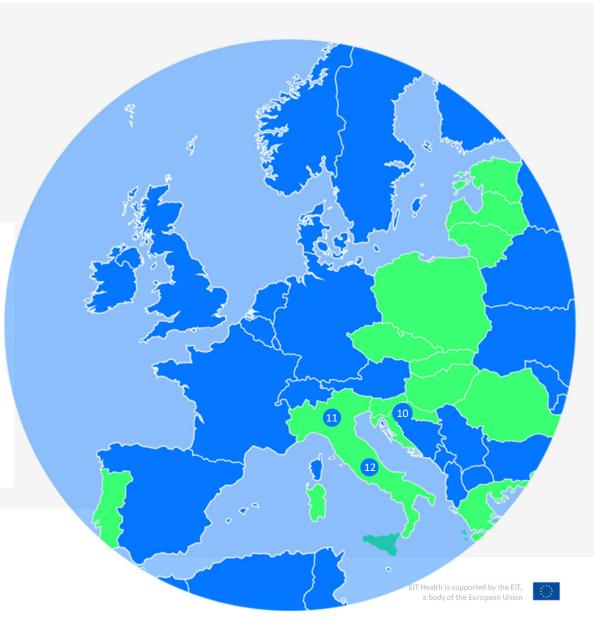
3D Virtual Navigation which integrates high resolution stereo depth camera with medical imaging systems with 'in the air' real control of surgeon's hands

### 11-12. ITALY

Big Data Software Services for Decision Support in Precision Medicine

FDG Dosimeter







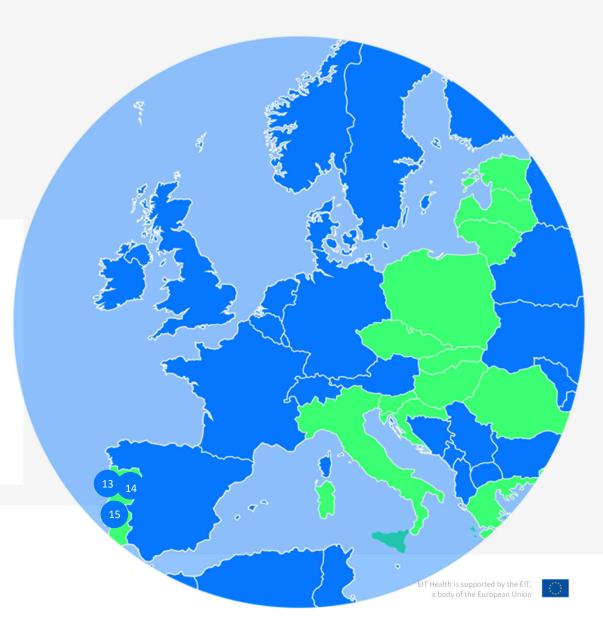
#### 13-14-15. PORTUGAL

Libra - digital platform for promoting and sustaining healthy behaviours in Obesity

FRADE - Pervasive platform for fall detection, fall risk assessment and prevention

Adherence to hypertension treatment and blood pressure self-monitoring using embedded smartphone camera and advanced image processing







## Thank you!

Ewa Guzek – EIT Health Innostars RIS Lead

ewa.guzek@eithealth.eu

