

# Making the case for smarter investing in health:

highlights of "Health at a Glance: Europe 2018"



Health spending accounts for **9.6% of GDP**



**Up to one-fifth of health spending is inefficient** and could be used for other care needs



**1 in 6 people has a mental health issue**



Low income households have **5 times higher unmet care needs** than high income

*Unnecessary admissions consume over **37 million hospital bed days** each year*

*Direct and indirect costs adding up to more than **4% of the GDP** (over EUR 600 billion)*

## PREVENTION REMAINS A PRIORITY

MORE THAN 790 000 DEATHS PER YEAR DUE TO BEHAVIOURAL RISK FACTORS



**20%** ADULT EU CITIZENS ARE SMOKERS



**38%** ADOLESCENTS REPORTED BINGE-DRINKING



**1 IN 6** ADULT EU CITIZENS ARE OBESE

# What challenges ahead ?

## 1. Unsustainable health and care costs



Increasing prevalence of chronic diseases and an ageing population

## 2. Role of environment on health



Lifestyle, pollutants, climate change

## 3. Increasing risks of infectious diseases



Resistance to antibiotics, (re)-emerging diseases

## 4. Health inequalities and access to health and care



Access to health promotion, prevention, treatment

## 5. Keeping a competitive European health and care industry

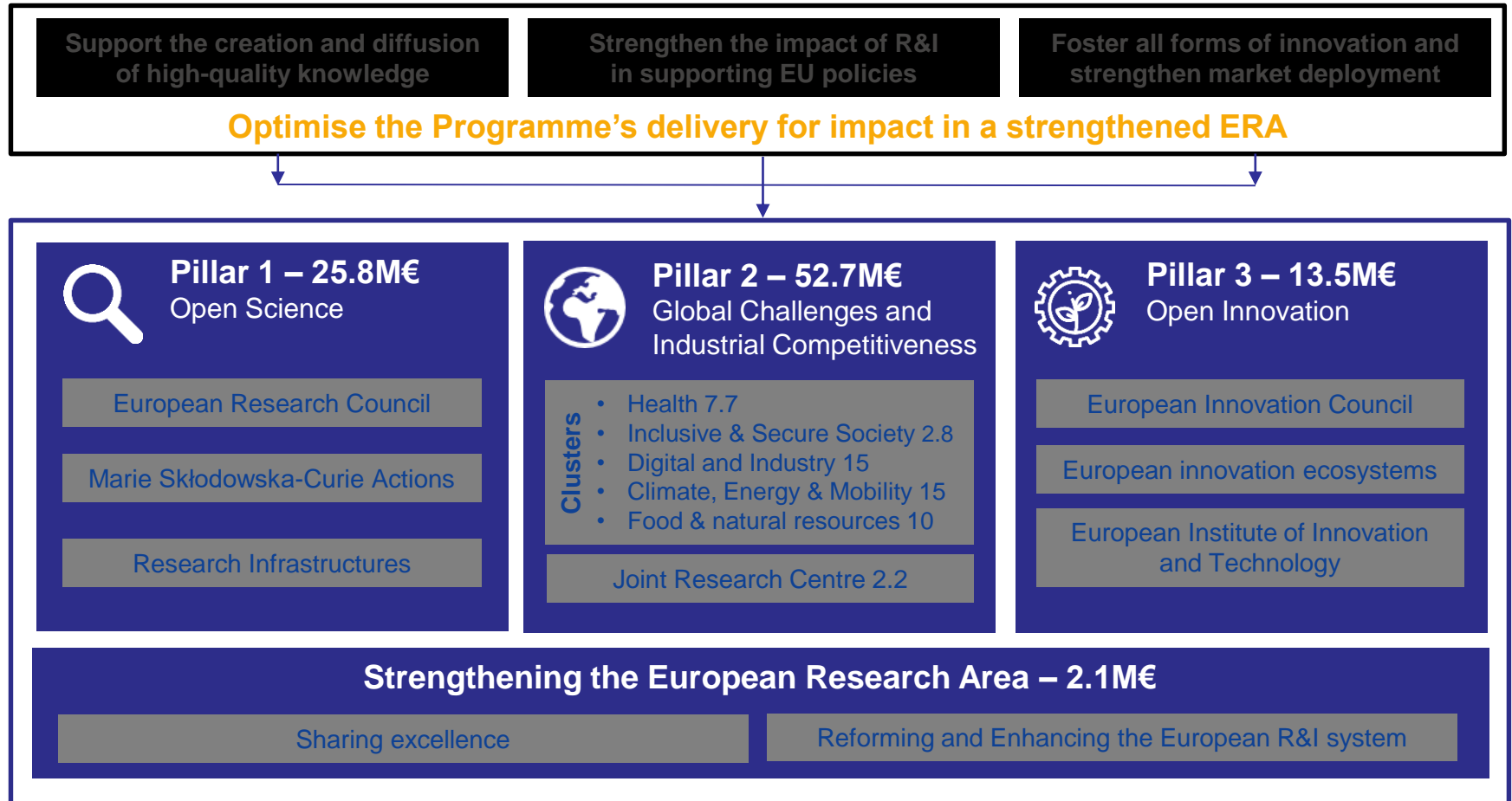


Keep Europe as the best innovator in healthcare area

- **Health care expenditure** of EU countries is steadily increasing and now accounts for nearly 10% of GDP, as a result of **increasing prevalence of chronic diseases** due to unhealthy lifestyles and an ageing population.
- Avoidable **environmental factors** cause 1.4 million deaths yearly in the EU.
- **Infections resistant to antimicrobials** (AMR) cause 25'000 deaths yearly in the EU and 700 000 deaths globally.
- **Life expectancy** in some EU countries is **six years lower than the average**.
- **EU healthcare industry** accounts for 3% of GDP and 1.5 million employees.

# Horizon Europe: evolution not revolution

## Specific objectives of the Programme



# Pillar 2 – Cluster Health

## Six main areas of intervention



Health throughout  
the Life Course



Environmental and Social  
Health Determinants



Non-communicable  
and Rare Diseases



Infectious diseases



Tools, Technologies  
and Digital Solutions  
for Health and Care



Health Care Systems



# Cross-cutting issues – impact (1/2)

- **Digitalisation and personalisation** of health and care cut across all intervention areas
- **Health economics and health systems** are key for uptake of results and achieving impact
- **Patient-centered solutions and technologies** for health and care call for integrated approaches from medicines to medical devices (supported in Horizon 2020 under the pillar ‘Leadership in Enabling and Industrial Technologies’)

# Cross-cutting issues – impact (2/2)

## ➤ Synergies between other EU programmes

## ➤ Limitations for EU-level actions:

↪ **EU R&I actions only if EU added value (subsidiarity principle):** EU R&I policy and funding shall not replace but complement national R&I policy funding

↪ **EU health actions only on cross-border issues:** EU member states are fully in charge of public health and care policy, including the underlying health and care systems

## ➤ Partnerships & Missions: since EU funding is only a fraction of investments in European health research (around 10% of total public funding)

European Social Fund Plus (ESF+)

European Regional Development Fund (ERDF)

Horizon Europe  
(EU research programme)

Digital Europe Programme

InvestEU Fund

Emergency Aid Rescue (rescEU)




European  
Commission

# Personalised Medicine approaches

from scientific potential to innovative solutions

**PERSONALISED MEDICINE**  
tailor-made prevention, diagnosis and treatment  
for individuals or groups of individuals


**Enabling**  
HEALTHIER, MORE PRODUCTIVE LIVES



**+** Significant EU investments in research on personalised medicine to

**TREAT PATIENTS WITH THE THERAPIES THAT WORK BEST FOR THEM**  
many common medicines are not effective for many patients

**CUT HEALTHCARE COSTS**  
as Europe's population ages and chronic diseases become more prevalent



**DRIVE HEALTHCARE INNOVATION**  
Establish Europe as a global leader in healthcare industry and innovation, and create jobs and economic growth

**AVOID ADVERSE REACTIONS TO MEDICINES**  
6% of acute hospital admissions are due to serious adverse reactions to medicines

## EU research funding for PM (since 2010)

- **FP7:** 209 projects (2756 participants) - EUR 1.334 billion plus EUR 380 million for 31 projects under IMI1
- **Horizon 2020:** 163 projects – EUR 870 million

# Promoting international cooperation on PM within Europe (and beyond)


- 2008: International Cancer Genome Consortium (ICGC)
- 2010: International Human Epigenome Consortium (IHEC)
- **2010: First European PM workshop** by EC (towards a funding strategy for PM approaches)
- 2011: launch of the International Rare Diseases Research Consortium (IRDiRC), **1<sup>st</sup> European PM Conference**
- **2015: EU Council Conclusions on Personalised Medicine**
- **2016: launch of ICPeMed: 28 countries and 4 regions, 11 Health Ministries, 6 Science and Education Ministries**
- 2017: ICPeMed Action Plan
- 2018: launch of **Regions4PerMed** and **SAPHIRE**



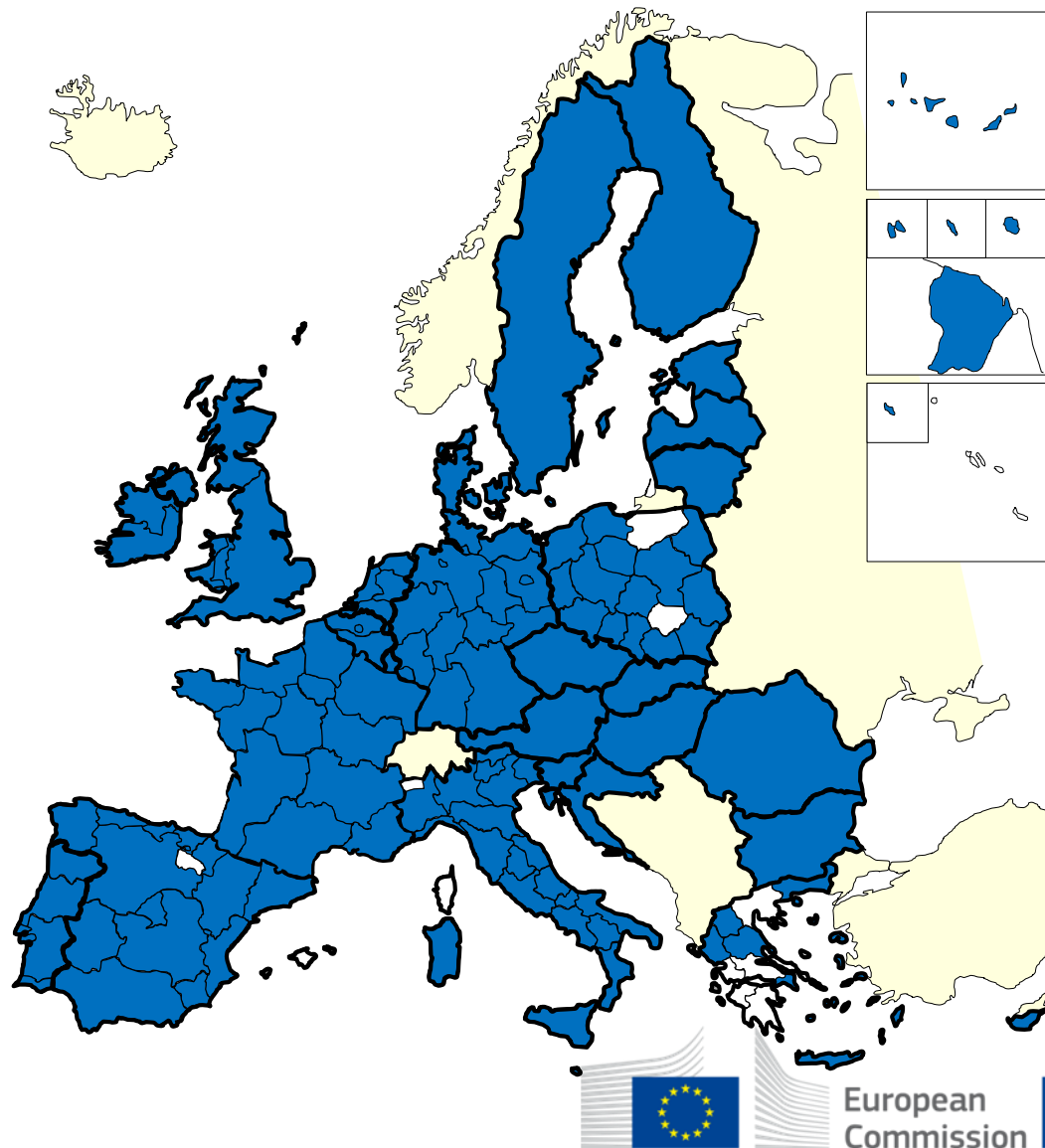
# Mapping regional Health R&I priorities

## Region's R&I Smart Specialisation Strategies (RIS3)

**134 RIS3** out of the 145 analysed **include Health R&I** as one of their priorities



 No Health R&I priority in the RIS3

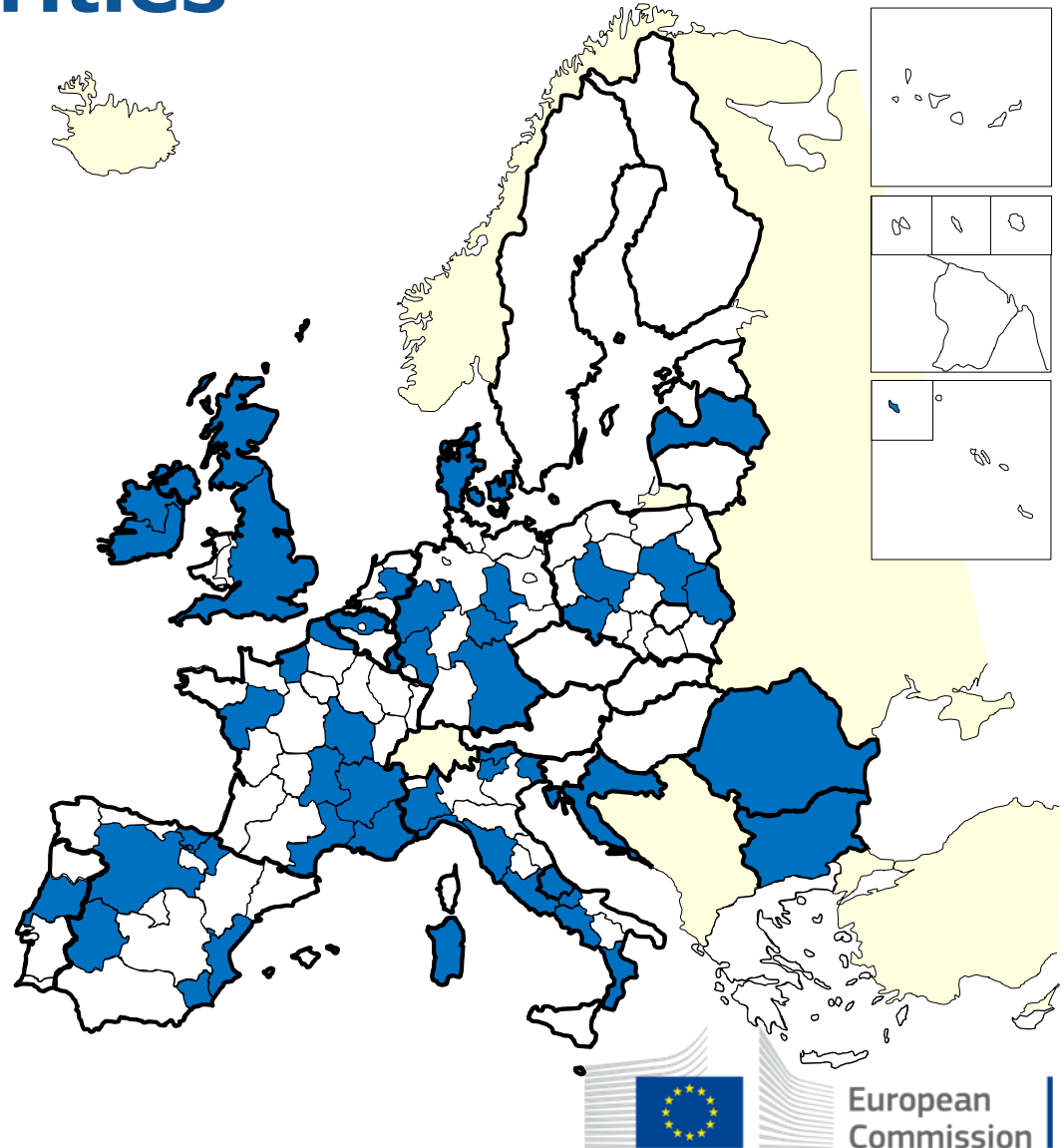
 Health R&I priority in the RIS3



# Personalised Medicine in the RIS3 priorities

**51 RIS3** out of the 145 analysed, **explicitly prioritise Personalised Medicine (35%)**

-  No Personalised Medicine priority in the RIS3
-  Personalised/stratified/precision Medicine priority in the RIS3



# Actions to support inter-regional cooperation in the area of Health R&I

- **Mapping of regions'** Health R&I priorities (RIS3) and dedicated workshop organised by EC/DG-RTD in May 2017
- **Partnering of regions** in the **IC PerMed** initiative ([www.icpermed.eu](http://www.icpermed.eu))
- Establishing of **24 European Reference Networks (ERNs)**  
→ virtual networks of specialist healthcare providers helping patients with rare or complex diseases
- **Thematic Partnerships** under the Smart Specialisation Platform for Industrial Modernisation (2 out of 16 are on health)
  - Medical technologies (created in 2017)
  - **Personalised Medicine (created in 2018)**  
→ To align complementary assets, infrastructures and work to integrate value chains across different technology sectors for PM. It will bring the agenda to implement PM to the next level.
- Horizon2020-funded support actions for regions with interest in the area of personalised medicine: **SAPHIRE** and **REGIONS4PERMED.**

# Support of Regional contribution to the International Consortium for PM (1/2)

**Two Coordination and Support Action projects** to establish and support networking between regions and to foster interregional cooperation in different European countries\*

**SAPHIRE** (3 years; 4 beneficiaries – BE, DE, NL, UK; M€ 1,78)

Title: **Securing Adoption of Personalised Health in Regions**

Aims:

- To establish an inclusive **network**, including a broad range of stakeholders and integrating remote or sparsely populated regions
- To **map activities**, identify **regional needs** in line with smart specialisation strategies
- To **support interregional collaborations** and **identify opportunities for funding**

\*Grant Agreements under preparation (Oct. 2019)

# Support of Regional contribution to the International Consortium for PM (2/2)

**REGIONS4PERMED** (4 years; 6 beneficiaries – IT (2), DE, ES, PL; M€ 1,68)

Title: **Interregional Coordination for a Fast and Deep Uptake of Personalised Health**

Aims:

- To **promote personalised prevention** in healthcare
- To support cooperation and coordination to **tackle fragmentation**
- To create a participatory approach; **build trust**; enable a multi-stakeholder process; **channel investments towards personalised health**
- To help **coordinating** regional policies and innovation programmes
- To support **synergies** between H2020 and ESIF.



# Other areas/activities where regional cooperation is sought

- **TO-REACH:** towards a partnership on health systems research involving public health authorities
- **EJP-RD:** European Reference Networks
- **Digitalisation of health and care:**
  - **Health R&I Cloud (as part of EOSC)**
  - **1M genome declaration**
  - **electronic health records**

→ common issues: health data infrastructures, standards, protocols (sharing, interoperability, GDPR), empowering citizens (health promotion), health systems capacity (fiscal sustainability: do more and better at lower costs)



# Thank you!

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<http://ec.europa.eu/horizon-europe>