

Research and Innovation



THE EU RESEARCH & INNOVATION PROGRAMME

2021 - 2027

Cluster 1 Health



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HORIZON EUROPE (2021-2027)

EURATOM



* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme



Horizon Europe – Cluster 1 - Health

Six "Destinations":

- 1. Staying healthy in a rapidly changing society
- 2. Living and working in a health-promoting environment
- 3. Tackling diseases & reducing disease burden
- 4. Ensuring access to innovative, sustainable & high-quality Healthcare
- 5. Unlocking the full potential of new tools, technologies and digital solutions for a healthy society
- 6. Maintaining an innovative, sustainable & globally competitive health industry



Impact pathways



Horizon Europe – Cluster 1 ,Health'

Strategic Plan 2021-24 (link) → 6 Expected Impacts Work Programme 2021-22 (link)

6 "Destinations"

- 1. Staying healthy in a rapidly changing society
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Topics (Calls)

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Focus on outcomes contributing to the impacts specified per Destination

Project proposals should

- make a clear case (value proposition)
- supported by a convincing trajectory (pathway to impact) for the project proposal to deliver the output, promote the outcome described in the topic, and contribute to the impact expected under that destination.



Horizon Europe – Cluster 1 ,Health'

Examples for Pathways-to-Impact (simplified)

Output

e.g.

- Knowledge and understanding of health and diseases
- Methodological and technological solutions to address health and diseases
- Know-how and capabilities for designing, developing and implementing health technologies and services, including sustainable processes for producing safe and effective tools and health technologies
- Evidences and recommendations for health policy, regulation and clinical practice

Outcome

e.g.

- **Citizens** are encouraged to make evidence-based life style choices and empowered to control and manage their own health
- Health care workers apply new evidences, health technologies and health care approaches that are more effective, accessible and sustainable
- Health care providers make full use of health data using data-driven decision support systems for people-centered services
- **Policy-makers and regulators** use new evidences, tools and guidelines for informed public health policies and actions
- **Researchers and developers** of medical interventions understand predisposing factors for health disorders and diseases, and the transition from health to illness

Impact

e.g.

- **Citizens** of all ages stay healthy and independent in a rapidly changing society
- Health care providers are able to better tackle and manage diseases and reduce the disease burden on patients effectively
- Health care systems provide equal access to innovative, sustainable and high-quality health care
- EU health industry is innovative, sustainable and globally competitive
- Living and working environments are health-promoting and sustainable



WP 2022 – Info Day – 28 October 2021

https://ec.europa.eu/info/research-and-innovation/events/upcoming-events/horizon-europe-info-days/cluster-1_en

Welcome / clinical studies / Gender equality: <u>https://www.youtube.com/watch?v=QIOXaFAjmXQ</u>

Dest 1: https://www.youtube.com/watch?v=QdrCkDvr9Eg

Dest 2: https://www.youtube.com/watch?v=fpfhwdDkLB0

Dest 3: https://www.youtube.com/watch?v=iKUDo8la5El

Dest 4: <u>https://www.youtube.com/watch?v=7Jz6D0aXObo</u>

Dest 5: <u>https://www.youtube.com/watch?v=U6C6GEjYdek</u>

Dest 6: <u>https://www.youtube.com/watch?v=xHb-5awmeyk</u>



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Destination 1: Staying healthy in a rapidly changing society



Disclaimer: information not legally binding



Destination 1: Staying healthy in a rapidly changing society

Citizens of all ages stay healthy and independent in a rapidly changing society thanks to healthier lifestyles and behaviours, healthier diets, healthier environments, improved evidence-based health policies, and more effective solutions for health promotion and disease prevention.

- Key Strategic Orientation: 'Creating a more resilient, inclusive and democratic European society'
- Impact areas:
 - Good health and high-quality accessible health care
 - High quality digital services for all
 - $\circ~$ Sustainable food systems from farm to fork on land and sea
 - Climate change mitigation and adaptation





Destination 1: Expected impacts

- **Citizens adopt healthier lifestyles and behaviours**, make healthier choices and maintain longer a healthy, independent and active life with a reduced disease burden, including at old ages or in other vulnerable stages of life.
- **Citizens** are able and **empowered** to manage better their own physical and mental health and well-being, monitor their health, and interact with their doctors and health care providers.
- **Citizens' trust in knowledge-based health interventions and in guidance from health authorities is strengthened**, including through improved health literacy (including at young ages), resulting in increased engagement in and adherence to effective strategies for health promotion, diseases prevention and treatment, including increased vaccination rates and patient safety.
- Health policies and actions for health promotion and disease prevention are knowledgebased, people-centred and thus targeted to citizens' needs, and designed to reduce health inequalities.



Destination 1: Topics in 2022

- HORIZON-HLTH-2022-STAYHLTH-01-01: Boosting mental health in Europe in times of change
- Closure: 1.2.2022 1st stage
- Instrument: RIA
- Tot: 50M€
- Project size: 7M€

 HORIZON-HLTH-2022-STAYHLTH-01-05: Prevention of obesity throughout the life course

- Closure: 1.02.2022 1st stage
- Instrument: RIA
- Tot: 60M€
- Project size: 10M€

- HORIZON-HLTH-2022-STAYHLTH-01-04: Trustworthy AI tools to predict the risk of chronic non-communicable diseases and/or their progression
- Closure: 1.2.2022 1st stage
- Instrument: RIA
- Tot: 60M€
- Project size: 6M€

• HORIZON-HLTH-2022-STAYHLTH-02-01: Personalised blueprint of chronic inflammation in health-to-disease transition

- Closure: 21.4.2022 Single stage
- Tot: 50M€
- Project size: 7M€



Boosting mental health in Europe in times of change

Expected outcome (contributing to all of the following elements)

- Health care professionals, national/regional public authorities and other relevant actors:
 - Have access to and apply new strategies and interventions for the promotion of mental health and the prevention of mental ill health, with focus on vulnerable populations;
 - Adopt clinical guidelines, practices, strategies and policy recommendations to mitigate the mental health burden in a transforming Europe;
- The scientific community together with the public authorities anticipate new and emerging risks to mental health associated with a transforming Europe, contributing to better and inclusive public mental health preparedness.
- **Citizens** have access to and make use of new tools and services to take informed decisions about their wellbeing and mental health care needs (including for self-management and self-care).
- Citizens feel less stigmatised and marginalised due to their mental ill health.



Boosting mental health in Europe in times of change

Scope (address one or several of the following elements)

- Provide a comprehensive knowledge base of how a transforming Europe can influence mental health in a fast-evolving society, especially in the most vulnerable populations
- Develop and implement interventions, which promote wellbeing and prevent mental illness to help cope with and mitigate the stress of a changing society, including digitalisation, climate change and the impact of the COVID-19 pandemic.
- The interventions should target relevant settings (e.g. workplaces, schools) and the most vulnerable populations (e.g. children and adolescents, the elderly, people with pre-existing health conditions and socio-economic high-risk groups).
- Inform policy-makers and regulators on: i) the prevalence and burden of mental ill health related to a transforming European society (e.g. digital technologies, climate change, etc); and/or ii) the effects of a transforming European society (including transition to "green jobs") on occupational mental health; and/or iii) the (comparative) cost-effectiveness of interventions/policy choices.

Additional conditions

- Research should be multidisciplinary, including medical sciences, social sciences, the humanities, and the arts, if relevant. It is
 important to consider aspects such as (associated) behavioural patterns, stigma and novel social dynamics as well as
 different socioeconomic, cultural and geographical contexts.
- Proposals should involve end-users (including civil society organisations) and/or strategic partners in the design and during the course of the project. Possible end-users and strategic partners could include local or regional authorities, community services, employers, schools/universities, ...
- Propose ideas and foresee a budget for joint activities with other projects: to be finalised during the grant agreement preparation!

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European Partnerships





Lessons Learned

from Horizon 2020 Interim Evaluation



Support breakthrough innovation



Create more impact through missionorientation and citizens' involvement



Rationalise partnerships' landscape



Reinforce openness



Strengthen international cooperation



Extended association possibilities

Open science policy

European Innovation Council

EU Missions

New approach to partnerships

Key Novelties

in Horizon Europe



Encourage participation

Spreading Excellence



New approach to European Partnerships

New generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives

• Strategic orientation

Key Features

- Systemic approach
- Simple architecture and toolbox
- Common set of criteria for the life-cycle

CO-PROGRAMMED

Based on Memoranda of Understanding/contractual arrangements; implemented independently by the partners and by Horizon Europe

CO-FUNDED

Based on a joint programme agreed and implemented by partners; commitment of partners for financial and inkind contributions

INSTITUTIONALISED

Based on long-term dimension and need for high integration; partnerships based on Art 185/187 of TFEU and the EIT legal acts for 2021-2027



9 European Partnerships on Health

The Strategic Plan 2021-2024 identifies 49 European Partnerships (9 on health):

- public-public;
- public-private;
- global initiatives.

EC proposal for 2 institutionalised partnerships on health based on Art 185/187 (23 Feb 2021)

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nnovative Health Initiative
Global Health Partnership
ransformation of health systems
Chemicals risk assessment
RA for Health
Rare diseases
Dne-Health Anti Microbial Resistance
Personalised Medicine
Pandemic Preparedness



Newcomer

Partnership on pandemic preparedness Background

- Responds to request for better coordination, as expressed in the context of the **ERAvsCorona Action plan**
- Recommended in the scientific opinion on Improving pandemic preparedness and management by the Scientific Advice Mechanism (SAM)
- Partners (Member States and European Commission) should develop and agree on an aligned multi-annual agenda with common objectives for R&I actions in pandemic preparedness



Health Emergency Preparedness and Response Authority

HERA



EU Health Emergency Preparedness & Response Authority (HERA)

- **Mission**: Enable the EU and its MS to rapidly deploy the most advanced medical and other measures in the event of a health emergency
- Assembly of ecosystems of public and private capabilities
- This will be done by covering the whole value chain and by providing end-to-end solutions

Flexible and resourced financing & procurement capacities Knowledge generation: horizon scanning, market intelligence, foresight
Development: late stage research, innovation and development
Production: flexible and scalable manufacturing capacities
Deployment: EU level stockpiling and distribution
Use: training programmes

Pandemic preparedness partnership 3 objectives

> Improve EU's preparedness to prevent, predict and respond to epidemics / pandemics



Develop Strategic Research and Innovation Agenda (SRIA) on preparedness



Synergy with HERA and sustainability

Partnership development – tentative timeline





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Q / A time!



