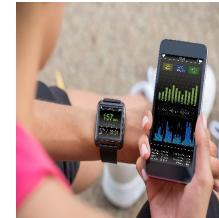


European Partnership on Health Innovation

Cross-sector collaboration to maintain Europe at the forefront of medical innovation for the benefit of European citizens and healthcare systems



Important Disclaimer:

The purpose of this document is to present the status of discussions between 5 health industry associations. The content should not be considered as final or pre-emptive of final legislative decision about future public private partnerships under Horizon Europe.

The Health Innovation PPP directly connects to EU political agenda

- **Horizon Europe, including SDGs**
- **Industrial Strategy** – we aim to support health sectors competitiveness
- **Digital Health Strategy and Smart Health** – we aim to support **European Health Data Space** and make Europe an attractive environment for health research and development investments
- **Antimicrobial resistance** – we aim to provide industry input, including combinations of solutions, to effectively prevent and address AMR
- **Cancer mission** – we aim to implement actions which, by combining 5D (diagnostic, device, data, drugs, delivery), will support development and deployment of effective solutions to defeat cancer alongside other EU funding instruments.
- **1 million genomes genomes initiative** – we wish to contribute to the MEGA goal, including setting up rules of engagement aligned with responsible research and innovation principles
- **Europe's Environmental/Climate Change agenda** – we aim to address the challenges of the environmental footprint, including green manufacturing

How could it work?

Multiple companies join force and

With input from key stakeholders, identify **challenges** that hold progress

Combine (often) **proprietary knowledge, data and assets**

Open them up for challenge by and **collaboration with public partners**

Validate proposed solutions during project lifetime in R&D practice



**TOOLS
METHODOLOGIES**



**DATA
STANDARDS**

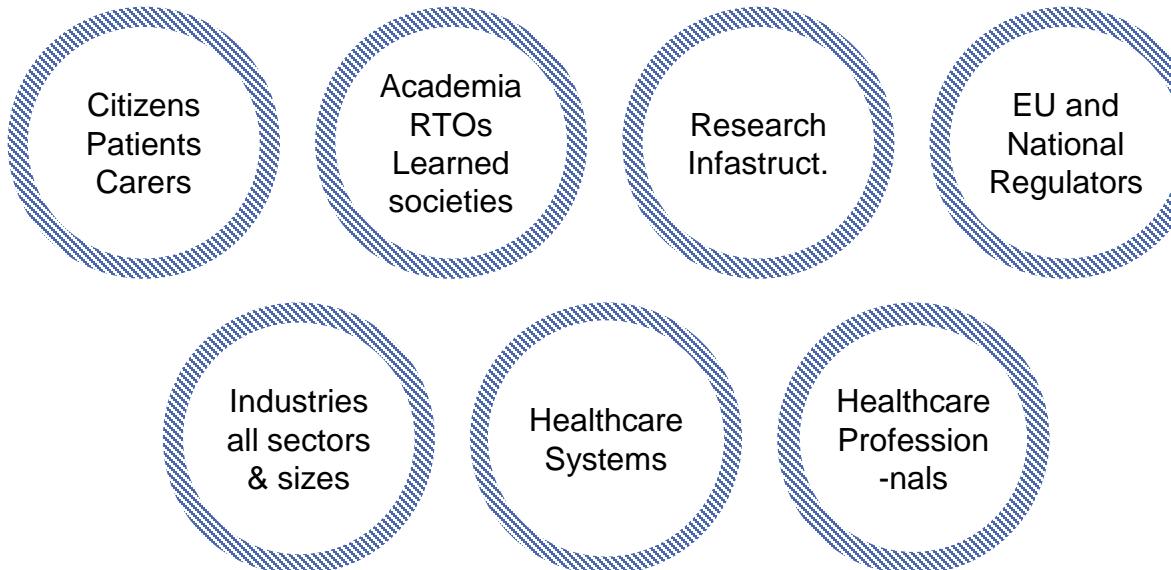


INFRASTRUCTURES



**DEMONSTRATORS
ACCELERATORS**

PUBLIC PRIVATE PARTNERSHIP = CHALLENGES ARE DEFINED AND AND SOLUTIONS ADDRESSED WITH INPUT FROM ALL STAKEHOLDERS



What if we could help kids and adults with resistant asthma (50% of affected patients) to live normal lives?



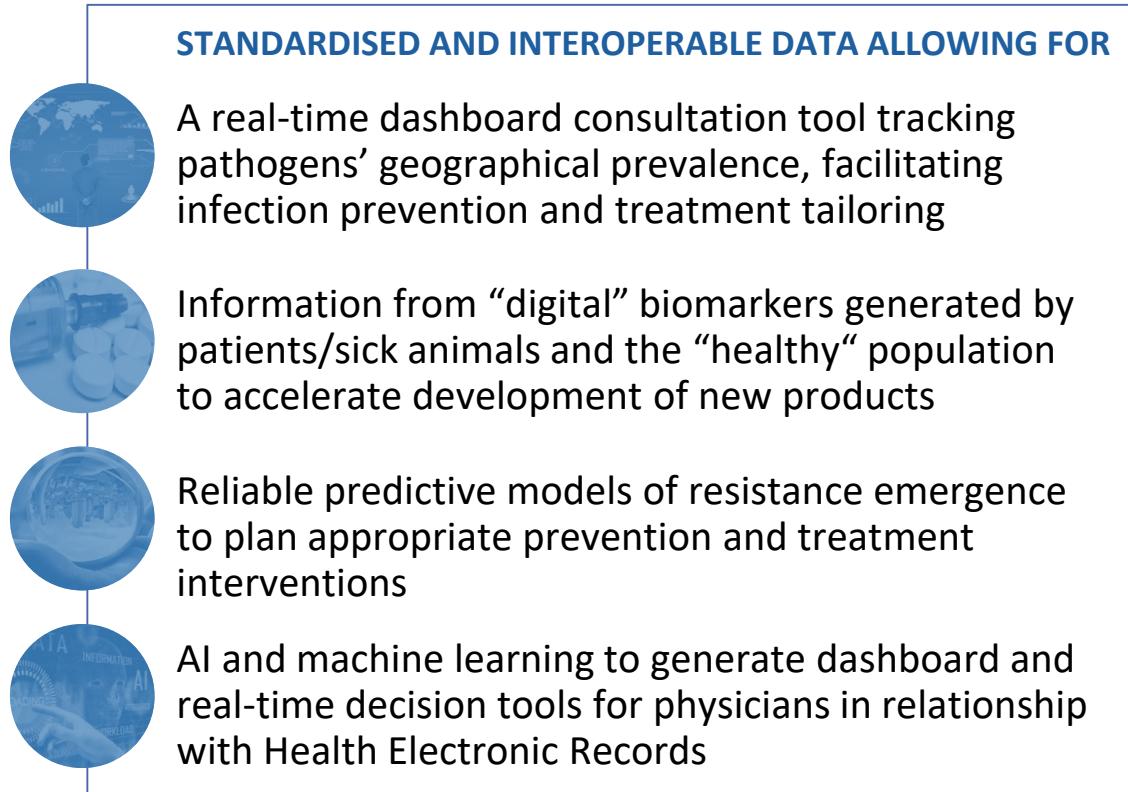
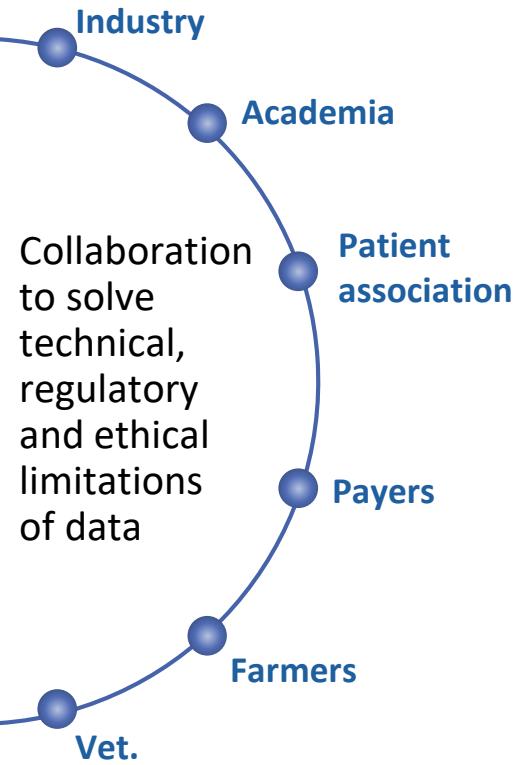
The challenge

- 30 million people in Europe suffer from Asthma and are subject to a life time treatment.
- 60% do not or do poorly responds to standard steroid treatments.
- About 4% with severe asthma do not respond at all

Prospectively combining technologies, data, products and services to:

- Understand and address resistance
- Offer the most effective combinations of tools that helps effectively (self-) manage asthma by kids and adults

Big Data and advanced analytics/AI to enable effective AMR prevention, intervention and prediction



Self-management of prostate cancer

To reduce overdiagnosis and overtreatment of indolent, in-time diagnostic of aggressive disease

An individualised decision support system tool

Web-based dashboard for personalised risk assessment

To equip patient with comprehensive information to make choice and do self management

Supports in therapy selection and monitoring of indolent disease

Combined with balanced information on the disease and lifestyle

Connected apps/devices to share data with physician

Similar project can be applied to psychiatry: for unaffected individuals to avoid becoming patients and for patients who may accelerate their recovery or improve disease control

Patient-centric, integrated solutions along the care continuum for obesity

Health living/prevention

Solutions to manage health status and comorbidities of pre-obese, combining devices, health IT, etc



Ambulatory care/ In patient care

Solutions to optimise care pathway, combining pharma, surgery and service



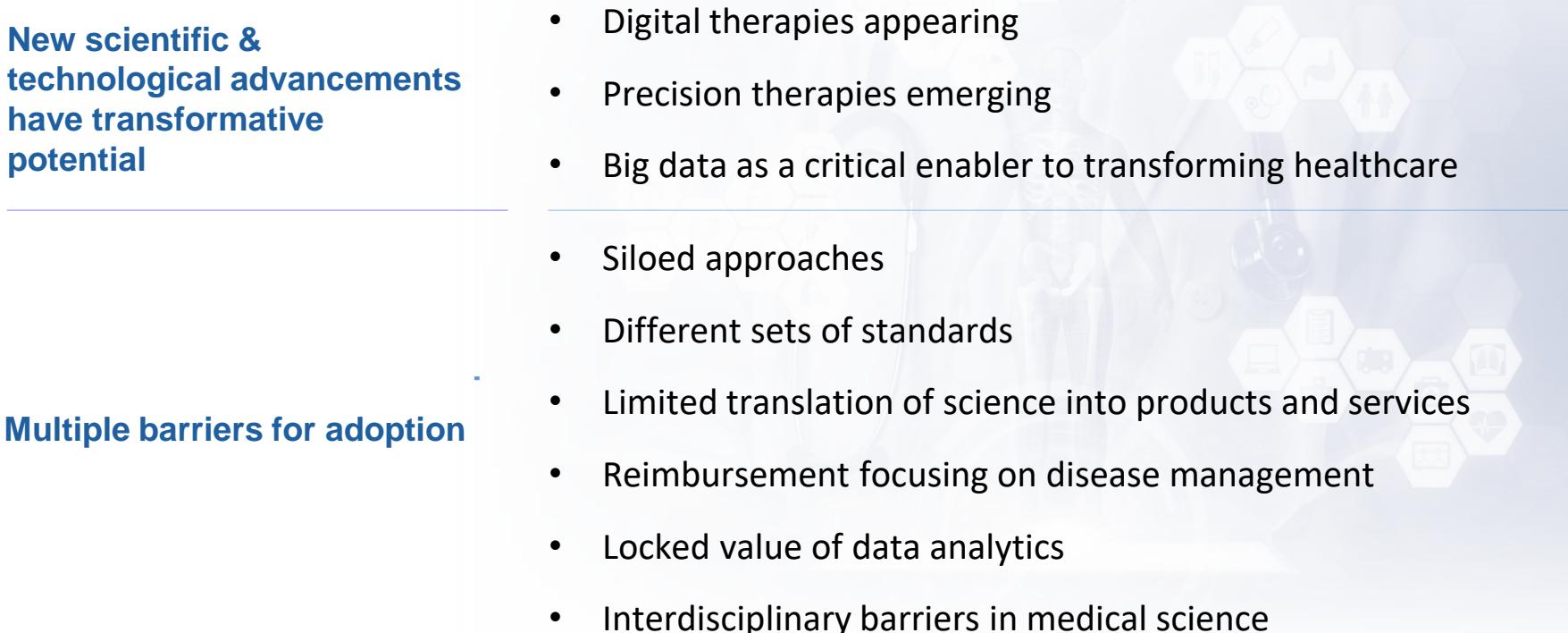
Home long term care

Solutions to manage adherence and obesity comorbidities, combining health IT, service, device and pharma



Biology promise and technology innovation has yet to gain more traction

New scientific & technological advancements have transformative potential

- Digital therapies appearing
 - Precision therapies emerging
 - Big data as a critical enabler to transforming healthcare
- 

Multiple barriers for adoption

- Siloed approaches
 - Different sets of standards
 - Limited translation of science into products and services
 - Reimbursement focusing on disease management
 - Locked value of data analytics
 - Interdisciplinary barriers in medical science
-

In response to this, we propose the cross-sector European health PPP

The PPP is a **unique** initiative

- **Push boundaries of the pre-competitive** space: mobilise and combine expertise across pharma, biologic, med tech and health IT
- **Pioneer paradigm changes** and cross-sector innovation
- **Strengthen translational research ecosystem** in Europe

The PPP will help achieve the goal through integration of

- **technologies and know-how**
- **products and services**
- clinical, community, social and informal **care workflows**
- **business models and convergence of frameworks**



Five areas of action for more health, healthcare sustainability and Europe's competitiveness

Goal:

Fast delivery of the most pertinent and safe innovative solutions to prevent, diagnose, treat and manage non-communicable and infectious diseases, while preserving the sustainability of the healthcare systems and competitiveness of health industry

- 1 Harness advances in and synergies in genetics, biology and technology innovations for less invasive, more precise and effective prevention, diagnosis, treatment and care
- 2 Develop patient-centric integrated care solutions along the healthcare continuum
- 3 Combine Big Data with advanced analytics/AI to enable R&D and products and services to support integrated healthcare approach
- 4 Engaging citizens and patients to manage and improve their health
- 5 Reinforce value initiatives to guide investment and rewarding of innovation in health and social care

Area of action 1: Harness advances in and synergies in genetics, biology and technology innovations for less invasive, more precise and effective prevention & diagnosis, treatment and care

Scope	To develop earlier, faster and more precise medicines, diagnostics, disease understanding, biomarkers, and health promotion for disease prevention, interception and management
Potential outputs/ deliverables	<ul style="list-style-type: none">• Increasing our understanding of human disease biology• Creating new tools and technologies for personalised and precise prevention and treatments• Developing novel treatment paradigms for non-communicable diseases• Better prepare for infectious disease outbreaks
Expected impact	Accelerating the implementation of healthcare innovation, allowing for early interception of disease, delivering new precision and personalised care while balancing and optimising healthcare expenditures

Area of action 2: patient-centric, integrated care solutions along the entire healthcare continuum

Scope

To understand how to achieve an effective continuum of care, by combining and strengthening existing solutions, leveraging real world evidence and centring solutions around the patient

Potential outputs/ deliverables

- Development pathways for the combination of products and integrated solutions for diseases
 - Integrated solutions to support more efficient operational and workflow
 - Integrated medical and non-medical solutions for improved patient outcomes
 - Setting up the environment, infrastructure and standards for integration
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Expected impact

Breaking silos, providing holistic, patient-centred continuous care, promoting health and well-being and improving health system efficiency

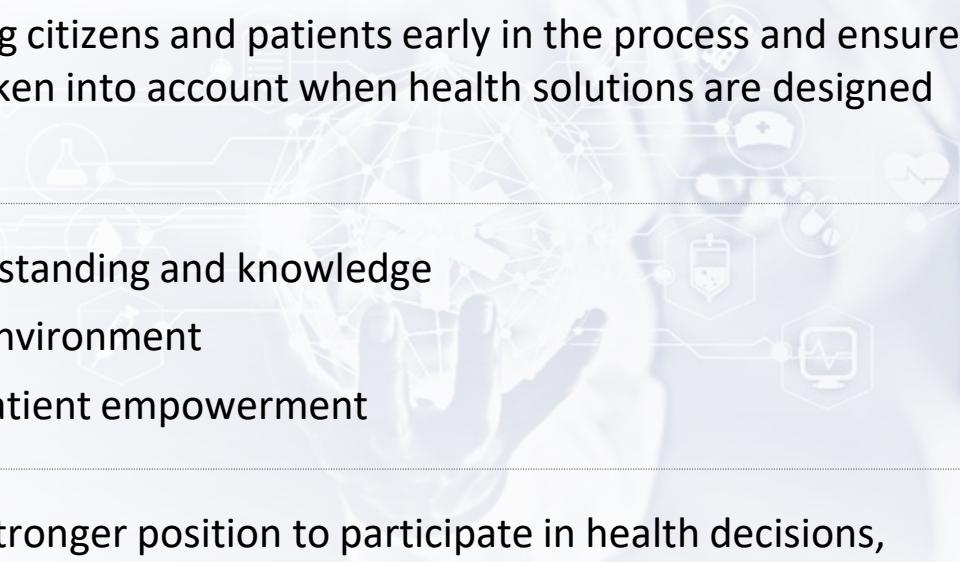
Area of action 3: Apply Big Data and advanced analytics/AI to enable R&D and new products and services to support integrated healthcare approach

Scope	To standardise health data, promote the pooling, integration and sharing of high-quality, harmonised, interoperable data that can be shared and develop new business models and incentives to encourage competitive offers
Potential outputs/ deliverables	<ul style="list-style-type: none">• A roadmap and implementation of data standards harmonisation• Development of auxiliary data tools and technics• Design an incentive system for buyers of health technologies to be compliant with data standards and quality• Deployment of the IT infrastructure necessary within healthcare for AI and machine learning
Expected impact	Unlocking the value of data, promoting Europe's leadership in the digital space, and enabling personalised interventions, optimisation of research/development, manufacturing and go-to-market processes

Area of action 4: engage citizens and patients to manage and improve their health

Scope

To concentrate on involving citizens and patients early in the process and ensure that patients' needs are taken into account when health solutions are designed and evaluated



Potential outputs/ deliverables

- Raising patients' understanding and knowledge
 - Building a facilitating environment
 - Building the case for patient empowerment
-

Expected impact

Empowered patients in a stronger position to participate in health decisions, ultimately leading to better patient outcomes and potential to generate healthcare cost savings

Area of action 5: reinforce value initiatives to guide investments and rewarding of innovation and health and social care

Scope

To define value for individual and integrated tools and services and demonstrate how this can help health and social care decision-making to become more effective, accessible and resilient

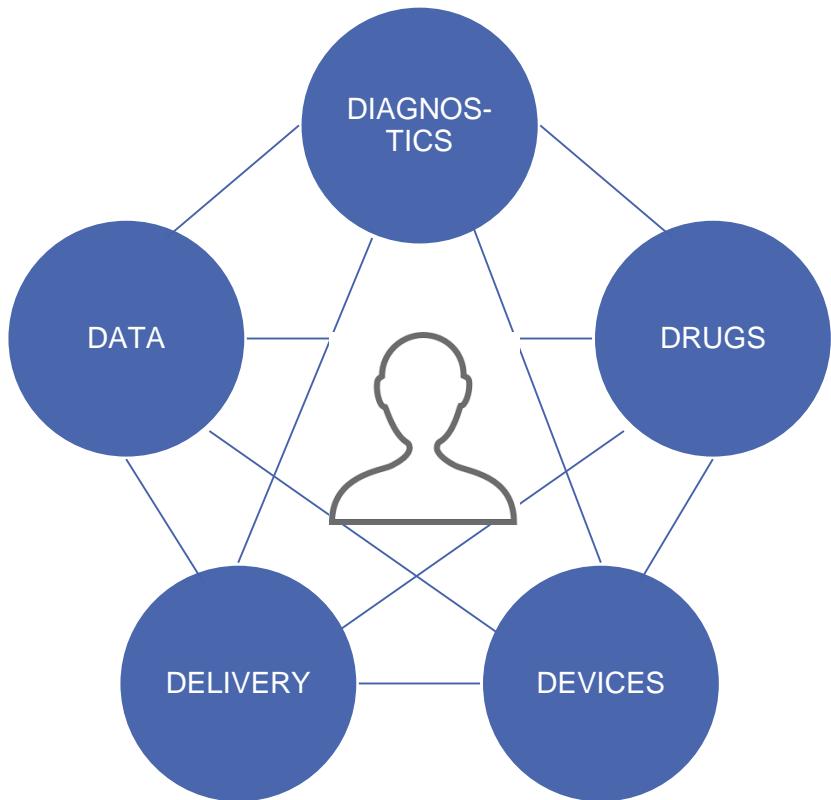
Potential outputs/ deliverables

- Developing a harmonised definition of value for products, services and their combinations
 - Developing tools and methodologies for value-based assessment, procurement and financing
 - Facilitating the implementation of value-based decision-making
 - Establishing pilots for innovation financing to accelerate access
-

Expected impact

Optimising health and social care systems, accelerating the change to value driven decision making and improved access to innovation for EU citizens; nurturing new business models that support growth

5D for research and health paradigm shift



From disease-care to **health-care** and **learning healthcare systems**:

- **Patient/citizen**, not product, at the centre throughout continuum of care
- **Earlier intervention**: prevention, interception, avoidance of complications
- From volume to **value and impact**