

General Information	
Preliminary title of the European Partnerships	Large-scale innovation and transformation of health systems in a digital and ageing society: a European Partnership on Health and Care Systems Research and Innovation
Short description of the partnership	A partnership with health and care systems owners/organisers and research funders to boost research in policy, uptake and scale-up of innovations to accelerate transformation of national/regional health and care systems.
Services directly involved	RTD, SANTE, CNECT, ECFIN, ENV, REGIO, SRSS, JRC, EMPL, GROW, EAC, EUROSTAT.
Context and problem definition	<p>Health and care systems in the EU are globally recognised for making quality care available to citizens, and are a key asset for economic strength in the EU. Healthcare is an important economic sector in Europe, employing 8.5% of the workforce, and counting for almost 10% of the GDP in the EU.</p> <p>Nonetheless, health and care systems face serious challenges due to ageing population, increasing number of people with multiple chronic conditions, higher demand for healthcare by citizens, expensive innovative products and solutions, and health workforce shortages. . Public spending on health and long-term care is steadily rising in the EU, which is expected to put additional pressure on the Member States given budgetary constraints and the need for fiscal sustainability.</p> <p>The key problem drivers are the following:</p> <ul style="list-style-type: none"> <li>- Lack of knowledge and good practice of how health and care systems research can support policy makers in management and design of health and care systems;</li> <li>- Lack of an operational platform that links researchers and innovators in the area of health and care systems with stakeholders from Member States and regional/local health authorities, technology and services providers, investors, patient/citizen and profession advocacy groups to define the unmet system needs and take collaborative R&amp;I actions to address them;</li> <li>- Lack of communication channels between researchers and policymakers to take into account the research needs of policymakers, and ensure that solutions provided by researchers are uptaken into policy;</li> <li>- Underuse of local/regional stakeholder eco-systems that play a key role in communicating with and informing patients, in education and training for professionals, and in piloting and integrating innovative solutions in health and care services.</li> </ul> <p>The proposed partnership is being built with the support of a H2020-funded Coordination and Support Action (TO-REACH), which was created to prepare a Strategic Research Agenda towards a joint European research programme on Health Systems, and is composed of partners from 18 countries (IT, NL, FI, FR, IE, LV, MT, NO, PT, RO, SI, SE, UK, IL, AT, US, CH, CA). It has prepared the grounds for joint research activities and pooling of resources from EU and Member States within the European Partnership on Health and Care Systems Research and Innovation.</p> <p>This partnership will draw on specific aspects relevant to health and care systems research in FP7 and H2020 initiatives such as EIP AHA, AAL/AAL2 and MYBL, which are mainly focused on addressing challenges related to ageing population (detailed in the section on current active partnerships).</p>
Objectives and expected impacts	<p>The partnership has the following <b>objectives</b>:</p> <ol style="list-style-type: none"> <li>1. Provide science-based evidence for health and care systems innovations that support cost-effective and fiscally sustainable health policies and the needs of health authorities, health professionals, patients, citizens and other key stakeholders;</li> <li>2. Develop science-based frameworks for monitoring and evaluating the cost-effectiveness and budgetary impact of innovative solutions, including digital, new health promotion services and care models;</li> <li>3. Build knowledge on the conditions for transferability and up-scaling of innovative health and care solutions across and within EU countries;</li> </ol>

4. Develop and test a mechanism to support diffusion of novel solutions/outputs that can reach health and care systems' end-users (including capacity building);
5. Define and prioritise unmet needs of citizens and health and care systems, which will guide development of innovative solutions by the private sector, investors and other stakeholders;
6. Establish an R&I platform that brings together health and health research data across health and care systems to enable data-driven policy in accordance with the GDPR.

The partnership shall have the following **expected impact**:

**A. Scientific impact:**

- a. Policy-informed health and care systems research and improved health intelligence and relevant health data (at regional, national and EU level) to inform policymaking;
- b. Strengthened knowledge transfer and shared expertise on health and care systems research and innovation among EU Member States.

**B. Societal impact:**

- a. Improved population health: reduced health inequalities; healthier workforce; improved productivity; better preparedness for health emergencies and cross-border health threats;
- b. Improved health literacy, empowering patients/citizens to take active steps in their well-being (shifting from disease treatment to prevention models);
- c. Knowledgeable and skilled future health and care workforce capable of handling new professional roles and working in collaboration with citizens;
- d. Supported implementation of a range of EU policies and objectives in the domains of health, social affairs, and research and innovation.

**C. Economic impact:**

- a. Enhanced effectiveness, accessibility, resilience, efficiency and fiscal sustainability of EU health and care systems;
- b. Facilitated market growth for spin-offs, start-ups, SMEs and the wider European industry, through a better definition of health and care systems' technological and organisational needs.

Progress towards achieving expected impact will be measured and monitored through the proxy indicators under Horizon Europe's Key Impact Pathways.

The **partnership will use research** to capitalise on systems' diversity, strengths, variety of policies and knowledge, and will promote R&I (including implementation research) as a tool to help local/regional and national authorities to innovate and reform the health and care systems. In addition, it will prepare the grounds for systematic use of relevant information and health data across the EU (e.g. cross-EU projects on interoperability, GDPR compliance, health data security, system for accrediting of innovation, among other). The partnership will have a strong component of capacity building, improving training of health professionals on how to deal with the challenges – both positive and negative – of innovation.

The proposed partnership will contribute to the following EU policies:

1. EU agenda on effective, accessible and resilient health systems (Communication COM(2014) 215; the State of Health in the EU; the European Semester);
2. Fiscal sustainability and cost-effectiveness of health systems<sup>1 2</sup> in the context of an ageing population and technological change, in line with the Stability and Growth Pact and the fiscal surveillance part of the European Semester;
3. Priorities in the Communication on enabling the digital transformation of health and care in the Digital Single Market (COM(2018)233);
4. The European Pillar of Social Rights (concerning access to health care).

The proposed partnership will contribute to achieving the UN Sustainable Development Goals, in particular Goal 3 "Good Health and Well-being", and its sub-

<sup>1</sup> Joint Report on Health Care and Long-Term Care Systems & Fiscal Sustainability INSTITUTIONAL PAPER 037 | OCTOBER 2016

<sup>2</sup> The 2018 Ageing Report Economic & Budgetary Projections for the 28 EU Member States (2016-2070) INSTITUTIONAL PAPER 079 | MAY 2018

	target on achieving “universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all”.
Necessity test: rationale for a European Partnership	<p>Implementation by a partnership is more effective in achieving the aforementioned objectives than traditional Framework Programme calls because it directly involves the owners/organisers of health and care systems in defining what are their priorities and needs for research and innovation, and allowing them to have a role in defining the strategy and align their investments to those priorities.</p> <p>At the same time, health and care systems owners/organisers will have direct access to the research and innovation results produced by the partnership, but more importantly, will be able to share their own data and research results, allowing for a knowledge transfer platform that feeds on EU, transnational and national research results, and best practices.</p> <p>Even though projects funded under traditional Framework Programme calls often managed to demonstrate the proof-of-concept for their innovative solution, their scale-up and uptake by health and care systems has often encountered significant difficulties. These difficulties have several reasons, which can be avoided or better addressed in a partnership of researchers and health system owners, namely: need for organisational, service and policy innovations to embed technical innovations/research results; lack of knowledge transfer between systems owners and research owners; and lack of cost-effectiveness analysis and lack of data on transferability of innovation into different health and care systems contexts.</p>
Relevant for the following parts of Horizon Europe	<p>Pillar II 'Global Challenges and European Industrial Competitiveness'</p> <p><input checked="" type="checkbox"/> Cluster Health</p> <p><input type="checkbox"/> Cluster Culture, creativity and inclusive society</p> <p><input type="checkbox"/> Cluster Civil Security for Society</p> <p><input type="checkbox"/> Cluster Digital, Industry and Space</p> <p><input type="checkbox"/> Cluster Climate, Energy and Mobility</p> <p><input type="checkbox"/> Cluster Food, Bioeconomy Natural Resources, Agriculture and Environment</p> <p><input type="checkbox"/> Cross-cluster</p> <p><input type="checkbox"/> Pillar III 'Innovative Europe'</p>
Currently identified links with other partnership candidates / Union programmes	<p>A strong link will be created with the possible industry-led European partnership on Health Innovation (Innovative Health Initiative - IHI) that will accelerate the development of scientific and technological innovations in the area of health (in a pre-competitive context). At the same time, the proposed Partnership on Health and Care Systems Research and Innovation will develop methods and tools to embed technological innovations into health and care systems. More so, the present partnership will provide the framework for unmet health and care systems' needs for which IHI should develop technological solutions, while delivering the necessary evidence, cost-effectiveness analysis to support their translation into practice.</p> <p>A similar link is foreseen with the European Institute of Technology (EIT) Knowledge and Innovation Community (KIC) Health for the areas of knowledge transfer and capacity building in the field of health and care systems research and innovation. However, EIT promotes entrepreneurship and innovation through delivering products, concepts and services and the systemic dimension of health and care system is not sufficiently addressed.</p> <p>Despite of the before mentioned links, the goals and objectives of this partnership require an unique governance where the EU catalyzes the relationship between health and care systems owners/organisers and research funders for a joint effort in the continued innovation cycle (from definition of priorities to uptake of innovation), which currently does not exist.</p> <p>This Partnership will create an innovation pipeline by forming synergies with other Horizon Europe initiatives (EIC, ERC, etc.), EU programmes and actions, such as ESF+, DEP, InvestEU, ERDF, RSP, ESIF, and cross-cluster synergies with Digital and Industry on technologies such as Robotics, Artificial Intelligence, HPC etc.</p>

Does the proposed partnership build on currently active ones?	<p>This Partnership builds on the following major ongoing partnerships:</p> <ul style="list-style-type: none"> <li>- European Innovation Partnership ‘Active and Healthy Ageing’ (12/2020)</li> <li>- Second ‘Active and Assisted Living’ programme, Art. 185 initiative (12/2020)</li> <li>- Joint Programming Initiative ‘More Years, Better Lives’</li> </ul>
Expected type and composition of partners	<p><u>Partners (grant agreement beneficiaries)</u></p> <ul style="list-style-type: none"> <li>- National/regional <b>health and care systems owners/organisers</b>: decision makers, key actors looking for change and able to take up innovation;</li> <li>- Research and/or health systems <b>research funders</b> – actors that provide the financial resources and establish research and innovation priorities;</li> </ul> <p><u>Other stakeholders (including project participation)</u></p> <ul style="list-style-type: none"> <li>- <b>Civil society and end-users</b> (patient/citizen advocacy groups, formal and informal care organisations, health professionals entities, international organisations) – drivers of change by giving input on the needs and priorities of research, as well as employing of the outcomes of the partnership;</li> <li>- <b>Research community</b> (national/regional research institutes, public and private universities, etc.) – study of the health and care systems, finding challenges, barriers, facilitators and promoters of innovation;</li> <li>- <b>Innovation owners</b> (spin-offs, start-ups, SMEs and the wider European industry) <ul style="list-style-type: none"> <li>- mostly related to organisational innovation, in some specific cases also technology supporting this organisational/systems’ innovation.</li> </ul> </li> </ul> <p>In order to ensure geographical coverage, participation will be open to any health and care systems owners/organisers and health systems research funders of the 28 EU Member States. Structuration of activities and governance in the partnership can allow for different levels of involvement. Allocation of resources can include in-kind contributions, which makes the partnership open to a large variety of potential actors.</p>
Contributions and commitments expected from partners	<p><u>National/regional health and care systems owners/organisers</u>: financial contributions, in-kind contributions, access to data, activities/resources linked to market, regulatory, societal or policy uptake;</p> <p><u>Research and/or health systems research funders</u>: financial contributions, in-kind contributions and activities/resources linked to policy uptake.</p>
Currently envisaged implementation mode(s).	<p><input type="checkbox"/> Co-programmed European Partnership</p> <p><input checked="" type="checkbox"/> Co-funded European Partnership</p> <p><input type="checkbox"/> Institutionalised European Partnership</p>
Justification of the implementation mode	<p>A co-programmed European Partnership (option 1, not preferred) would be implemented independently by the partners and would not allow to establish the close collaboration of the different actors that is needed for the <i>uptake</i> of research results.</p> <p>A co-funded European Partnership (option 2, preferred) in this area brings together research funders and health system owners from Member States to jointly tackle common research priorities addressing unmet public health needs, and facilitate the uptake of research results and innovative solutions. This option is more appropriate because it will help overcome fragmentation in research activities, create synergies between research funders and health system owners, pool resources, and provide a range of knowledge and expertise to support the Member States in developing their health and care systems of the future. It will facilitate activities covering research, information flow, knowledge translation, capacity building and technical support. A co-funded partnership would bring together public actors to define unmet public health needs to be addressed by research and innovation, as well as to develop a collaborative action plan to address these and to take research results to implementation.</p> <p>An institutionalized European Partnership (option 3, not preferred) it is more demanding, rigid and complex in terms of governance and management. Therefore, it is less appropriate.</p>
Proposed starting year	Year: 2021/2022