HORIZON EUROPE (2021-2027) EU Research & Innovation Programme Investing to shape our future



Cluster 1 Health

Christina Kyriakopoulou, PhD Policy officer – Research Programmes People Directorate DG Research & Innovation

Greek Info Day, 14 July 2021



HORIZON EUROPE

Investing to shape our future

Impact oriented purpose driven

value proposition

intervention logic pathway to impact





ogframe

input-output-outcome-impact

impact funding

Horizon Europe (2021-2027)

Introduction – Rationale for a European Framework programme

Horizon Europe structure: constants & novelties

- Horizon Europe structure
- Strategic Plan
- The pathway to impact



The Health Cluster

The Health Cluster

The Health clusters and its 6 Destinations

Funding Opportunities for Health research in 2021

Partnerships in Horizon Europe and Health

The Cancer Mission

What is new in the submission process?

What is new in the evaluation process?



Horizon Europe Budget: €95.5 billion (2021-2027)

The ambitious EU research and innovation framework programme

(including €5.4 billion from NGEU – Next Generation Europe – programme of EU for Recovery from COVID-19 crisis)



fuel EU's scientific and technological excellence and the strengthen the European Research Area (ERA) tackle policy priorities, including green and digital transitions and Sustainable Development Goals

boost Europe's innovation uptake, competitiveness and jobs

Science & technology

Society

Economy



EU framework programmes proved powerful for research & innovation impact

€1.5 million

Collaborations from more than 150 countries 3X more often among top 1% cited publications

compared to output in Member States

€48.2 million

Directed to coronavirus R&I just seven days after the first EU case reported

84%

of investments address Sustainable Development Goals; **30% address** climate change

double

the proposals received per year compared to the previous programme **19%**

estimated labour productivity increase in funded companies **thanks to the programme***



While benefiting from world-class research and strong industries... Our knowledge and skills are our main resources



6% of the world's **population**

17% of global R&D

25% of all high-quality scientific publications

1.5% EU business **R&D investment**



EU figure is for 2019 Figures for USA, Japan, China and South Korea are for 2018. Figures represent R&D as % of GDP

> European Commission

...Europe can do better at transforming this into **leadership in innovation** and **entrepreneurship**

s: https://www.un.org/sustainabledevelopment/sustainable-development-goals/

Our Vision

The EU's key funding programme for research and innovation:

- Tackles climate change
- Helps to achieve the UN's Sustainable Development Goals
- Boosts the EU's competitiveness and growth
- Facilitates collaboration and strengthens the impact of research and innovation in developing, supporting and implementing EU policies while tackling global challenges
- Supports the creation and better diffusion of excellent knowledge and technologies
- Creates jobs, fully engages the EU's talent pool, boosts economic growth, promotes industrial competitiveness and optimises investment impact within a strengthened European Research Area.





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



HORIZON EUROPE

EURATOM



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



Pillar II Budget for clusters & for JRC

in current prices

Cluster 1	Health	€8.246 billion (including €1.35 billion from NGEU)
Cluster 2	Culture, Creativity & Inclusive Societies	€2.280 billion
Cluster 3	Civil Security for Society	€1.596 billion
Cluster 4	Digital, Industry & Space	€15.349 billion (including €1.35 billion from NGEU)
Cluster 5	Climate, Energy & Mobility	€15.123 billion (including €1.35 billion from NGEU)
Cluster 6	Food, Bioeconomy, Natural Resources, Agriculture & Environment	€8.952 billion
	JRC (non-nuclear direct actions)	€1.970 billion

Clusters are including a budget for Partnerships and Missions NGEU is Next Generation EU programme – Recovery Fund



Horizon Europe – funding modalities

- Grants to individual researchers/fellows, teams, infrastructures, innovators under Pillar 1 (ERC, MSCA) and Pillar 3 (EIC)
 → bottom-up open competition
- Grants to collaborative R&I projects (Pillar 2, incl. Cluster 1 'Health')
 → top-down open competition by multi/international consortia proposing projects on specific topics in response to calls for proposals
- Grants to contracting authorities/entities (Pillar 2, incl. Cluster 1 'Health')
 → for pre-commercial procurement of R&I services and procurement of innovative solutions
- Partnerships between R&I investors and funders (Pillar 2 and Pillar 3, incl. Cluster 1 'Health')
- Missions driven by inspirational goals for impact (Pillar 2, incl. mission on cancer) update of Missions WP 2021-22
- Synergies with EU4Health, Digital Europe Programme, InvestEU, other



HORIZON EUROPE

Strategic Planning and programming











Strategic plan gives direction to the work programme



Main Features

Early involvement and extensive exchanges with Member States Extensive exchanges with the European Parliament Consultations with stakeholders and public at large



Horizon Europe – impact-oriented funding





HORIZON EUROPE

Pillar II, Cluster 1 'Health' Intervention Logic



Only the workprogramme text has legal value; the oral presentation is only advisory.



Horizon Europe – Cluster 1 - Health

Aims:

- to contribute to the promotion of social cohesion and inclusiveness and the health and well-being of people.
- to help develop "an economy that works for people" by supporting research (and coordination) in order to make innovative, high-quality health technologies and health care both available and affordable for citizens;
- and to make health care systems more accessible and sustainable, including through the digital transformation of health and care.



CLUSTER 1: Health

Sustainable Development Goals





European Commission The Commission ('college' of 27 Commissioners) and its policy departments (32 Directorates-General, 'DGs' or 'Commission services')

Political Guidelines 2019-2024

Ursula von der Leyen, Commission President-elect

- > A European Green Deal
- > A Europe for the **Digital Age**
- > An Economy that Works for **People**
- Promote our European Way of Life
- > A Stronger Europe in the World
- > A New Push for **European Democracy**



DGs develop, implement and manage EU policy, law, and funding programmes (European agencies support and report to parent-DGs, incl. regulatory agencies like EMA, EFSA)



Horizon Europe – impact-oriented funding





Strategic Planning: Impact statements/destinations of Cluster 1 'Health

- 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.
- 2. <u>Living and working in a health-promoting environment</u>: Living and working environments are health-promoting and sustainable thanks to better understanding of environmental, occupational, social and economic determinants of health.
- 3. <u>Tackling diseases and reducing disease burden</u>: Health care providers are able to better tackle and manage diseases (infectious diseases, including poverty-related and neglected diseases, non-communicable and rare diseases) and reduce the disease burden on patients effectively thanks to better understanding and treatment of diseases, more effective and innovative health technologies, better ability and preparedness to manage epidemic outbreaks and improved patient safety.
- 4. Ensuring access to innovative, sustainable and high-quality health care: Health care systems provide equal access to innovative, sustainable and high-quality health care thanks to the development and uptake of safe, cost-effective and people-centred solutions, with a focus on population health, health systems resilience, as well as improved evidence-based health policies.
- 5. Unlocking the full potential of new tools, technologies and digital solutions for a healthy society: Health technologies, new tools and digital solutions are applied effectively thanks to their inclusive, secure and ethical development, delivery, integration and deployment in health policies and health and care systems.
- 6. <u>Maintaining an innovative, sustainable and globally competitive health-related industry</u>: EU health industry is innovative, sustainable and globally competitive thanks to improved up-take of breakthrough technologies and innovations, which makes the EU with its Member States more resilient and less dependent from imports with regard to the access to and supply of critical health technologies.

Horizon Europe – Cluster 1 ,Health'

Strategic Plan 2021-24 (<u>link</u>) → 6 Expected Impacts Work Programme 2021-22 (link)

6 "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
- Unlocking the full potential of new tools, technologies and digital solutions for a healthy society
- 6. Maintaining an innovative, sustainable & globally competitive health industry

Topics (Calls)

 \rightarrow

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 – Pathway to Impact

Output

Outcome

Impact

Resources

e.g. Human, Financial, Expertise, Know-how, Infrastructures, Networks

Input

Results of R&I

e.g. Knowledge, Advice, Processes, Procedures, Technologies, Data, Methodologies, Standards

Immediate use or uptake of R&I results

e.g. result of **'Productive** Interactions' between 'producers' and 'users' of R&I ➤ short- to medium-term

Wider benefits for "society"

e.g. social, economic and environmental impact
> 5 Ps of SDGs: people, planet, prosperity, peace, partnerships

medium- to long-term

Expected Impacts per

Cluster (set by SP21-24)

European Commission

Topics calling for R&I actions (RIA, CSA, partnership)

Expected Outcomes leading to impact per Destination (set by WP21-22)



Link between policy priorities and project results

EU POLICY PRIORITIES	Overall priorities of the European Union (Green Deal, Fit for the Digital Age,)
KEY STRATEGIC ORIENTATIONS	Set of strategic objectives within the EC policy priorities where R&I investments are expected to make a difference
IMPACT AREAS	Group of expected impacts highlighting the most important transformation to be fostered through R&I
EXPECTED IMPACTS	Wider long term effects on society (including the environment), the economy and science, enabled by the outcomes of R&I investments (long term). It refers to the
= DESTINATIONS	specific contribution of the project to the work programme expected impacts described in the destination. Impacts generally occur some time after the end of the project.
EXPECTED OUTCOMES = TOPICS	The expected effects, over the medium term, of projects supported under a given topic. The results of a project should contribute to these outcomes, fostered in particular by the dissemination and exploitation measures. This may include the uptake, diffusion, deployment, and/or use of the project's results by direct target groups. Outcomes generally occur during or shortly after the end of the project.
PROJECT RESULTS	What is generated during the project implementation. This may include, for example, know-how, innovative solutions, algorithms, proof of feasibility, new business models, policy recommendations, guidelines, prototypes, demonstrators, databases and datasets, trained researchers, new infrastructures, networks, etc. Most project results (inventions, scientific works, etc.) are 'Intellectual Property', which may, if appropriate, be protected by formal 'Intellectual Property Rights'

Strategic Planning and Programming (EC)

STRATEGIC PLAN

Application process (researchers) an ssion

PROJECT PROPOSALS

Horizon Europe – Cluster 1 'Health'

Some main 'take aways':

- Health cluster provides grant-based funding mainly to <u>collaborative</u> research & innovation projects, so-called RIAs (other types of funding are Coordination & Support Actions, Programme Co-fund Actions, Innovation Procurement Actions)
- Societal Challenge 1 on "Health; Demographic Change and Well-being" of the previous EU R&I programme, Horizon 2020 (2014-2020):
 - > 80% of RIAs had between 7 to 18 participants (13 in average)
 - 613 projects (RIAs) involving 8143 participants:
 from EU Member States (87%), H2020 Associated Countries (7%)
 other Third Countries (6%)



- Type of organisations: Higher or Secondary Education Establishments (42%), Private for-profit entities (23%), Research Organisations (23%), Public bodies (6%), Other (6%).
- Minimum size of consortia to be eligible for Horizon Europe: at least {1 MS + 2 MS/AC}
- Participation is "open to the world"
- EU funding is restricted to entities from EU MS, AC (e.g. NO, IS), some Third Countries (e.g. LM OSA Europe

Horizon Europe – Cluster 1 ,Health'

Timelines for first call (WP 21-22, Topics/Calls in 21)

- Launch of first call with 24 topics
 Closure of call (deadline)
 - Evaluation and selection
 - Informing applicants of shortlisted proposals
 - Informing applicants of proposals not retained for funding Jan-Feb 2022
 - Grant Preparation
 - Signature of grants

Apr-May 2022

Feb-Apr 2022

23 June 2021

21 Sept 2021

Oct-Dec 2021

Jan-Feb 2022



Horizon Europe – Cluster 1 ,Health'

Timelines for 2022 calls (WP 21-22)

- Launch of 2022 calls with 20 topics
- Opening of "Pandemic" calls (4 topics in WP22 update) 12 Ja
- Closing of the calls (1st stage of 2-stage deadline)
- Closing of the calls (2nd stage of 2-stage topics)
- Closing of the calls (all single stage topics)
- Evaluation and selection
- Signature of grants

6 October 2021 12 January 2022 *1 February 2022* 6 September 2022 21 April 2022 3 following months plus 6 months



Horizon Europe – Cluster 1 "Health"

Cross-cutting issues

- Ethics and Integrity remain absolute priorities;
- **Open Science** practices will continue to expand;
- Social Sciences and Humanities should continue to be taken into account;
- International Cooperation will remain a key feature and opportunity of the framework programme, that is of particularly important for health research.
- Gender



Horizon Europe – Cluster 1 "Health"

Cross-cutting issues – Gender

- integration of the gender dimension into R&I content is further strengthened, it will become mandatory unless indicated as not relevant at topic level.
- additional provisions to foster gender equality in organisations;
- having a **gender equality plan** in place will become an eligibility criterion for public bodies, research organisations and higher education institutions.



Towards the launch of Horizon Europe

- budgetary border conditions and issues for Cluster 1

MFF

- at least 50% of budget should contribute to Green and Digital transition/modernisation
- at least 30% of budget should contribute to climate objectives

Horizon Europe

- 10% of Pillar II budget for support to Missions
- 35% of HE budget to contribute to climate objectives
- More investment in digital than under Horizon 2020
- Annual budget allocation not yet fixed

NGEU

- Budget to be committed by 2023, and be paid by 2026
- Topics can be supprted partially or fully with NGEU budget
- Topics need to be relevant for the recovery and to overcome the impact of the pandemic

HE Implementation

- First calls not before April
- Externalisation of cluster 1 (budget implementation taks)
- Missions: preparatory phase with decision in Q3/2021
- Europe's Beating Cancer Action Plan in Q1/2021



HORIZON EUROPE

Destination 1: Staying healthy in a rapidly changing society



Only the workprogramme text has legal value; the oral presentation is only advisory.



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: (broad impact per destination)
 - Good health and high-quality accessible health care
 - $\circ~$ 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: Staying healthy in a rapidly changing society

- In WP21-22, R&I will focus on major societal challenges: diet and health (obesity), ageing and demographic change, digital empowerment and digital literacy and personalised prevention
- R&I should provide new evidences, methodologies and tools for understanding the transition from health to disease.
 R&I should develop better strategies and personalised tools for preventing diseases and promoting health, including through social innovation approaches
- Specific measures will also be developed to educate and **empower citizens** of **all ages** and **throughout their life**, to play an active role in the **self-management** of their own health and self-care, to the benefit of an active and healthy ageing





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.


Destination 1: Staying healthy in a rapidly changing society - Topics in 2021





- Closure: 21.09.2021
- Instrument: RIA
- Tot: 60M€
- Project size: 10M€



- HORIZON-HLTH-2021-STAYHLTH-01-03:
 Supporting digital empowerment and health literacy of citizens
- Closure: 21.09.2021
- Instrument: CSA
- Tot: 3M€
- Project size: 3M€



- HORIZON-HLTH-2021-STAYHLTH -01-04: A roadmap for personalised prevention
- Closure: 21.09.2021
- Instrument: CSA
- Tot: 3M€
- Project size: 3M€



Link between policy priorities and project results

EU POLICY PRIORITIES	Overall priorities of the European Union (Green Deal, Fit for the Digital Age,)
KEY STRATEGIC ORIENTATIONS	Set of strategic objectives within the EC policy priorities where R&I investments are expected to make a difference
IMPACT AREAS	Group of expected impacts highlighting the most important transformation to be fostered through R&I
EXPECTED IMPACTS	Wider long term effects on society (including the environment), the economy and science, enabled by the outcomes of R&I investments (long term). It refers to the specific contribution of the project to the work programme expected impacts described
DESTINATIONS	in the destination. Impacts generally occur some time after the end of the project.
EXPECTED OUTCOMES = TOPICS	The expected effects, over the medium term, of projects supported under a given topic. The results of a project should contribute to these outcomes, fostered in particular by the dissemination and exploitation measures. This may include the uptake, diffusion, deployment, and/or use of the project's results by direct target groups. Outcomes generally occur during or shortly after the end of the project.
PROJECT RESULTS	What is generated during the project implementation. This may include, for example, know-how, innovative solutions, algorithms, proof of feasibility, new business models, policy recommendations, guidelines, prototypes, demonstrators, databases and datasets, trained researchers, new infrastructures, networks, etc. Most project results (inventions, scientific works, etc.) are 'Intellectual Property', which may, if appropriate, be protected by formal 'Intellectual Property Rights'

PROJECT PROPOSALS

ro

an ssion

Application process (researchers)

Strategic Planning and Programming (EC)

STRATEGIC PLAN

Describing the impact of your proposal

Project's pathway towards impact ...by thinking about the specific contribution the project can make to the expected outcomes and impacts set out in the Work Programme.



HORIZON EUROPE

Destination 2: Living and working in a health-promoting environment



Only the workprogramme text has legal value; the oral presentation is only advisory.



Destination 2: Living and working in a health-promoting environment

The environment we live and work in is a major determinant of our health and well-being. Environmental factors are estimated to account for almost 20% of all deaths in Europe.

- Destination 2 → filling knowledge gaps in the understanding of the impacts on our health and well-being of those environmental, occupational and socio-economic risk factors that have the most significant or widespread societal impacts.
- Results will support the EU's environment and health policies and overarching policy frameworks such as the European Green Deal, the Chemical Strategy for Sustainability, the Zero Pollution Action Plan and the WHO European Environment and Health Process (EHP).
- International collaboration is welcomed, collaboration between projects encouraged!





Destination 2: Expected impacts

- Policy-makers and regulators are well informed about environmental, socio-economic and occupational risk and health-promoting factors
- Environmental, occupational, social, economic, fiscal and health policies and practices at the EU, national and regional level are sustainable and based on **solid scientific evidence**
- The **upstream determinants of disease** related to choices in energy generation, agricultural practices, industrial production, land use planning, built environment and construction are known, understood and reduced
- The health threats and burden resulting from hazardous chemicals and air, water and soil pollution and contamination is reduced, so that the related number of deaths and illnesses is substantially decreased by 2030
- Living and working environments in European cities and regions are healthier, more inclusive, safer, resilient and sustainable
- The adaptive capacity and resilience of populations and health systems in the EU to climate and environmental change-related health risks is strengthened
- **Citizens' health and well-being is protected** and promoted, and premature deaths, diseases and inequalities related to environmental pollution and degradation are prevented
- Citizens understand better environment and health issues, the measures to address them and support related policies and regulations

Commission

Destination 2: Living and working in a healthpromoting environment - Topics in 2021





- HORIZON-HLTH-2021-ENVHLTH-02-01:
 Exposure to electromagnetic fields (EMF) and health
- Closure: 21.09.2021
- Tot: 30M€
- Project size: 8M€

- HORIZON-HLTH-2021-ENVHLTH-02-02:
 Indoor air quality and health
- Closure: 21.09.2021
- Tot: 40M€
- Project size: 8M€

- HORIZON-HLTH-2021-ENVHLTH-02-03:
 Health impacts of climate change: costs and benefits of action and inaction
- Closure: 21.09.2021
- Tot: 60M€
- Project size: 10M€



HORIZON EUROPE

Destination 3: Tackling diseases and reducing disease burden



Only the workprogramme text has legal value; the oral presentation is only advisory.



Destination 3: Tackling diseases and reducing disease burden

Communicable and non-communicable diseases cause the greatest amounts of premature death and disability in the EU and worldwide.

- Destination 3 → addressing an urgent need for research and innovation to develop new prevention measures, public health interventions, diagnostics, vaccines, therapies, antimicrobials and their alternatives, as well as to improve existing prevention strategies to create tangible impacts, taking into account sex/gender-related issues.
- Results will **support the EU's political priorities** such as the **fight against cancer** and other non-communicable diseases (NCDs), better diagnosis and treatment of rare diseases, **preparedness and response to and surveillance of health threats and epidemics**, reduction of the number of **antimicrobial-resistant infections**, improving **vaccination rates**, demographic change, **mental health and digital empowerment** in health literacy.
- International collaboration is welcomed, collaboration between projects encouraged!

Destination 3: Expected impacts

- Health burden of diseases in the EU and worldwide is reduced through effective disease management, including through the development and integration of innovative diagnostic and therapeutic approaches, personalised medicine approaches, digital and other people-centred solutions for health care.
- Premature mortality from NCDs is reduced by one third (by 2030), mental health and well-being is promoted, and the voluntary targets of the WHO Global Action Plan for the Prevention and Control of NCDs 2013-2020 are attained (by 2025), with an immediate impact on the related disease burden (DALYs).
- Health care systems benefit from strengthened research and innovation expertise, human capacities and know-how for combatting communicable and non-communicable diseases, including through international cooperation.
- **Citizens benefit from reduced (cross-border) health threat of epidemics and AMR pathogens**, in the EU and worldwide. In particular, the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases are contained and hepatitis, water-borne diseases and other communicable diseases are being combated.
- Patients and citizens are knowledgeable of disease threats, involved and empowered to make and shape decisions for their health, and better adhere to knowledge-based disease management strategies and policies (especially for controlling outbreaks and emergencies).



Destination 3: Topics in 2021

5 Research and Innovation Actions



- HORIZON-HLTH-2021-DISEASE-04-01: Improved supportive, palliative, survivorship and end-of-life care of cancer patients
- Closure: 21.09.2021
- Indicative budget: 50M€
- Project size: 6M€



- HORIZON-HLTH 2021-DISEASE-04-02:
 Building a European
 innovation platform
 for the repurposing
 of medicinal
 products
- Closure: 21.09.2021
- Indicative budget: 50M€
- Project size: 25M€



- HORIZON-HLTH-2021-DISEASE-04-03: Innovative approaches to enhance povertyrelated diseases research in sub-Saharan Africa
- Closure: 21.09.2021
- Indicative budget: 40M€
- Project size: 8M€



- HORIZON-HLTH-2021-DISEASE-04-04: Clinical validation of artificial intelligence (AI) solutions for treatment and care
- Closure: 21.09.2021
- Indicative budget: 60M€
- Project size: 6M€



- HORIZON-HLTH-2021-DISEASE-04-07: Personalised medicine and
 - infectious diseases: understanding the
 - individual host
 - response to viruses (e.g. SARS-CoV-2)
- Closure: 21.09.2021
- Indicative budget: 60M€
- Project size: 7M€



Destination 3: Topics in 2021

2 Coordination and Support Actions



- HORIZON-HLTH-2021-DISEASE-04-05:
 A roadmap towards the creation of the European partnership on One Health antimicrobial resistance (OH AMR)
- Closure: **21.09.2021**
- Indicative budget: 1M€
- Project size: 1M€



- HORIZON-HLTH-2021-DISEASE-04-06: Building a European partnership for pandemic
 - preparedness
- Closure: 21.09.2021
- Indicative budget: 2M€
- Project size: 2M€



Disclaimer: information not legally binding

HORIZON EUROPE

Destination 4: Ensuring access to innovative, sustainable and highquality health care



Only the workprogramme text has legal value; the oral presentation is only advisory.





Destination 4: Ensuring access to innovative, sustainable and high-quality health care

Health care systems provide equal access to innovative, sustainable and highquality health care thanks to the development and uptake of safe, cost-effective and people-centred solutions, with a focus on population health, health systems resilience as well as improved evidence-based health policies.

• Key Strategic Orientation: 'Creating a more resilient, inclusive and democratic European society'.

Impact areas:

- ➢ Good health and high-quality accessible health care;
- > A resilient EU prepared for emerging threats;
- *Climate change mitigation and adaptation;*
- *High quality digital services for all;*
- A competitive and secure data economy.





Destination 4: Expected impacts

- Health and social care systems have improved governance mechanisms and are more effective, efficient, accessible, resilient, trusted and sustainable, with health promotion and disease prevention being at their heart by shifting from hospital-based to people-centred health care structures;
- Health care providers are equipped with skills and competences suited for future needs and health care systems are modernized, digitally transformed and equipped with innovative tools, technologies and digital solutions;
- Citizens are empowered in their own health management, informal carers are supported and specific needs of more vulnerable groups are addressed;
- Health policy and systems adopt a holistic approach for the evaluation of health outcomes and value of public health interventions, the organization of health care and decision-making;
- Creation of synergies with other programmes, e.g. EU4Health, through:
 - supporting integration/coordination of work between Member States
 - promoting the implementation of best practices on data-sharing
 - reinforcing the healthcare workforce
 - tackling the implications of demographic challenges
 - advancing digital transformation.





Destination 4: Topics in 2021







- HORIZON-HLTH-2021-CARE-05-01: Enhancing quality of care and patient safety
- Closure: 21.09.2021
- Instrument: RIA
- Total: 25M€
- Project size: 5M€

HORIZON-HLTH-2021-CARE-05-02: Data-driven decision-support tools for better health care delivery and policy-making with a focus on cancer

- Closure: 21.09.2021
- Instrument: RIA
- Total: 40M€
- Project size: 10M€

HORIZON-HLTH-2021-CARE-05-04:
 Health care innovation procurement
 network

- network
- Closure: 21.09.2021
- Instrument: CSA
- Total: 5M€
- Project size: 5M€



HORIZON EUROPE

Destination 5: Unlocking the full potential of new tools, technologies and digital solutions for a healthy society



Only the workprogramme text has legal value; the oral presentation is only advisory.



Destination 5: Unlocking the full potential of new tools, technologies and digital solutions for a healthy society

Emerging and disruptive technologies offer big opportunities for transforming health care, thereby promoting the health and well-being of citizens.

- Key Strategic Orientation: '*Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains*'.
- Impact areas
 - High quality digital services for all
 - A competitive and secure data-economy,
 - Industrial leadership in key and emerging technologies that work for people,
 - o Good health and high-quality accessible health care,



Destination 5: Expected impacts

- Europe's scientific and technological expertise and know-how, as well as its capabilities for innovation is world class;
- Citizens benefit from targeted and faster research resulting in safer, more efficient, cost-effective and affordable tools, technologies and digital solutions;
- The EU gains high visibility and leadership in terms of health technology development, including through international cooperation;
- The burden of diseases in the EU and worldwide is reduced;
- Both the productivity of health research and innovation, and the quality and outcome of health care is improved.



Destination 5: Topics in 2021







- HORIZON-HLTH-2021-TOOL-06-01:
 Smart medical devices and their surgical implantation for use in resource-constrained settings
- Closure: 21.09.2021
- Instrument: IA
- Total: €25M
- Project size: €6M

HORIZON-HLTH-2021-TOOL-06-02: Next generation advanced therapies to treat highly prevalent and high burden diseases with unmet medical needs

- Closure: 21.09.2021
- Instrument: RIA
- Total: 60M
- Project size: €6M

 HORIZON-HLTH-2021-TOOL-06-03: Innovative tools for use and reuse of health data (in particular of electronic health records and/or patient registries

- Closure: 21.09.2021
- Instrument: RIA
- Total: €30M
- Project size: €8M



HORIZON EUROPE

Destination 6: Unlocking the full potential of new tools, technologies and digital solutions for a healthy society



Only the workprogramme text has legal value; the oral presentation is only advisory.



Destination 6: Maintaining an innovative, sustainable and globally competitive health industry

The health industry is a key driver for growth and has the capacity to provide health technologies to the benefit of patients and providers of health care services.

• **Key Strategic Orientation**: '*Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains*'.

Impact areas

- A competitive and secure data-economy,
- Industrial leadership in key and emerging technologies that work for people,
- High quality digital services for all,
- o Good health and high-quality accessible health care,



Destination 6: Expected impacts

- Health industry (including SMEs) is more competitive and sustainable, assuring EU leadership and strategic autonomy in medical supplies and digital technologies.
- Health industry is working more efficiently along the value chain.
- European standards ensuring safety and quality of healthcare, as well as effectiveness and interoperability of health innovations.
- Swift uptake of innovative health technologies and services.
- Reliable and timely access to key manufacturing capacity (e.g. vaccines and medical radioisotopes).



Destination 6: Topics in 2021







- HORIZON-HLTH-2021-IND-07-01:
 Green pharmaceuticals
- Closure: 21.09.2021
- Instrument: RIA
- Total: €40M
- Project size: €8M

- HORIZON-HLTH-2021-IND-07-02: Development, procurement and responsible management of new antimicrobials
- Closure: 21.09.2021
- Instrument: CSA
- Total: €2M
- Project size: €2M

- HORIZON-HLTH-2021-IND-07-0: Promoting a trusted mHealth label in Europe: uptake of technical specifications for quality and reliability of health and wellness apps
- Closure: 21.09.2021
- Instrument: CSA
- Total: €2M
- Project size: €2M



HORIZON EUROPE

What is new in the submission process?







Consortium composition (collaborative projects)

- at least one independent legal entity established in a Member State, and
- at least two other independent legal entities each established either in a different Member State or an Associated Country.

Gender Equality Plan (applicable only from 2022 on)

Participants that are public bodies, research organisations or higher education establishments from Members States and Associated countries **must have a gender equality plan**, covering minimum process-related requirements.

- A self-declaration will be requested at proposal stage (for all types of participants).
- Included in the entity validation process (based on self-declaration)



Who is eligible for funding?



EU COUNTRIES

- Member States (MS) including their outermost regions
- The Overseas Countries and Territories (OCTs) linked to the MS.



NON-EU COUNTRIES

- Countries associated to Horizon Europe (AC)
- Low and middle income countries: See <u>HE</u>
 <u>Programme Guide</u>.
- Other countries when announced in the call or exceptionally if their participation is essential



SPECIFIC CASES

- Affiliated entities established in countries eligible for funding.
- EU bodies
- International organisations (IO):
 - International European research organisations are eligible for funding.
 - Other IO are not eligible (only exceptionally if participation is essential)
 - IO in a MS or AC are eligible for funding for Training and mobility actions and when announced in the call conditions

Associated Countries



For the purposes of the eligibility conditions, applicants established in Horizon 2020 Associated Countries or in other third countries negotiating association to Horizon Europe will be treated as entities established in an Associated Country, if the Horizon Europe association agreement with the third country concerned applies at the time of signature of the grant agreement.

Specific situation of UK

- The UK is expected to soon become an associated country to Horizon Europe. UK entities can take part in the first calls for proposals of Horizon Europe
- The UK is associating to the full Horizon Europe programme with the only exception of the EIC Fund (which is the loan/equity instrument of the EIC).



Horizon Europe – 49 European Partnerships

Partnerships

- Strategic Plan identifies 49 co-programmed and co-funded partnerships:
 - public-public;
 - public-private;
 - global initiatives.
- EC proposals for 10 institutionalised partnerships based on Art 185/187 (23 Feb 2021, <u>link</u>)
- link to HE partnerships website

CLUSTER 1: Health
Innovative Health Initiative
Global Health Partnership
Transformation of health systems*
Chemicals risk assessment*
ERA for Health*
Rare diseases**
One-Health Anti Microbial Resistance**
Personalised Medicine**
Pandemic Preparedness**

Co-funded or co-programmed



** Calls with opening dates in 2023-24

Innovative Health Initiative

- IHI builds on its predecessor, the Innovative Medicines Initiative (IMI), but has a significantly broadened scope, enlarged partner composition and revised objectives:
 - ✓ Integrating various technologies (pharmaceutical, medtech, biotech, imaging, vaccines) for better prevention, diagnosis and treatment;
 - ✓ Better responding to public health needs;
 - ✓ Better addressing the requirements of patients and health care professionals;
 - \checkmark More openness to new ideas from external stakeholders.
- The new partner composition addresses the main finding of IMI2 interim evaluation: "enable the active engagement of other industry sectors with the pharmaceutical industry to capitalise on their expertise in the development of new health care interventions".
- Cross-sectoral collaboration will be at the heart of IHI.





Specificities of IHI

- Partnership between the EU and 4 health industry associations (COCIR, MedTech Europe, EFPIA including Vaccines Europe, EuropaBio)
- Budget of 2.4 billion EUR: EU contribution up to 1.2 billion EUR and similar commitment from industry (mostly in-kind in projects) and contributing partners (usually charities or other companies)
- Operates in the precompetitive space (see SBA Art. 123.2: actions may include clinical studies where the targeted area or the intended use represents an unmet public health need, significantly affecting or threatening the Union's population)
- Governance adapted to better incorporate views of various stakeholders involved in health care:
 - State Representative Group (SRG)
 - Innovation Panel (instead of a Scientific Committee) that will involve end-users: patients, health care practitioners and providers, regulators, ... → all stakeholders able to propose topic ideas



Disclaimer: pending the outcome of the ongoing legislative process – some of these elements may change

Current and next steps

- Legislative process
 - Single Basis Act (SBA): negotiations with the Council Research Working Party ongoing
 - Formal adoption of the SBA might be possible in November
- KPIs / monitoring framework
- Daily operations of IHI, call process, governance bodies setting-up...
- Strategic Research and Innovation Agenda: published
- First call: under preparation



Disclaimer: pending the outcome of the ongoing legislative process - some of these elements may change

European Partnership on Transforming Health and Care Systems (THCS)

State of play (June 2021)

Contact Commission services: <u>RTD-HS-PARTNERSHIP@ec.europa.eu</u>

Partners (main contact): Drafting Group of Member State representatives: <u>THCSpartnership@gmail.com</u>

Draft proposal (June 2020)



European Partnership on Transforming Health and Care Systems (THCS)

Proposed under Destination 4: Ensuring access to innovative, sustainable and high-quality health care in the EU

Key problem drivers:

- Demographic changes.
- Poor uptake of technological innovations.
- Climate changes, environmental factors and globalisation.
- Changes in political and social landscape.

The opportunity offered by the THCS co-funded partnership:

To pool a critical mass of European/national/regional scientific resources to research, develop and test organisational, service and policy innovations. The context-specific knowledge and evidence will inform health policies and facilitate uptake of innovations, as well as their scalingup and transfer to other countries and regions.



European Partnership on Transforming Health and Care Systems (THCS)

The proposal document has been developed by the Drafting Group (BE, ES, FR, IT, LV, NL, NO, AT, PL, CH, SE, FI) in collaboration with the EC (RTD, SANTE, CNECT, ECFIN).

The partnership partly builds on previous EU initiatives, in particular TO-REACH, AAL2, JPI MYBL and EIP on AHA.

The regional dimension is relevant and important for H&C systems in Europe, and for this partnership.

Current status and future steps:

- Topic in WP 2021-2022 (year 2022).
- The proposal document is available on the HE webpage: planned for 7 years, estimated budget of 300 million EUR, including EC contribution of 100 million EUR.
- Commitment from countries expected by **15 October**.
- **Tentatively 21 countries** have confirmed a commitment of almost 250 mn Euro (in cash and in-kind).

European Commission

Partners and stakeholders

Partners composition

National and regional

decision makers of

research and

innovation policy

priorities

National and regional **research** and innovation funders

National and regional **decision makers of health and care systems**

National, regional and local health & care providers

Key actors promoting health & care innovation

All categories of end-users



European Commission
Activities to be funded





Horizon Europe – 5 Missions Areas











Adaptation to climate change, including societal transformation Cancer

Healthy oceans, seas, coastal & inland waters Climateneutral & smart cities Soil health & food

Mission on Cancer

• 5 intervention areas (+ cross-cutting actions)

Goal: by 2030, more than 3 million lives saved, living longer and better

Understanding	Prevention	Diagnostic and Treatment	Quality of Life	Equitable Access	Cross-Cutting Actions

13 recommendations for bold actions (<u>link</u> to Reports of the Mission Boards)



Mission on Cancer – update

	Actions
15 June 2021	Adoption of WP Missions 2021-2022 and opening of calls
05 July 2021	Meeting of Strategic Programme Committee (SPC)
20 July 2021	Meeting of Cluster 1 – Health Programme Committee
31 August 2021	Meeting of Strategic Programme Committee
Sept. 2021	Joint meeting of SPC and Health P
15 Sept. 2021	Meeting of Strategic Programme Committee
23 Sept.	4 th Meeting of SGPP cancer subgroup
End Sept. 2021	Adoption of Communication on Missions (final decision on full implementation)
End Dec. 2021	Adoption of amendment to WP 2021-2022



Europe's Beating Cancer Plan

European Commission

INAUGURAL MEETING: Stakeholder Contact Group for Europe's Beating Cancer Plan

28 May 2021, 10.30 – 12.30 CET, BRUSSELS TIME

#EUCancerPlan #HealthUnion

With the Europe's Beating Cancer Plan in place, the European Commission has taken a major step towards a new era in cancer prevention, diagnosis, treatment and care. Decisive and swift action is now needed to put its policy objectives, flagship initiatives and supportive actions in place.

Governments and public health authorities play a vital role in this but cannot address the increasing challenges associated with cancer alone. A strong commitment of the wider stakeholder community is vital.

In order to support the Member States in the implementation of the Cancer Plan and monitoring of its actions, the European Commission has established a **Stakeholder Contact Group** under the Commission's Health Policy Platform. This will be the forum for discussion and engagement with all relevant stakeholders on cancer prevention and care.

The Commission invites you to the first meeting of the Stakeholder Contact Group, taking place on Friday 28 May from 10:30 until 12:30, with participation of Stella Kyriakides, European Commissioner for Health and Food Safety. The success of the Cancer Plan will depend on strong collaboration and genuine partnerships.

Supporting documents:

Live webinars privacy statement

Register now following this link:

https://ecconf.webex.com/ecconf/onstage/o.php?MTID=e1f70187fb1cbbd462ae4982c309e24a4

We are looking forward to welcoming you online.

The EU Health Policy Platform team



European Commission

Directorate-General for Health and Food Safety Unit C2: Health information and integration in all policies



Synergies with other Union programmes

HORIZON EUROPE

Other Union Programmes, including

Agricultural Policy	InvestEU	ESF+	Innovation Fund	
External Instrument	LIFE	Digital Europe	Internal Security Fund and Instrument for	
Maritime & Fisheries Fund	EU4Health	Space Programme	Border Management	
Connecting Europe Facility	ERDF	ERASMUS+	Single Market Programme	
Just Transition Mechanism		Creative Europe	Recovery and Resilience Facility	

Enhanced synergies

COMPATIBILITY

Harmonisation of funding rules; flexible co-funding schemes; pooling resources at EU level

COHERENCE & COMPLEMENTARITY Alignment of strategic priorities in support of a common vision



HORIZON EUROPE What is new in the evaluation process?







Same criteria as in H2020

Same three award criteria: 'Excellence', 'Impact' and 'Quality and efficiency of the implementation'. Excellence only for ERC.

Adapted following lessons learnt

- The number of 'aspects to be taken into account' have been reduced, ensuring that the same aspect is not assessed twice
- **Open Science** practices assessed as part of the scientific methodology in the excellence criterion
- New approach to impact: Key Impacts Pathways (KIPs)
- The assessment of the **quality of applicants** is assessed under 'implementation', rather than as a separate binary assessment of operational capacity
- Assessment of management structures has been removed.





EXCELLENCE

- Clarity and pertinence of the project's objectives, and the extent to which the proposed work is ambitious, and goes beyond the state-of-the-art.
- Soundness of the proposed methodology, including the underlying concepts, models, assumptions, interdisciplinary approaches, appropriate consideration of the gender dimension in research and innovation content, and the quality of open science practices including sharing and management of research outputs and engagement of citizens, civil society and end users where appropriate.

IMPACT

- Credibility of the pathways to achieve the expected outcomes and impacts specified in the work programme, and the likely scale and significance of the contributions due to the project.
- Suitability and quality of the measures to maximize expected outcomes and impacts, as set out in the dissemination and exploitation plan, including communication activities.

QUALITY AND EFFICIENCY OF THE IMPLEMENTATION

- Quality and effectiveness of the work plan, assessment of risks, and appropriateness of the effort assigned to work packages, and the resources overall.
- Capacity and role of each participant, and extent to which the consortium as a whole brings together the necessary expertise.



Points to consider when writing a proposal in HE



Key principles





Your proposed work must be within the scope of a work programme topic

You need to demonstrate that your idea is ambitious and goes beyond the state of the art



Your scientific methodology must take into account interdisciplinary, gender dimension and open science practices.



You should show how your project could contribute to the outcomes and impacts described in the work programme (the pathway to impact)



You should describe the planned measures to maximise the impact of your project ('plan for the dissemination and exploitation including communication activities')



You should demonstrate the quality of your work plan, resources and participants



Horizon Europe – Cluster 1 "Health"

Keep informed. Get involved.

- Register to receive the latest updates of developments.
- Reach out to National Contact Points..
- Become an independent evaluator for HE proposals

ALL this can be done via **EC portal for** *Funding & Tenders Opportunities*. <u>https://ec.europa.eu/info/funding-tenders/opportunities/portal</u>

General information on Horizon Europe: <u>https://ec.europa.eu/info/horizon-europe</u>

You can also follow us on Twitter @EUScienceInnov____



HorizonEU





Thank you!

#HorizonEU

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



© European Union 2021

Unless otherwise noted the reuse of this presentation is authorised under the <u>CC BY 4.0</u> license. For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders. Image credits: © ivector #249868181, #251163013, #273480523, #241215668, #245719946, #251163053, #252508849, #241215668, #244690530, #222596698, #235536634, #263530636, #66009682, #273480523, #362422833; © petovarga #366009967; © shooarts # 121467308, 2020. Source: Stock.Adobe.com. Icons © Flation – all rights reserved.