



# EUROPEAN PROJECTS

## S.M.A.R.T. Objectives

The establishment of all objectives should be created using the S.M.A.R.T. philosophy. What do we mean by a S.M.A.R.T. objective? S.M.A.R.T. is an acronym that is used to guide the development of measurable goals.





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## Specific

Who, What, Where,  
When, Why, Which

Define the goal as much  
as possible with no  
ambiguous language.

WHO is involved, WHAT  
do I want to accomplish,  
WHERE will it be done,  
WHY am I doing this  
(reasons, purpose),  
WHICH constraints /  
requirements do I have?

## Measurable

From and To

Can you track the  
progress and measure  
the outcome?

How much, how many,  
how will I know when  
my goal is  
accomplished?

## Attainable

How

Is the goal reasonable  
enough to be  
accomplished? How so?

Make sure the goal is  
not out of reach or  
below standard  
performance.

## Relevant

Worthwhile

Is the goal worthwhile  
and will it meet your  
needs?

Is each goal consistent  
with other goals you  
have established and  
fits with your  
immediate and long  
term plans?

## Timely

When

Your objective should  
include a time limit. "I  
will complete this step  
by month/day/year."

It will establish a sense  
of urgency and prompt  
you to have better time  
management.

# SCIENTIFIC EXCELLENCE

## CONCEPTUAL BASE OF THE PROPOSAL NEED

Who has the problem/opportunity?  
What they want to have?

## IDEA

What's our solution?  
Which components must have?

## TECHNOLOGY

Which are the characteristics to develop?  
Which new knowledge we need to develop  
these components?

## PARTNERS INVOLVED

Who? Final clients?

Who? Industry

Who? Researchers

*The EU Joint Programme – Neurodegenerative Disease Research (JPND) is the largest global research initiative aimed at tackling the challenge of neurodegenerative diseases.*

**AIMS to increase coordinated investment between participating countries in research.**

## **GOAL**

- to find cures for neurodegenerative diseases and to enable early diagnosis for early targeted treatments.
- However, it is not possible to give definitive predictions on how long this might take to happen.
- to accelerate progress on solutions that can alleviate the symptoms, and lessen the social and economic impact for patients, families and health care systems.

## Participating JPND countries

The funding organisations that have agreed to participate in this joint call are listed below. The call will be conducted simultaneously by the funding organisations in their respective countries and coordinated centrally by the Joint Call Secretariat.

- Australia, National Health and Medical Research Council
- Belgium, Research Foundation Flanders
- Canada, Canadian Institutes of Health Research
- Czech Republic, Ministry of Education, Youth and Sports
- Denmark, Innovation Fund Denmark
- Denmark, Velux Fonden
- Finland, Academy of Finland
- France, French National Research Agency
- Germany, Federal Ministry of Education and Research
- Ireland, Health Research Board
- Italy, Ministry of Health
- Luxembourg, National Research Fund
- Netherlands, The Netherlands Organisation for Health Research and Development
- Norway, The Research Council of Norway
- Poland, National Centre for Research and Development
- Slovakia, Ministry of Education, Science, Research and Sport of the Slovak Republic
- Spain, National Institute of Health Carlos III
- Sweden, Swedish Research Council for Health, Working Life and Welfare
- Switzerland, Swiss National Science Foundation
- Turkey, Scientific and Technological Research Council of Turkey
- United Kingdom, UK Alzheimer’s Society

# Partnerships in Health (2022) (HORIZON-HLTH-2022-CARE-10)

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-hlth-2022-care-10-01;callCode=null;freeTextSearchKeyword=;matchWholeText=true;typeCodes=1,2;statusCodes=31094501,31094502;programmePeriod=2021%20-%202027;programCcm2Id=43108390;programDivisionCode=null;focusAreaCode=null;destination=null;mission=null;geographicalZonesCode=null;programmeDivisionProspect=null;startDateLte=null;startDateGte=null;crossCuttingPriorityCode=null;cpvCode=null;performanceOfDelivery=null;sortQuery=sortStatus;orderBy=asc;onlyTenders=false;topicListKey=callTopicSearchTableState>

## European partnership on transforming health and care systems

Types of action:	HORIZON-COFUND HORIZON Programme Cofund Actions		
DeadlineModel:	single-stage	Deadline:	21 April 2022 17:00:00 Brussels time
opening date:	06 October 2021		

## Expected outcomes:

This topic aims at supporting activities that are enabling or contributing to one or several expected impacts of destination 4, notably “*Ensuring access to innovative, sustainable and high-quality health care*”, “A resilient EU prepared for emerging threats” and “High-quality digital services for all”. To that end, proposals under this topic should aim for delivering results that are directed, tailored towards and contributing to all of the following expected outcomes:

- Health and care authorities, policymakers and other stakeholders use the research results to develop evidence-based strategies and policies on transforming health care systems and learn from good practices of European countries and regions;
- Health and care providers and professionals implement innovative ways of delivering care and maintaining population health;
- Health and care authorities, policymakers and other stakeholders plan and carry out efficient investments in health and care systems at national/regional level to use innovative solutions and care models;
- Researchers across European countries and regions are engaged in enhanced collaborative research on transforming health and care systems;
- An increased number of innovators and stronger local/regional ecosystems of stakeholders are in place and facilitate uptake of successful innovations for health and care;
- Citizens and health and care professionals have increased digital and health literacy;
- Countries cooperate better and use context-specific knowledge and evidence to make their health and care systems more resilient with respect to upcoming needs and crises.

## Scope:

For many reasons (demographic changes, technological progress, fiscal constraints, public health emergencies etc.) the European health and care systems are expected to be subject to severe stress. In particular, the COVID-19 pandemic has highlighted existing structural weaknesses in health and care systems, and emphasised areas where not enough effort, planning and resources had been directed to. In addition, rapid technological and societal evolutions call for urgent responses to increasing demands and expectations from citizens. There is a need to accelerate the transition towards more efficient, sustainable, resilient, innovative and accessible health and care systems in Europe. To this end, the creation of a research and innovation (R&I) partnership with a focus on health and care systems' transformation represents a unique strategic opportunity to bring together stakeholders, create synergies, coordinate R&I actions, facilitate the digitization of health and care services and support the transformation of health and care systems with innovative solutions driven by knowledge and evidence. The partnership should build on knowledge gained from initiatives taken under Horizon 2020 (TO-REACH, Active and Assisted Living programme (AAL), Joint Programming Initiative More Years, Better, Lives (JPI MYBL), European Innovation partnership (EIP-AHA), ICPeMed, etc.). In order to increase the likelihood of successful system transformation, the partnership will facilitate exchange of information and good practices among countries, provide robust guidance and tools, network institutional stakeholders and involve regional ecosystems. It will stimulate service, policy and organisational innovations, as well as the integration of biomedical and technological innovations for the benefit of the European citizens and the European industry. Development of new products is beyond the scope of this Partnership. By laying the ground for the transformation of the health and care systems, the partnership will contribute to the transition of Europe to a more sustainable development and address emerging threats raised by environmental changes and globalisation.

## Scope:

The partnership should bring together a broad range of actors with a common vision of future health and care systems. Through the objectives of Horizon Europe, the partnership should contribute to achieving the following European Commission priorities:

- Promoting our European way of life
- An economy that works for people
- A Europe fit for the digital age
- A European green deal

The partnership will contribute to priorities of the “*Communication on effective, accessible and resilient health systems*” (COM(2014) 215 final), the “*Communication on enabling the digital transformation of health and care in the Digital Single Market; empowering citizens and building a healthier society*” (COM(2018) 233 final) and support the objectives of the Commission proposal for the new EU4Health Programme (COM(2020) 405 final).

Thanks to its capacity to bring together different stakeholders (e.g. research funders, health authorities, health and care institutions, innovators, policy makers), to create a critical mass of resources and to implement a long-term Strategic Research and Innovation Agenda (SRIA), the partnership will address the following objectives:

- Supporting multidisciplinary R&I to fill knowledge gaps, produce evidence and develop guidance and tools in priority areas for the transformation of health and care systems,
- Supporting the interdisciplinary development of service, policy and organisational innovations for health and care systems,
- Strengthening the R&I community in the field of health and care systems,
- Improving the capability of health and care actors to take up innovative solutions,
- Gathering stakeholders to develop the ecosystems needed for a swift uptake of innovations by health and care systems.

## Expected impacts:

- Proposals for topics under this destination should set out a credible pathway to contributing to ensuring access to innovative, sustainable and high-quality health care, and more specifically to one or several of the following impacts:
- Health and social care services and systems have improved governance mechanisms and are more effective, efficient, accessible, resilient, trusted and sustainable, both fiscally and environmentally. Health promotion and disease prevention will be at their heart, by shifting from hospital-centred to community-based, people-centred and integrated health care structures and successfully embedding technological innovations that meet public health needs, while patient safety and quality of services is increased.
- Health care providers are trained and equipped with the skills and competences suited for the future needs of health care systems that are modernised, digitally transformed and equipped with innovative tools, technologies and digital solutions for health care. They save time and resources by integrating and applying innovative technologies, which better involve patients in their own care, by reorganising workflows and redistributing tasks and responsibilities throughout the health care system, and by monitoring and analysing corresponding health care activities.
- Citizens are supported to play a key role in managing their own health care, informal carers (including unpaid carers) are fully supported (e.g. by preventing overburdening and economic stress) and specific needs of more vulnerable groups are recognised and addressed. Improved access to health care services, including financial risk protection, timely access to quality essential health care services, including safe, effective, and affordable essential medicines and vaccines.
- Health policy and systems adopt a holistic approach (individuals, communities, organisations, society) for the evaluation of health outcomes and value of public health interventions, the organisation of health care, and decision-making.
- Create strong opportunities for synergies with the EU4Health programme and in particular to contribute to the goals “protecting people in the Union from serious cross-border threats to health and strengthening the responsiveness of health systems and coordination among the Member States to cope with those threats” and 3 “strengthening health systems by improving their resilience and resource efficiency, in particular through: i) supporting integrated and coordinated work between Member States; ii) promoting the implementation of best practices on data sharing; iii) reinforcing the healthcare workforce; iv) tackling the implications of demographic challenges; and v) advancing digital transformation”

## Ensuring access to innovative, sustainable and high-quality health care (Single Stage - 2022) (HORIZON-HLTH-2022-CARE-08)

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-hlth-2022-care-08-04;callCode=null;freeTextSearchKeyword=;matchWholeText=true;typeCodes=1,2;statusCodes=31094501,31094502;programmePeriod=2021%20-%202027;programCcm2Id=43108390;programDivisionCode=null;focusAreaCode=null;destination=null;mission=null;geographicalZonesCode=null;programmeDivisionProspect=null;startDateLte=null;startDateGte=null;crossCuttingPriorityCode=null;cpvCode=null;performanceOfDelivery=null;sortQuery=sortStatus;orderBy=asc;onlyTenders=false;topicListKey=callTopicSearchTableState>

## Better financing models for health systems

Types of action:	HORIZON-RIA HORIZON Research and Innovation Actions		
Type of MGA	HORIZON Action Grant Budget-Based [HORIZON-AG]		
Deadline Model:	single-stage	Deadline:	21 April 2022 17:00:00 Brussels time
opening date:	06 October 2021		

# Scope:

In 2017, spending on health care in the EU stood at 9.6% of gross domestic product, ranging from over 11% in France and Germany to less than 6% in Romania. In most countries, in-patient care services made up the bulk of health spending, while spending on pharmaceuticals also accounted for a large share of health expenditure in some countries. [\[1\]](#)

Due to demographic changes in the EU with a population projected to continue ageing and higher expectations regarding provision of health care services, public health threats with relevant repercussions for society and the introduction of innovative and digital solutions to improve health care systems' functioning, the demand for health care services as well as the budgetary pressures on health care systems are and will keep increasing.

Future models of care delivery will have to take into account both the systemic and multi-dimensional performance perspective and to look at relevant outcome and quality indicators, structure of care delivery, and knowledge base regarding optimal care delivery systems,

Therefore, research and innovation should tackle the challenges of financing health care services in the EU by addressing one or more of the following:

- Financing of health care – development of new cost-effective models for financing and reimbursement, including incentive mechanisms and outcome-based financing in order to promote good performance of the health care systems.
- Financing of preventive health care – novel models and appropriate structure of financial incentives for effective health promotion and disease prevention, financial incentives for stronger co-operation between primary care and public health services, long-term sustainable financing mechanism for local- and municipality-run promotion programmes and the assessment of personal health risk behaviour and its potential impact on health costs.
- Innovative purchasing and contract methods – new strategies for contracting provision of health care services (public sector hired services) as well as solutions to better assess provision capacity and quality, to assess markets, and cost-effectiveness as well as equal access of contracting-out services. This can help align the incentives of providers with those of patients and the public good.
- New and improved tools for better design of incentives for health care professionals – incentives that minimise differentiation between services and “cream-skimming” by patients, fostering better health care planning, optimized use of health care services and avoidance of resources' overconsumption and -waste.

Value-based pricing- and payment models for health technologies are not in the scope of this topic; such models are covered by topic “New pricing and payment models for cost-effective and affordable health innovation” (HORIZON-HITH-2022-IND-13-03) under destination 6

# Scope:

Value-based pricing- and payment models for health technologies are not in the scope of this topic; such models are covered by topic “New pricing and payment models for cost-effective and affordable health innovation” (HORIZON-HLTH-2022-IND-13-03) under destination 6.

Research and innovation in these areas should take into account the potential impact of public health emergencies and threats on the sustainability, financing, as well as the effective and efficient functioning of EU health care systems.

To ensure wide uptake by user communities and scalability of the models and methods across health systems, actions should promote the highest standards of transparency and openness, going well beyond documentation and extending to aspects such as assumptions, architecture, code and any underlying data.

Applicants are highly encouraged to actively involve public authorities (i.e. ministries of finances and health, procurement agencies/procurers and agencies responsible for the management of health services contracts, public health and health-policy institutes, health administrations, among other) in the proposals.

Projects funded under this topic are strongly encouraged to participate in networking and joint activities, as appropriate, and in particular they are expected to liaise with successful applicants under topic “New pricing and payment models for cost-effective and affordable health innovation” (HORIZON-HLTH-2022-IND-13-03) and the consortium to be created under the planned “European Partnership on Transforming Health and Care Systems” (HORIZON-HLTH-CARE-2022-IND-10-01). These networking and joint activities could, for example, involve the participation in joint workshops, the exchange of knowledge, the development and adoption of best practices, or joint communication activities. This could also involve networking and joint activities with projects funded under other clusters and pillars of Horizon Europe, or other EU programmes, as appropriate. Therefore, proposals are expected to include a budget for the attendance to regular joint meetings and may consider to cover the costs of any other potential joint activity without the prerequisite to detail concrete joint activities at this stage. The details of these joint activities will be defined during the grant agreement preparation phase. In this regard, the Commission may take the role of facilitator for networking and exchanges, including with relevant stakeholders, if appropriate.

Cross-cutting Priorities:

## Expected impacts:

Proposals for topics under this destination should set out a credible pathway to contributing to ensuring access to innovative, sustainable and high-quality health care, and more specifically to one or several of the following impacts:

- Health and social care services and systems have improved governance mechanisms and are more effective, efficient, accessible, resilient, trusted and sustainable, both fiscally and environmentally. Health promotion and disease prevention will be at their heart, by shifting from hospital-centred to community-based, people-centred and integrated health care structures and successfully embedding technological innovations that meet public health needs, while patient safety and quality of services is increased.
- Health care providers are trained and equipped with the skills and competences suited for the future needs of health care systems that are modernised, digitally transformed and equipped with innovative tools, technologies and digital solutions for health care. They save time and resources by integrating and applying innovative technologies, which better involve patients in their own care, by reorganising workflows and redistributing tasks and responsibilities throughout the health care system, and by monitoring and analysing corresponding health care activities.
- Citizens are supported to play a key role in managing their own health care, informal carers (including unpaid carers) are fully supported (e.g. by preventing overburdening and economic stress) and specific needs of more vulnerable groups are recognised and addressed. They benefit from improved access to health care services, including financial risk protection, timely access to quality essential health care services, including safe, effective, and affordable essential medicines and vaccines.
- Health policy and systems adopt a holistic approach (individuals, communities, organisations, society) for the evaluation of health outcomes and value of public health interventions, the organisation of health care, and decision-making.
- The actions resulting from the calls under this destination will also create strong opportunities for synergies with the EU4Health programme and in particular to contribute to the goals under general objectives 1a “protecting people in the Union from serious cross-border threats to health and strengthening the responsiveness of health systems and coordination among the Member States to cope with those threats” and 3 “strengthening health systems by improving their resilience and resource efficiency, in particular through: i) supporting integrated and coordinated work between Member States; ii) promoting the implementation of best practices on data sharing; iii) reinforcing the healthcare workforce; iv) tackling the implications of demographic challenges; and v) advancing digital transformation”.

# Tools and technologies for a healthy society (two-stages - 2022) (HORIZON-HLTH-2022-TOOL-12-two-stage)

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-hlth-2022-tool-12-01-two-stage;callCode=null;freeTextSearchKeyword=;matchWholeText=true;typeCodes=1,2;statusCodes=31094501,31094502;programmePeriod=2021%20-%202027;programCcm2Id=43108390;programDivisionCode=null;focusAreaCode=null;destination=null;mission=null;geographicalZonesCode=null;programmeDivisionProspect=null;startDateLte=null;startDateGte=null;crossCuttingPriorityCode=null;cpvCode=null;performanceOfDelivery=null;sortQuery=sortStatus;orderBy=asc;onlyTenders=false;topicListKey=callTopicSearchTableState>

## Computational models for new patient stratification strategies

Types of action:	HORIZON-RIA HORIZON Research and Innovation Actions		
Type of MGA	HORIZON Action Grant Budget-Based [HORIZON-AG]		
Deadline Model:	two-stage	Deadline:	01 February 2022 17:00:00 Brussels time
opening date:	06 October 2021		06 September 2022 17:00:00 Brussels time

## **Expected outcomes:**

This topic aims at supporting activities that are enabling or contributing to one or several expected impacts of destination 5 “*Unlocking the full potential of new tools, technologies and digital solutions for a healthy society*”. To that end, proposals under this topic should aim for delivering results that are directed, tailored and contributing to some of the following expected outcomes:

- Clinical researchers use effective health data integration solutions for the classification of the clinical phenotypes.
- Researchers and/or health care professionals use robust and validated data-driven computational tools to successfully stratify patients.
- Regulatory bodies approve computer-aided patient stratification strategies to enable personalised diagnosis and/or personalised therapy strategies.
- Health care professionals adopt evidence-based guidelines for stratification-based patient management superior to the standard-of-care.

## Scope:

In the era of big and complex data, the challenge remains to make sense of the huge amount of health care research data. Computational approaches hold great potential to enable superior patient stratification strategies to the established clinical practice, which in turn are a prerequisite for the development of effective personalised medicine approaches.

The proposals may include a broad range of solutions, such as computational disease models, computational systems medicine approaches, machine-learning algorithms, Virtual Physiological Human, digital twin technologies and/or their combinations, as relevant. The topic covers different stages in the continuum of the innovation path (i.e. translational, pre-clinical, clinical research, validation in the clinical and real-world setting, etc.), as relevant to the objectives of the proposals.

The topic will support the development of the computational models driven by the end users' needs.

Proposals should address several of the following areas:

- Establish interdisciplinary research by bridging disciplines and technologies (disease biology, clinical research, data science, -omics tools, computational and mathematical modelling of diseases, advanced statistical and/or AI/machine learning methods, Virtual Physiological Human and/or digital twin technologies).
- Develop new computational models for the integration of complex health data from multiples sources, including structured and unstructured data.
- Develop and optimise robust, transparent and accurate computational models to guide patient stratification strategies for improving clinical outcomes.
- Demonstrate, test and clinically validate such models with respect to their utility to realistically stratify patients with the aim of improving the standard-of-care.
- The development of new patient stratification strategies guided by computational models and the validation of the new concepts of stratification in pre-clinical and/or clinical studies.

## Scope:

The proposals should adhere to the FAIR data<sup>[1]</sup> principles, adopt data quality standards, data integration operating procedures and GDPR-compliant data sharing/access good practices developed by the European research infrastructures, wherever relevant. In addition, proposals are encouraged to adopt good practices of international standards used in the development of computational models, and make available the tools and solutions developed early. Proposals aiming to develop computational models of high technology readiness level are encouraged to deliver a plan for the regulatory acceptability of their technologies. Early interaction with the relevant regulatory bodies is recommended (i.e. the EMA qualification advice for new technologies, etc.) for the proposals contributing to the development of new medicinal products, improvement of the effectiveness of marketed products and the development of medical devices. The proposals aiming to validate their models as high-risk medical devices in the relevant clinical environment are encouraged to deliver a certification implementation plan.

All projects funded under this topic are strongly encouraged to participate in networking and joint activities, as appropriate. These networking and joint activities could, for example, involve the participation in joint workshops, the exchange of knowledge, the development and adoption of best practices, or joint communication activities. This could also involve networking and joint activities with projects funded under other clusters and pillars of Horizon Europe, or other EU programmes, as appropriate. Therefore, proposals are expected to include a budget for the attendance to regular joint meetings and may consider to cover the costs of any other potential joint activities without the prerequisite to detail concrete joint activities at this stage. The details of these joint activities will be defined during the grant agreement preparation phase. In this regard, the Commission may take on the role of facilitator for networking and exchanges, including with relevant stakeholders, if appropriate. In addition, the proposals will be encouraged to exchange with other successful

# Staying healthy (Two stage - 2022) (HORIZON- HLTH-2022-STAYHLTH-01-two-stage)

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-hlth-2022-stayhlth-01-01-two-stage;callCode=null;freeTextSearchKeyword=;matchWholeText=true;typeCodes=1,2;statusCodes=31094501,31094502;programmePeriod=2021%20-%202027;programCcm2Id=43108390;programDivisionCode=null;focusAreaCode=null;destination=null;mission=null;geographicalZonesCode=null;programmeDivisionProspect=null;startDateLte=null;startDateGte=null;crossCuttingPriorityCode=null;cpvCode=null;performanceOfDelivery=null;sortQuery=sortStatus;orderBy=asc;onlyTenders=false;topicListKey=callTopicSearchTableState>

## Boosting mental health in Europe in times of change

Types of action:	HORIZON-RIA HORIZON Research and Innovation Actions		
Type of MGA	HORIZON Action Grant Budget-Based [HORIZON-AG]		
Deadline Model:	two-stage	Deadline:	01 February 2022 17:00:00 Brussels time
opening date:	06 October 2021		06 September 2022 17:00:00 Brussels time

# Expected outcomes:

This topic aims at supporting activities that are enabling or contributing to one or several impacts of destination 1 “*Staying healthy in a rapidly changing society*”. To that end, proposals under this topic should aim for delivering results that are directed, tailored towards and contributing to all of the following expected outcomes:

- Health care professionals, national/regional public authorities and other relevant actors in key settings (e.g. schools, workplaces, etc.):
  - Have access to and apply evidence-based, innovative, cost-effective/cost-neutral, large-scale, comprehensive strategies and interventions for the promotion of mental health and the prevention of mental ill health, targeting the most vulnerable populations;
  - Adopt clinical guidelines, best practices, implementation strategies and policy recommendations (as applicable to them) to mitigate the mental health burden and help cope with the (combined) effects of a transforming Europe (e.g. the socio-economic consequences of the COVID-19 pandemic, climate change, environmental degradation, energy transition, demographic and migration factors, digitalisation, and exponential technological advancements);
- 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

## Scope:

Against the backdrop of a transforming Europe and in the midst of a global pandemic, the EU is committed to lead the transition to a healthier planet and a new digital world. The health and wellbeing of its citizens is a prerequisite to achieve this aspiration.

On the one hand, extreme weather and environmental disasters have risen dramatically over the last decade. Links between these events and serious mental health problems, including anxiety, depression, post-traumatic disorder and suicide, have been reported. Moreover, several new words such as “eco-anxiety”, “ecoparalysis” and “ecological grief” have been coined to express the acute and/or chronic effects on mental health caused by climate and environmental changes.

On the other hand, digital technologies and the achievement of the Digital Single Market – one of the EU’s key priorities – are transforming our economy, our industries as well as our culture and lifestyle. Digitalisation, including digitally-enabled technologies such as robotics and artificial intelligence, are penetrating much faster into societies than in the past and affect us all. Accordingly, the “Fourth Industrial Revolution” is changing the way we work (e.g. workplaces, working practices and patterns, the workforce and its skills, and how we perceive work) as well as the way we live. The exponential incorporation of digital technologies in our daily lives has already caused profound changes in the way we communicate and is likely to have significant impact (both positive and negative) on mental health and intellectual/cognitive ability, in particular of the youth. Digital platforms can provide mental health support as well as increase social inclusiveness. However, digital technologies also introduce new risks, such as continuous connectivity, cyberbullying and exposure to inappropriate or fake content.

# Scope:

Accordingly, the proposed research should aim to deliver in all three dimensions listed below, focusing on one or several of the (combined) effects of a transforming Europe highlighted in the “Expected Outcomes”<sup>[1]</sup>.

1. 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, by consolidating data from relevant sources and/or acquiring new data, and by reviewing existing methodologies.

2. Develop and implement (pilot and/or scale-up) 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/or other factors highlighted in the “Expected Outcomes”.<sup>8</sup> 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 co-morbidities and other high-risk groups such as socio-economic disadvantaged groups, migrants, etc.). Integration of care and coordination among different settings from communities to health care is desirable. The effectiveness of the interventions should be evaluated, inter alia, in terms of health outcomes, (comparative) cost-effectiveness, implementation facilitators and barriers. Depending on the aspects covered by the proposed research, desired outputs may include, but are not limited to:

- a) Evidence-based guidelines for health care professionals on the promotion of mental wellbeing and prevention of mental illness related to ICT and climate and environment change (including screening methods).
- b) Evidenced-based pedagogical practices for education professionals to foster mental health promotion in schools (including higher education) and/or via eLearning.
- c) Consultation during school time to educate students (e.g. on coping with change) and to detect early students at risk.
- d) Educational material and campaigns targeting the most vulnerable groups, (e.g. children and the elderly), disseminated via the most appropriate and effective media and communication channels, to improve health literacy, skills, attitudes and self-awareness leading to a better (self-)management of wellbeing and/or mental ill health.
- e) Studies on occupational mental health in the workplace, in particular in small and medium-sized enterprises, e.g.: i) understanding the impact of a 24-hour digital economy on workers’ well-being, also in terms of managerial control mechanisms, work-life balance and privacy and developing/piloting new methods to protect and support workers’ well-being in this respect; ii) designing information and training campaigns for workers to integrate the already visible impacts of digitalisation-induced changes into the professional risk assessment processes; iii) developing return-to-work programmes, also exploring innovative collaboration between mental health services, (life-long) education, and employment sectors. This will ensure appropriate support to better integrate individuals affected by mental ill health in the workforce and the society.

## Scope:

3. 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 (e.g. digitalisation, climate change and transition to “green jobs”) on occupational mental health; and/or iii) the (comparative) cost-effectiveness of public mental health interventions/policy choices.

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. In all instances, sex and gender-related issues must be taken into account. All data should be disaggregated by sex, age and other relevant variables, such as by measures of socioeconomic status (i.e. take into account the socioeconomic gradient in mental health). International collaboration is encouraged.

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, cultural institutions, insurance companies, civil society organisations, communities, among others. Proposals should adopt a patient-centred approach that empowers patients, promotes a culture of dialogue and openness between health professionals, patients and their families, and unleashes the potential of social innovation.

All projects funded under this topic are strongly encouraged to participate in networking and joint activities, as appropriate. These networking and joint activities could, for example, involve the participation in joint workshops, the exchange of knowledge, the development and adoption of best practices, or joint communication activities. This could also involve networking and joint activities with projects funded under other clusters and pillars of Horizon Europe, or other EU programmes, as appropriate. Therefore, proposals are expected to include a budget for the attendance to regular joint meetings and may consider to cover the costs of any other potential joint activities without the prerequisite to detail concrete joint activities at this stage. The details of these joint activities will be defined during the grant agreement preparation phase. In this regard, the Commission may take on the role of facilitator for networking and exchanges, including with relevant stakeholders, if appropriate.

# Ensuring access to innovative, sustainable and high-quality health care (Single Stage - 2022) (HORIZON-HLTH-2022-CARE-08)

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-hlth-2022-care-08-03;callCode=null;freeTextSearchKeyword=;matchWholeText=true;typeCodes=1,2;statusCodes=31094501,31094502;programmePeriod=2021%20-%202027;programCcm2Id=43108390;programDivisionCode=null;focusAreaCode=null;destination=null;mission=null;geographicalZonesCode=null;programmeDivisionProspect=null;startDateLte=null;startDateGte=null;crossCuttingPriorityCode=null;cpvCode=null;performanceOfDelivery=null;sortQuery=sortStatus;orderBy=asc;onlyTenders=false;topicListKey=callTopicSearchTableState>

## Public procurement of innovative solutions (PPI) for building the resilience of health care systems in the context of recovery

Types of action:	HORIZON-RIA HORIZON Research and Innovation Actions		
Type of MGA	HORIZON Action Grant Budget-Based [HORIZON-AG]		
Deadline Model:	single-stage	Deadline:	21 April 2022 17:00:00 Brussels time
opening date:	06 October 2021		

# Expected outcomes:

This topic aims at supporting activities that are enabling or contributing to one or several expected impacts of destination 4 “*Ensuring access to innovative, sustainable and high-quality health care*”. To that end, proposals under this topic should aim for delivering results that are directed, tailored towards and contributing to some of the following expected outcomes specified below:

- Public and private procurers in the area of health care deploy at a critical scale, innovative, market-ready solutions (materials, technologies and systems/practices), that are relevant to the preparedness and resilience of health care systems;
- European health and technology industry actors (including start-ups/SMEs) bring to the market secure, interoperable digital health care solutions (complying with relevant ethical and privacy protection standards) which are proven to improve health outcomes and access to care for patients;
- Procurers facilitate the commercialisation of innovative solutions at a large scale (EU/international) by their successful suppliers through providing them with customer references for the validation and first pilot deployment in multiple countries and health care settings;
- Policymakers, health care providers and professionals, patients and their carers – each in their respective areas – exchange and adopt good practices and the best solutions the market can deliver to improve the resilience of health care systems.

## **Scope:**

Public procurement of innovative solutions (PPI) can boost the wider market uptake of high impact innovations in health care systems, while building the capacity of providers and increasing resilience and preparedness in the context of cross-border public health emergencies. This can support the economic recovery of the EU by providing incentives to the EU health and technology industry (especially spin-offs, start-ups and SMEs) to innovate and by providing business opportunities to commercialise innovative products or services at a larger scale than they would normally have. By acting as early adopters of such innovative solutions, procurers can open up new growth markets for the EU industry, thereby contributing to EU growth, employment and competitiveness. At the same time, joint/collaborative demand-side initiatives can help create economies of scale and scale up the wider adoption of innovations by the health sector. Advances in this area can help EU health care systems build resilience and respond to public health threats better than if they would act individually.

The actions supported will target critical-scale deployment of relevant health care solutions across different regions in Europe by engaging public and/or private procurers from each participating country (at national, regional or local level) that have deployment responsibilities and budget control in the relevant area of care or supply of services. Procurers will specify, purchase and deploy solutions addressing their relevant, shared unmet needs, while engaging together in a supply and demand side dialogue, in order for the deployed solutions to deliver sustainable, new or improved health care services and outcomes, always taking into account patient feedback. Specific guidance on PPI actions and minimum eligibility requirements can be found in General Annex Hof the Horizon Europe work programme.

## Scope:

Proposals should therefore be based on clearly identified user needs and well-structured work plans, explaining how the procurement of the innovative solutions will contribute to the expected outcomes. In addition, proposals should clearly state the benefits of the solutions that will be developed during the course of the project. In this context, applicants should consider aspects of accessibility and affordability of the solution, efficiency of the technology when implemented in the relevant contexts and how it contributes to health systems resilience.

This topic prioritises areas of health care such as health promotion, preparedness, prevention, surveillance and rapid response to cross-border health threats. Promoting coordination, cooperation and common standards in the procurement of innovation in health care (including emergency procurement) should be at the heart of any proposal submitted as well as facilitating the digital and green transition of EU health systems.

Activities covered should include cooperation with policymakers to reinforce the national policy frameworks and mobilise substantial additional national budgets for the PPI, searching support and collaborating with respective coordination and networking projects. Likewise, awareness raising, technical assistance and/or capacity building beyond the project to mainstream PPI implementation and removing obstacles for introducing the innovative solutions to be procured into the market could be included.

A wide variety of settings are potentially relevant for the implementation of such innovative solutions, for example primary health care settings, hospitals, specialised centres, and long-term health care facilities. The involvement of end-users and the use of cross-sectorial approaches are necessary in the area of health. They can lead to more impactful proposals, especially if combined with cost-effectiveness analyses in comparison with the status quo.

Within this topic, it is possible to foresee the transfer and adaptation of solutions and/or interventions from other sectors to health care. It is open both to proposals requiring improvements mainly based on one specific solution/technology field, as well as to proposals requiring end-to-end solutions that need combinations of different types of innovation.

Synergies with the Technical Support Instrument<sup>[1]</sup> and the European Structural and Investment Fund are encouraged.

# AI for human empowerment (AI, Data and Robotics Partnership) (RIA)

TOPIC ID: HORIZON-CL4-2022-HUMAN-01-01

Grant

## General information

Topic updates

Topic description

Destination

Conditions and documents

Partner search

Submission service

Topic related FAQ

Get support

## General information

Programme

**Horizon Europe Framework Programme (HORIZON)**

Call

**[A HUMAN-CENTRED AND ETHICAL DEVELOPMENT OF DIGITAL AND INDUSTRIAL TECHNOLOGIES 2022 \(HORIZON-CL4-2022-HUMAN-01\)](#)**

 See budget overview

Type of action

**HORIZON-RIA HORIZON Research and Innovation Actions**

Type of MGA

**HORIZON Action Grant Budget-Based [HORIZON-AG]**

Forthcoming

Deadline model

**single-stage**

Planned opening date

**21 December 2021**

Deadline date

**05 April 2022 17:00:00 Brussels time**

