

PORTFOLIO OF SYNERGIES WITH THE PARTNERSHIP ERA4HEALTH

ERA4Health Partnership

WP8



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D8.4 – D1.3.1 Portfolio of Synergies of JTC2022 WP8



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¹ PU = Public
SEN = Sensitive

D8.4 – D1.3.1 Portfolio of Synergies of JTC2022

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GLOSSARY

European Partnership: European Partnerships are initiatives where the EU commits to jointly support the development and implementation of a programme of research and innovation activities together with private and/or public partners. Some of these activities include the coordination of funding calls.

ERA4Health: acronym of the European Partnership which long title is “Fostering a European Research Area for Health Research”.

E4H: short acronym of the European Partnership Fostering a European Research Area for Health Research.

Synergy: the interaction of elements that when combined produce a total effect that is greater than the sum of the individual elements, contributions, etc.

Strategic Research and Innovation Agenda (SRIA): strategic document that identifies the priority areas and main fields to be addressed in E4H and define the general framework for future research, development and innovation activities.

JTC2022: Joint Transnational Call 2022.

European Research Area (ERA): ambition to create a single, borderless area for research, innovation and technology across the EU.

Investigator Initiated Clinical Studies (IICs): clinical studies initiated and managed by a nonpharmaceutical company researcher/s who could be an individual investigator, an institution or a group of institutions, and a collaborative study group or a cooperative group.

LIST OF ACRONYMS

AWP: Annual Work Plan

B1MG: Beyond 1 Million Genomes Project

BBMRI: Biobanking and Biomolecular Resources Research Infrastructure

BE READY: Building a European strategic REsearch and innovation Area in Direct sYnergy with EU and International Initiatives for Pandemic Preparedness

CoI: Conflict of Interest

COMET: Core Outcome Measures in Effectiveness Trials

connect4children: Collaborative Network for European Clinical Trials for Children

IC2PerMed: Integrating China in the International Consortium for Personalised Medicine

CTTI: Clinical Trials Transformation Initiative

E4H: ERA4Health

EATRIS: European Infrastructure for Translational Medicine

ECRAID: European Clinical Research Alliance on Infectious Diseases

ECRIN: European Clinical Research Infrastructure Network

EDCTP: European & Developing Countries Clinical Trials Partnership

EIT Health-KIC: European Institute of Innovation and Technology Health - Knowledge and Innovation Community

EJP RD: European Joint Programme on Rare Diseases

ELIXIR: Life-Science Infrastructure for Biological Information

EMA: European Medicines Agency

EP PerMed: European Partnership for Personalised Medicine

EOSC: European Open Science Cloud

ERA: European Research Area

ERA PerMed: ERA-Net Cofund on Personalised Medicine

ERA-Net Neuron: European Research Area Network of European Funding for Neuroscience Research

ERDF: European Regional Development Fund

ERINHA: European Research Infrastructure on Highly Pathogenic Agents

ESFRI: European Strategy Forum on Research Infrastructures

ESF+: European Social Fund Plus

EU: European Union

EU4Health Programme: European Union for Health Programme

EUHA: European University Hospital Alliance

EUP AH&W: EU Partnership Animal Health and Welfare

EU-Africa PerMed Project: Building links between Europe and Africa in Personalised Medicine

EU-AMRI: European Alliance of Medical Research Infrastructures

EU-Openscreen-ERIC: Not-for-profit European Research Infrastructure Consortium (ERIC) for chemical biology and early drug discovery

EU-PEARL: EU Patient-centric clinical trial platforms

EuroBioimaging ERIC: European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences

FACCE-JPI: Joint Programming Initiative on Agriculture, Food Security and Climate Change

FutureFoodS: European Partnership for a Sustainable Future of Food Systems

GA: Grant Agreement

GACD: Global Alliance for Chronic Diseases

ICPerMed: International Consortium for Personalised Medicine

IHI: Innovative Health Initiative Joint Undertaking

IICS: Investigator Initiated Clinical Studies

INFRAFRONTIER: European Research Infrastructure for Modelling Human Diseases

IRDiRC: International Rare Diseases Research Consortium

JPI AMR: Joint Programming Initiative on Antimicrobial Resistance

JPI HDHL: Joint Programming Initiative a Healthy Diet for a Healthy Life

JPND Research: Joint Programme - Neurodegenerative Disease Research

JTC: Joint Transnational Calls

MIRRI: Microbial Resource Research Infrastructure

NordForsk: Organisation under the Nordic Council of Ministers that facilitates and provides funding for Nordic research cooperation

OH AMR: Candidate European Partnership One Health Antimicrobial Resistance

PARC: Partnership for the Assessment of Risks from Chemicals

PRUDENT: Prioritization, Incentives and Resource Use for Sustainable Dentistry

SBEP: Sustainable Blue Economy Partnership

SHARE ERIC: Survey of Health Ageing and Retirement in Europe

THCS: Transforming Health Care Systems Partnership

The global health network: Platform and community of health workers and researchers

ToR: Terms of Reference

TRANSCAN-3: Sustained collaboration of national and regional programmes in cancer research

Trials@Home: Centre of Excellence for Decentralised Clinical Trials

SWG: Synergies Working Group

Water4All: Partnership Water security for the planet

WP: Work Package

EXECUTIVE SUMMARY

The **purpose** of this public deliverable is to describe the methodology followed to identify the European/international initiatives which may have potential synergies with the Partnership ERA4Health - Fostering a European Research Area for Health Research (E4H), committed in the framework of the **Task 1.3.1 - Elaboration of a Portfolio of Strategic Synergies**, of the WP named **WP1.3 Exploring Synergies of Pillar 1**, Work Package number **WP8**, of the Partnership E4H.

The **main purpose of the action** carried out is to identify overlaps which may help avoid duplicities with other research programmes and to be aware of other initiatives with which potential collaborations may be initiated.

The **objective** of the deliverable is to describe and give an overview of:

- the synergies identified for the definition of the JTC2022,
- the activities carried out to update and identify new European/international initiatives with potential synergies with E4H,
- the activities carried out for the search of synergies with the initiatives identified, and
- elaboration of a portfolio of initiative and synergies with E4H.

This deliverable will be disseminated as a PUBLIC document, addressed to the Secretariats and the partners of E4H, the **European, National and regional policy makers**, the **managers and coordinators** of all the European/international initiatives identified (and other potential ones) and **other stakeholders** in the fields of the Partnership, and in the field of Health in general. The final documents will be spread to the whole **society**.

Main results:

- 59 initiatives have been identified.
 - 26 in the field of Health
 - 9 in other fields than Health
 - 24 in the category of Initiatives related to Clinical Studies and Research Infrastructures.
- Description of the synergies found with all the European/international initiatives identified.
- Elaboration of the draft of the Portfolio of Initiatives and Synergies with E4H.

FICYT will continue updating the list of initiatives and the synergies identified during the whole duration of the Partnership E4H. It is planned to update the information once a year.

An online international workshop was organized on 9th June 2023 to bring together all the Synergies Working Group (SWG) members (representatives of each of the initiatives identified), the E4H Secretariats, the E4H partners and national/regional agencies to present all the initiatives and initiate a debate on the synergies identified and future potential collaborations. The portfolio of initiatives and synergies will be updated annually as new potential initiatives are identified.

1. PURPOSE AND OBJECTIVES

The main objective of WP8 (Exploring Synergies) is to explore synergies between activities and the research agenda of ERA4Health with other related initiatives to avoid overlap and duplication of national and EU research funding and search for potential collaborations. In order to foster a European Research Area (ERA) for Health, a close interaction of the scientific community with policy makers, R&I funding organizations, health and care systems, European programmes and other stakeholders is needed. This Partnership holds a strategic position among the biomedical and health research community and relevant funding organizations. It brings together public research funding organisations, pre-clinical and clinical research communities. Therefore, it is particularly well suited to promote collaboration and the desired interactions at a transnational level, towards a European (and beyond) Research Area in Health Research.

E4H has worked on the identification of synergies with Partnerships, funding programmes, infrastructures and other activities at both EU and international levels in order to collaborate with them and ensure added value to initiatives and instruments that are ongoing.

Synergies among European/international initiatives will result in better innovation governance, more public-public and public-private cooperation and improved R&I support in the countries & regions. More links and bridges between different programmes would facilitate:

- Use of same bodies to implement different funds to promote synchronisation and links at governance level.
- Managing Authorities may identify Partnerships members as intermediate bodies for implementing their actions.

For ERA4Health Partnership it is crucial to connect with other key players and initiatives in the health domain and beyond to increase the impact of R&I investments on the societal challenge that it addresses. To ensure coherence and complementarity of activities and leverage knowledge and investment possibilities, collaborations will be established with other European Partnerships, clusters, mission and programmes under Horizon Europe as well as explore collaborations with other relevant activities at EU and international level.

For doing that, E4H has worked on the identification of European/international initiatives with potential synergies in terms of funding and research activity. Other fields for synergies will be considered for the update of future portfolios of synergies: gender and privacy issues, open access, capacity building, etc.

The **purpose** of this deliverable is to describe the methodology followed to identify the European/international initiatives which may have potential synergies with the Partnership ERA4Health - Fostering a European Research Area for Health Research (E4H), committed in the framework of the **Task 1.3.1 - Elaboration of a Portfolio of Strategical Synergies**, of the WP named **WP1.3 Exploring Synergies of Pillar 1**, Work Package number **WP8**, of the Partnership E4H.

The **main purpose of the action** carried out is to identify overlaps which may help avoid duplicities with other research programmes and to be aware of other initiatives with which potential collaborations may be initiated.

Creating synergies with other related initiatives is essential to avoid the overlapping and duplication of national and EU research funding and complement each other to cover all the needs and demands currently existing in the society in the health area. At the same time, harmonisation of good practices on the cross-section issues should be also pursued. ERA4Health Partnership will actively promote synergies and collaboration with other key initiatives at European level, namely other EU Funding Programmes, Clusters, Missions and other Partnerships.

The **objective** of the deliverable is to describe and give an overview of:

- synergies identified for the definition of the SRIA and the JTC2022,
- the activities carried out to update and identify new European/international initiatives with potential synergies with E4H,
- the activities carried out for the search of synergies with the initiatives identified, and
- elaboration of a portfolio of initiative and synergies with E4H.

This deliverable will be disseminated as a **PUBLIC** document. Specifically, this deliverable is addressed to:

- **The Secretariats of E4H and the partners of E4H:** the information collected will be sent to the Secretariats of E4H and E4H partners in order that they have it into consideration for the elaboration of the annual working plans and the preparations and selection of the call topics for future JTCs, to help avoid duplicities with the funding covered by other initiatives.
- **European, National and regional policy makers:** this information will be shared with as many European, National and regional policy makers as possible for them to get knowledge on the existing initiatives and help them better align the structural programmes of regional and national public administrations with other existing programmes.
- The **managers and coordinators** of all the European/international initiatives identified (and other potential ones) which contribute to avoid overlaps in the topics funded by any of the initiatives identified and help initiate potential collaborations once knowing all the existing initiatives.
- **Other stakeholders in the fields of the Partnership, and in the field of Health in general,** who will get information about other European initiatives that may have synergies with those managed by them.
- **The whole society:** the final documents will be spread throughout the general dissemination channels of E4H and mailing lists of the partners of E4H to reach as much audience as possible.

The content of this deliverable will also feed the activities of:

- **Work Package 4** of E4H – Communication, Dissemination and Exploitation, which main aim is to raise awareness about ERA4Health objectives, activities and results and ensure the timely dissemination of its outputs to different target audiences to enhance actions by governments and stakeholders.
- **Work Package 5** of E4H – Synergies and External Relations, which main aim is to promote synergies and actively engage with relevant stakeholders and initiatives at EU and International level within the area of ERA4Health, so to increase mutual awareness and establish an effective and efficient collaboration in order to avoid duplication of investments, work and related activities. The initiatives and contact persons identified in WP8 will be considered for the collaborations that will be initiated in the framework of WP5.

- **Work Package 15** of E4H – Synergies with other initiatives implementing clinical studies, which main aim is coordinate the funding of multinational Investigator Initiated Clinical Studies (IICSs) through the ERA4Health mechanism with all the other funding sources able to fund multinational clinical studies and identify the initiatives /organisations able to provide support in the planning, design and conduct of multinational IICS.

This deliverable covers activities carried out from the elaboration of the SRIA of E4H, which started in 2021, and the first six months of E4H. The list of initiatives and synergies will be updated periodically as new initiatives are identified. The sense for the creation of the list of Initiatives is essential to identify potential synergies at the time of the launch of all the funding calls by E4H, to avoid duplicities and overlaps.

2. METHODOLOGY

The methodology followed for the elaboration of the portfolio of European/International initiatives and synergies have considered the next steps:

- **Definition of the European/international initiatives identified at the time of the elaboration of the SRIA of E4H and the Joint Transnational Call of 2022 (JTC2022) and synergies found.** A list of European/international Initiatives with potential synergies with E4H were identified at a very preliminary step in 2021 and the first term of 2022 at the SRIA preparation stage.

31 initiatives were identified and potential synergies with E4H were included in the SRIA. The initiatives had different nature and aims:

- EU funding programmes: based on EU policies that will help define a relevant approach within each specific area and research priorities.
- ERA-NETs/Joint Programming Initiatives (JPI)/European Joint Programme (EJP)/Partnerships: close collaboration will be promoted with these initiatives in terms of peer-learning and research priorities selection. For each annual programme elaborated

by ERA4Health, a deep analysis and exchange of information will be carried out to avoid doubled funding.

- Other EU funding instruments: information on complementarities with research priorities will be exchanged to avoid duplications.
 - EU co-funding instruments: promotion of regional/national complementarities with EU co-funding instruments to leverage EU funding. A potential complementarity with EC Cohesion Policy Funds can be further explored by regional/national funding organisations.
 - European Research Infrastructures: the existing EU Health research infrastructures are a key element for building an European Research Area for Health research offering facilities that provide resources and services for the research communities to conduct research and foster innovation in their fields.
- **Further research on the identification of new European/international initiatives:** after the E4H was granted, FICYT carried out further research on new existing European/international initiatives with potential synergies with E4H and found 28 more, reaching a total of 59 initiatives identified.

The main sources of information used are:

- The Funding & Tenders portal, where all the funding programmes of the European Union are published. Web: [Funding & Tenders Portal](#)
 - Web of the European Commission where the information about the European Partnerships is stored. Web: [European Partnerships](#)
 - The Spanish National Contact Point webpage, which includes information on all the initiatives funded under HE. Web: <https://www.horizonteeuropa.es/>
 - Suggestions from E4H partners and from the EC and HaDEA representatives.
 - Webs of the initiatives.
- **Categorisation of the initiatives identified:** the initiatives identified were split into three categories according to their potential link with the priority areas of E4H. There were four categories indicated in the Annex I of the GA (1- Initiatives related to E4H priority areas in the

field of Health in the framework of H2020/HE, 2- Initiatives of non-E4H areas in the field of Health in the framework of H2020/HE, 3- Initiatives in non-Health fields and 4- Initiatives that support Clinical studies and Research Infrastructures), but it was agreed that all but one of the initiatives from H2020 in the category 1 had ended, so categories 1 and 2 were merged to create more consistent and balanced categories. The three categories finally considered are:

- **Initiatives in the field of Health:** the aim of this category is to identify those initiatives, mainly funding programmes, which may launch topics to be funded in similar research lines to those of E4H, and also which may be developing activities similar to those that E4H is planning to carry out. This is very relevant for the elaboration of the annual work plans of E4H. 26 initiatives have been identified in this area.
 - **Initiatives in other fields than Health:** the aim of this category is to identify not only the initiatives fully focussed on the field of Health, but also other initiatives in other fields than Health which may cover topics related to the areas of E4H, and also which may be developing activities similar to those that E4H is planning to carry out. For instance, Cluster 6 of HE focusses on Food, among other areas, and may cover topics related to healthy habits or nutrition and to prevention of cardiovascular diseases. 9 initiatives have been identified in this area.
 - **Initiatives related to Clinical Studies and Research Infrastructures:** this category has specifically been selected to identify the Research Infrastructures and those initiatives which give funding to carry out clinical studies, advice on how carry out clinical studies, regulator entities, etc. 24 initiatives have been identified in this area.
- **Elaboration of a register of the initiatives identified:** the initiatives were collected in an Excel including the following fields:
 - Reference: to keep track on each of the initiatives.
 - Area: to include information about the specific area covered by each initiative. The different type of areas covered are the following: for the category 1) cardiovascular diseases, Nutrition and lifestyle-related diseases, Nanomedicine, Cancer, General Health, Rare Diseases, Antimicrobial Resistance, Personalised Medicine, Pandemic, Chronic Diseases, Neuroscience, other. For the category 2) Food, Water, Chemicals, Cooperation, Cohesion Policy, Social Policy, marine and Maritime R&I. And for the category 3) General Health, Clinical studies, Nanomedicine and Other.

- Type of initiative: Partnership, ERANET, Funding Programme, EU-cofunding programme, Research Infrastructure, Joint Programming Initiatives (JPI), European Joint Programme (EJP) and Other.
 - Level: National, European and International.
 - Web of the initiative
 - Contact name for the initiative: a contact person for each initiative has been identified and invited to be a member of the Synergies Working Group created in E4H. The SWG was created in the framework of the Task 1.3.2 of WP8 (see deliverable D8.1). The SWG is made up of one representative from each of the identified initiatives who officially accepted to be part of the SWG and to collaborate in the search for synergies.
 - Contact e-mail.
 - Research lines: with answer yes/no, this field indicates if the initiative covers specific research lines.
 - Name of the document containing the research lines: the documents may be the SRIA of the initiatives, working plans, etc.
 - Link to the document containing the research lines.
 - Active/finished: this field indicates if the initiative is still ongoing. Some initiatives were active and were considered for the elaboration of the SRIA and the JTC2022 but finished. These initiatives will not be included in the updates of the Portfolio.
 - Description: this field includes information on the description of each of the initiatives identified.
- **Review of the list of initiatives by the members of Work Package 8 Exploring Synergies partners of E4H:** the list of Initiatives was sent to all the partners and funding agencies of E4H to get feedback from them about the pertinence of including all the initiatives identified and/or include other initiatives not identified in the previous steps.
 - **Elaboration of the final list of European/international initiatives identified:** a final list of European/international initiatives were elaborated (see Section Results of this deliverable) considering comments from the E4H partners.
 - **Search for synergies between the initiatives identified and E4H:** after the identification of the initiatives and the elaboration of the final list, FICYT started the search of synergies for each initiative. In order to identify potential synergies, an exhaustive research on the documents

and links containing the research lines and priorities of each initiative has been carried out. A list of synergies was elaborated for each identified initiative (see Section Results).

- **Elaboration of the portfolio of Synergies** (see Section Results): the first draft of the synergies identified was shared with the members of the SWG and the E4H partners, for them to confirm or modify whatever needed. A portfolio with the final list of European/international initiatives and synergies identified has been elaborated and will be used by the Partnership E4H for:

- the elaboration of the annual work plans of E4H: this document which will be annually updated and shared with the Secretariat and partners of E4H for the definition of the annual work plans of E4H to avoid duplicities and overlapping with the topics to be funded by E4H.
- dissemination purposes: this portfolio will be widely disseminated to make national/regional policy makers and funding programme managers aware of the existing European/international initiatives and their main research priorities. This will allow them to have the information and contact persons (members of the SWG created and registered in D8.1) for them to better align their national/regional policies.
- Initiate collaborations and exchange of best practices between E4H and the initiatives.

- **Public presentation of the initiatives and the synergies identified:** an international workshop was organised on 9 June 2023, to present the initiatives and the synergies to a great audience with more than 159 attendees (EC representatives, E4H partners and Secretariats, SGW members, National/regional policy makers). The main objective of this workshop was to make all participants aware of existing initiatives and synergies. Short presentations were made to get an overview of all initiatives and synergies. Following the workshop, contacts with the initiatives will be initiated in order to deepen future collaborations.

3. RESULTS

The main results obtained after the execution of the activities described in this deliverable are:

- Identification and description of 59 initiatives:
 - 26 in the field of Health
 - 9 in other fields than Health
 - 24 in the category of Initiatives related to Clinical Studies and Research Infrastructures.
- Description of the synergies found with all the European/international initiatives identified.
- Elaboration of the draft of the portfolio of initiatives and Synergies with E4H.

INITIATIVES RELATED TO OTHER FIELDS THAN HEALTH


Ref.	Initiative	Research lines	Management & Governance	Early Career Network	Gender	Data Protection	Raise citizens' awareness	Stakeholders	Translation of evidence into policy	Digital Health	Health Technology Assessment	Clinical Studies	Patient empowerment
2.1	Water4All	Low		x				x	x				
2.2	FutureFoodS	Intermediate	x										
2.3	SBEP	Low	x										
2.4	FACCE-JPI	Intermediate							x				
2.5	EUP AH&W	Low	x										
2.6	NordFosk	x		x	x		x	x	x	x		x	
2.7	HE Cluster 6	x											
2.8	PARC		x										
2.9	ERDF		x										

INITIATIVES RELATED TO CLINICAL STUDIES & RESEARCH INFRASTRUCTURES

Ref.	Initiative	Research lines	Management & Governance	Early Career Network	Gender	Data Protection	Raise citizens' awareness	Stakeholders	Translation of evidence into policy	Digital Health	Health Technology Assessment	Clinical Studies	Patient involvement
3.1	ECRIN											X	
3.2	EATRIS							X			X	X	X
3.3	ESFRI											X	
3.4	EUHA		X	X		X			X	X		X	X
3.5	conect4children			X			X	X	X			X	
3.6	MIRRI											X	
3.7	ERINHA											X	
3.8	EOSC		X									X	
3.9	Trials@Home											X	
3.10	COMET			X								X	X
3.11	ELIXIR											X	
3.12	REMED4All							X	X		X	X	X
3.13	BBMRI											X	
3.14	EU-OPENSREEN											X	
3.15	INFRAFRONTIER											X	
3.16	ECRAID											X	
3.17	EU-PEARL											X	
3.18	EDCTP3											X	
3.19	EU_AMRI											X	
3.20	EuroBioimaging											X	
3.21	SHARE ERIC											X	
3.22	CTTI										X	X	X
3.23	TGHN											X	
3.24	EMA											X	

The portfolio of initiatives and synergies is presented below:

SYNERGIES WITH INITIATIVES IN THE FIELD OF HEALTH

REFERENCE	1.1
NAME OF THE INITIATIVE	Joint Programming Initiative a healthy diet for a healthy life
ACRONYM OF THE INITIATIVE	JPI-HDHL
LOGO	
WEBPAGE	Home (healthydietforhealthylife.eu)
DESCRIPTION OF THE INITIATIVE	
<p>The strategic goal of JPI HDHL is that by 2030 all citizens will have the motivation, ability and opportunity to consume a healthy diet from a variety of foods, have healthy levels of physical activity and that the incidence of diet related disease will have decreased significantly.' JPI-HDHL coordinates, aligns and promotes research in the area of sustainable food, nutrition, health and physical activity and bring together 18 countries that align research programming and fund new research to prevent or minimise chronic diseases linked to food, nutrition, health, lifestyle and physical activity. HDHL also acts as a think tank, bridging between and bringing together sectors and people.</p>	
SYNERGIES	
Synergies related to Research Lines	
<ul style="list-style-type: none"> • Citizens, Diet and Behaviour (area 1) - Measurement and understanding. <p>Biomarkers of food intake and physical activity Sensitive and reliable biomarkers are vital in the assessment of diet and physical activity. There is a need for biomarkers to assess the intake of specific nutrients, food or food components. In relation to physical activity, biomarkers and e-monitors have been implemented in professional sport to measure performance and training. In recent years scientific efforts have been focused on developing a set of biomarkers and e-monitors for 'ordinary' physical activity and sports, in order to measure physical activity more objectively.</p> <p>Towards standardized monitoring Standardized monitoring of health behaviours and their determinants allows scientists to link data from different studies and perform large-scale analyses of diet and physical activity. This approach makes it easier to demonstrate whether an intervention is effective or not, to evaluate and compare current policies and to develop new ones.</p> <p>Predicting and changing health-related behaviours Additional understanding of the broad range of determinants of diet, food choice, physical activity and sedentary behaviour, and attaining/maintaining a healthy body is needed. For example, there exists</p>	

scarce research and data on the impact of economic status on healthy diets and physical activity. A range of approaches (e.g. natural experiments, predictive studies, qualitative work or randomized, controlled trials) might be appropriate in studying different determinants and their interrelationships.

Analysis of social inequality

Data that quantify health inequalities and variations in health determinants across different socioeconomic and minority groups are currently limited. Both health and health behaviours - including dietary habits and physical activity - are unequally distributed across different socio-economic groups. But the causes and consequences are not well understood. Research should focus on the effects of interventions in different socio-economics groups, with particular attention to intersectionality in order to ensure that health gaps do not widen but, preferably, are reduced. This will allow the design of more-effective interventions.

- **Citizens, Diet and Behaviour (area 1) - Policies to change behaviour**

Intervention programs

Mechanisms of behavioural change range from controlled to automatically-processed influences on behaviour and are still underexplored in the areas of nutrition and physical activity, especially when these combine. Understanding these mechanisms and their interactions could help elucidate where best to target intervention programs.

- **Food for Health (area 2) - Safe and sustainable food for a healthy diet**

Bioactives

Better use of raw animal and plant materials is essential in order to preserve natural resources. Bioactives, in the form of enhanced nutrients or non-nutrient food components, could provide great opportunities for innovation in food-processing technology. However, lack of scientific evidence on the health effects of new nutrient sources - for example from waste streams from the global food industry, including commercial fishing - has limited their use in the development of novel food products. More insights need to be gained on new and known bioactives, their interaction with the human genes and microbiota, and their effect in food matrices. This multidisciplinary research should involve nutrition scientists, physicians and food engineers across the food value-chain.

Product reformulation and foodomics

Research in the field of food and sensory science, as well as consumer research, is needed to enable targeted innovation and reformulation of food products and product portfolios, to add value in terms of health and sustainability, and of sensory properties. In particular the physicochemical structure, texture and sensory aspects of (reformulated) foods are crucial to consumer acceptance. These aspects also influence their willingness to buy, and therefore are essential in bringing a broad portfolio of healthy and sustainable food products to the market. The research should also consider issues such as portion size and salt, sugar and fat levels.

Food safety

Food safety is an important consideration in the development and production of healthy and sustainable food products. Global sourcing and production, with multiple stakeholders across the food value-chain, requires more-advanced monitoring and hazard assessment. The presence of toxins and environmental pollutants, and the transformation towards new, more sustainable marine and plant-based sources, further highlights the importance of new research in this field.

In collaboration with the food industry, potential toxic components or contaminants present and other biochemical and microbiological hazards in foods need to be identified. There is a need for the development of advanced technologies that facilitate quality monitoring and hazard assessment across the global food value-chain.

- **Food for Health (area 2) - Understanding nutrient utilization and metabolism**

Bioaccessibility and bioavailability of nutrients

More research is needed to improve the understanding of nutrient bioavailability in the human body, including nutrient release from the food matrix, transport within the intestine and the delivery of nutrients to the site of absorption or utilization. This knowledge will provide new opportunities for the development of foods that, for example, affect nutrient transfer and microbiota composition in the gut and thereby modulate satiety and/or metabolism.

In addition, increased use of existing and exploitation of new plant and aquatic resources, could be a promising way forward in meeting demands for scarce ingredients. Examples include the extraction of bioactive ingredients such as long-chain n-3 fatty acids from algae, and plant proteins from agriculture waste streams. Knowledge needs to be gained on the health effects and safety of such components and how they can be efficiently processed in order to develop safe and nutritious foods that are accepted and appreciated by consumers.

The effects of food processing

The composition of a food, ingredient properties, processing and storage conditions affect the nutritional value and sensory properties of the end product. There is a strong need for research that gains a better understanding of these effects. This will substantially facilitate product development and reformulation. The whole food value-chain should be considered, from raw material to end product, in order to allow safe and standardized production processes. Research should also focus on prediction of the effects of food structure and food processing on the nutritional and sensory characteristics of foods.

- **Food for Health (area 2) - Food production for precision nutrition**

European citizens generally consume excessive levels of salt, sugar and saturated fat. However, individual consumers display different metabolic reactions to these food components. Similarly, some consumers will respond physiologically to a dietary intervention but others will not (despite equivalent compliance). To date we have little or no understanding of this phenomenon, though this is vital in working towards precision nutrition. More research is needed to determine how precision nutrition can be of the most added value: food products targeting the dietary and sensory needs of specific groups - such as the elderly, pregnant women, children and people with a chronic disease - and perhaps even tailored to an individual's needs.

- **Diet, Health and Disease (area 3) – Malnutrition**

Identification of underlying mechanisms

There is a need for advanced technologies that allow investigation of the effects of diets on each level: from the epigenome and transcriptome to the proteome and metabolome and, thus, the human phenotype. When embedded into the different life stages this research can reveal mechanisms or pathways that improve assessment of disease risk and help prevent or even treat lifestyle-related diseases.

Biomarkers for health

Sensitive and reliable biomarkers are vital in assessing the long-term health effects of diets and food products. These effects are currently difficult to assess, as demonstrated by, for example, the many rejections of health claims submitted to the European Food Safety Authority. Identification or development of a much broader palette of validated biomarkers could substantially facilitate this process. Biomarkers should reflect nutrition-related health status at both individual and group levels, and represent the effects of individual ingredients, food-products and/or diets.

Precision nutrition concepts for prevention & treatment of lifestyle-related diseases

A promising approach to tackling the different forms of malnutrition, is the development of more targeted nutrition within the vision of precision nutrition concepts. The objective is to more effectively tailor prevention and/or therapeutic strategies to meet the needs of specific target groups, or groups of individuals with similar phenotypes. An example could be nutritional concepts specially developed for the elderly, or people with a chronic health disorder such as diabetes or inflammatory bowel disease. This might be more effective than the 'one size fits all' approach - of the last few decades - that has not proven successful.

Definition of a healthy diet

Research is needed to understand the complex nutrition-gut-metabolism interactions and their impact on the health and disease risk for of people in general and specific subgroups (i.e. those in critical physiological or transitional life periods such as pregnancy, lactation, infancy, childhood, retirement and old age, or people with chronic diseases). Insights in this field are a prerequisite for the development of more-targeted dietary recommendations in the continuum between health and disease. As a healthy diet is not necessarily the same as a sustainable diet, a diet that is both healthy and sustainable is a logical focus.

Overweight, obesity prevention and treatment

Effective strategies, for the prevention and treatment of obesity and related metabolic diseases, must target all age groups and use a whole-life approach that covers all critical transition phases, by combining knowledge and expertise from all three research areas within the JPI HDHL. It is important to investigate how interventions can be implemented effectively within healthcare systems, as this has the potential to deliver huge, and relatively short-term, impacts.

It is crucial to better understand the role of early environmental exposure to an unhealthy diet and/or low levels of physical activity, in the development of obesity, diabetes and related diseases at any life stage. This will help optimise foetal and early postnatal development, with the goal of preventing excessive weight gain during infancy and childhood.

In recent years research has focused mainly on preventing obesity in childhood. Adolescents, too, are an important target group; during adolescence hormonal changes and rapid growth might offer potential for metabolic (re)programming, while dietary behaviour often substantially changes. Furthermore, scientists should also look into how adults can maintain a healthy body weight and prevent weight gain by investigating the mechanisms that lead to obesity in later life, especially during life-changing events, such as young adults moving out from home, people starting a family, or older people transitioning into retirement.

- **Diet, Health and Disease (area 3) - Physiology of dietary behaviour**

Regulation of food intake

Food intake, food choice and eating behaviour are partly controlled by nutrients present in the gastrointestinal tract and the central nervous system, in a process called nutrient-signaling.

Cognitive control of dietary behaviour also plays a part. For example, the role of technology and (digital) marketing targeted at children that shapes both healthy and unhealthy behaviour, is of much interest. However, the implications of these interactions are still unknown. There is a particular need for research into the association between neurological processes, micro- and macronutrient composition of the diet, and health issues such as obesity, metabolic disorders and degenerative diseases. Different kinds of foods and meal compositions, the frequency and timing of consumption and physical activity might affect a person's internal clock and health status, since every organ has a time of the day at which it functions at its best.

Gut-brain axis

The composition and activity of human gut microbiota have been linked with brain function and neuropsychological diseases. Diet is one of the main factors modulating the composition and function of the gut microbiome, but the mode of action is not yet fully understood. More research, as well as a harmonization of research approaches, is needed to better understand how diet and lifestyle influence the composition of the gut microbiota and thereby health, especially the development, maintenance and decline of cognitive function throughout life. In addition to the microbiota, the gastrointestinal mucosa has been shown to have a major impact on metabolic processes after food intake. This regulation includes a large number of yet-to-be-identified endocrine regulators, and the possibility of neural regulation via the gastrointestinal tract.

- **Diet, Health and Disease (area 3) - Adverse reactions to food**

Food allergies and food intolerance


The relationship between food processing and food allergy or food intolerance merits investigation at the European level. Therefore, JPI HDHL seeks to underpin approaches that can define the extent to which product reformulation, food processing and eating habits can attenuate the risk of adverse reactions to food. Such reactions include both immune-mediated food allergies and non-immune mediated food intolerances. For the second group in particular, not all reported symptoms are caused by food intolerance. Therefore, it is difficult to estimate how many people are truly affected, which points to the need for stronger evidence-based data. More research is needed to identify potential allergens and to understand how they work.

OTHER SYNERGIES: Collaborations and peer-learning

Early Career Network: JPI-HDHL has set up an ECN.

Stakeholders: JPI-HDHL has experience with stakeholder involvement.

Translation of evidence into policy: JPI-HDHL works heavily towards implementing science to policy.

REFERENCE	1.2
NAME OF THE INITIATIVE	Horizon Europe – Cluster 1
ACRONYM OF THE INITIATIVE	HE Cluster 1
LOGO	
WEBPAGE	Horizon Europe (europa.eu)
DESCRIPTION OF THE INITIATIVE	
<p>The aims of this cluster include improving and protecting the health and well-being of citizens of all ages by generating new knowledge, developing innovative solutions and integrating where relevant a gender perspective to prevent, diagnose, monitor, treat and cure diseases. Further aims include developing health technologies, mitigating health risks, protecting populations and promoting good health and well-being in general and at work. Finally, this cluster also aims to make public health systems more cost-effective, equitable and sustainable, prevent and tackle poverty-related diseases and support and enable patients' participation and self-management.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>HORIZON-HLTH-2023-ENVHLTH-02-01: Planetary health: understanding the links between environmental degradation and health impacts</p> <p>Globally, life quality and expectancy have increased to unprecedented levels over the last decades due to the significant public health, agricultural, industrial and technological achievements of the 20th century. On the other hand, the ongoing trend of environmental degradation and global climate and environmental changes has introduced new pressures, which involve large impacts on human health and might put at risk the recent public health gains.</p>	
<p>HORIZON-HLTH-2024-ENVHLTH-02-06-two-stage: The role of environmental pollution in non-communicable diseases: air, noise and light and hazardous waste pollution</p> <p>The European Green Deal set out by the European Commission recognizes that manmade environmental pollution is an increasing threat for human health and wellbeing. Opinion polls 85 show that climate change, air pollution, and waste are the three most important environmental issues that European citizens are concerned about. Over three-quarters (78%) of respondents believe that environmental issues have a direct effect on their daily life and health.</p>	
<p>HORIZON-HLTH-2023-DISEASE-03-03: Interventions in city environments to reduce risk of non-communicable disease (Global Alliance for Chronic Diseases - GACD)</p> <p>The European Commission is a member of the Global Alliance for Chronic Diseases (GACD)¹²⁰. This topic is launched in concertation with the other GACD members and aligned with the 8th GACD call. The topic is focused on implementation research with the potential to reduce the risks of NCDs in cities in LMICs and/or vulnerable populations in HICs. Proposals should focus on implementation science around evidence-based interventions that promote healthy behaviours, and that have the potential to profoundly reduce the risk of chronic diseases and multimorbidity. Non-communicable diseases, such as diabetes, cardiovascular disease, neurological diseases, respiratory diseases, certain cancers, and mental health disorders, are the leading cause of morbidity and mortality in both LMICs and HICs. The COVID-19 pandemic has brought these chronic diseases</p>	

further into the spotlight, as the majority of those who have experienced severe illness and/or death have had one or more underlying NCD. Reducing the burden of NCDs is therefore critical to building more resilient, equitable, and healthier societies.

HORIZON-HLTH-2023-DISEASE-03-07: Relationship between infections and non-communicable disease

Increasing evidence suggests that several infections might influence the development of many non-communicable diseases (e.g. multiple sclerosis, Alzheimer, post-covid-19 condition), or that NCD may be influenced by concurrent presence in the same individual of one (or more) infections. On the other hand, NCDs might represent risk factors for IDs.

The proposals are expected to elucidate and provide a better understanding of causative links between infections and non-communicable diseases onsets, and/or the impact of infections on the exacerbation of existing NCDs or vice versa, in children and/or adults. The analysis of genetics, immune status, immune or inflammatory responses, microbiome, lifestyle and/or other relevant factors (e.g. differences in age, sex/gender, vaccination status, ethnicity) should be integrated to get information for prevention, early diagnosis, risk factors, and to better understand causative links as well as the progression of those non-communicable diseases.

HORIZON-HLTH-2024-DISEASE-03-08-two-stage: Comparative effectiveness research for healthcare interventions in areas of high public health need

Effective, affordable and accessible healthcare for diverse population groups is challenging and complex. For example, specific needs underlie the delivery of effective preventive actions and therapeutic treatments to a rapidly growing elderly population, often presenting comorbidities and associated polypharmacy. The pediatric population, including children born preterm, has also its specific needs in specially adjusted therapeutics and early interventions to address emerging health and developmental problems. Similar to the elderly population, the pediatric population is often excluded from many clinical trials that generate the evidence base for healthcare interventions. Women, including pregnant women, are also often under-represented in clinical studies and access to quality healthcare is frequently inadequate. Other population groups with limited access to quality healthcare and/or underrepresentation in clinical studies include low-income groups, and refugees. Intersectionality within these groups also needs consideration.

HORIZON-HLTH-2023-TOOL-05-04: Better integration and use of health-related real-world and research data, including genomics, for improved clinical outcomes

Health data bear vast information potential in many disease areas, to significantly improve the outcomes and efficiency of healthcare delivery, unlock new research and innovation avenues, and inform public health policy across Europe. There is a huge need of integration, use and deployment of health data from multiple sources for effectively addressing the challenges of medical research underpinning diagnostics, therapy guidance and implementation decisions on new therapies. Such integration requires linking data of different types, disease areas and provenance which are scattered in repositories and databases across Europe.

This topic aims to support proposals focusing on the integration of health data from multiple sources (e.g. electronic health records, genomics, medical imaging, laboratory and diagnostic results, pathogen data, public health registries and other clinical research data) by linking real-world and clinical research data. The data integration should be exemplified in several use cases, i.e. well-justified groups of

diseases (excluding cancer), within and/or across medical domains, and pave the way towards improved health outcomes. At least one of those use cases should build on the use of whole genome sequence data.

HORIZON-HLTH-2024-TOOL-05-06-two-stage: Innovative non-animal human-based tools and strategies for biomedical research

The proposal(s) should develop and/or use tools and strategies that address critical areas of biomedical research where animal-models are currently used but are of limited translational value for investigation and development of prevention and treatment. Such advanced tools and strategies should aim at a better understanding of the pathogenesis of disorders that feature a high impact on public health and exhibit a high rate of animal use or severe animal suffering, and enable to develop biomedical concepts with increased translational value, thereby ultimately leading to improved disease prediction, prevention and treatment.

HORIZON-HLTH-2023-TOOL-05-01: Clinical trials of combined Advanced Therapy Medicinal Products (ATMPs)

The subjects of this topic are combined ATMPs (Advanced Therapy Medicinal Products) according to the definition of the ATMP-regulation (EU 1394/2007, Article 2d). Such combined ATMPs are composed of an ATMP and one or more medical devices or one or more active implantable medical devices, and their cellular or tissue part must either contain viable cells or tissues, or non-viable cells or tissues liable for exerting the primary action on the human body.

The combined ATMPs should be more effective than current state-of-the-art solutions on the European market owing to improved features like personalisation, accuracy, reliability and usability and contribute to long-term sustainability (faster and affordable) of European health systems.

Research should focus on advanced stages of clinical development with regulatory work on the Medical Device part completed and safety studies of the combination product in an advanced stage.

Proposals should address the following activities, among others: Phase 2 clinical trials and above of combined ATMPs.

HORIZON-HLTH-2023-IND-06-05: Mapping the hurdles for the clinical applications of Advanced Therapy Medicinal Products (ATMPs)

New pioneering treatments called Advanced Therapy Medicinal Products (ATMPs), including cell and gene therapies, have the potential to bring new cures to patients affected by diseases with limited or no available treatments. However, several hurdles impede or slow down the access of ATMPs to patients in the EU and Associated Countries. These include e.g. regulatory challenges, underlying scientific uncertainties, differences in assessing the values of ATMPs by the various Health Technology Agencies (HTA), difficulties to perform randomised-controlled clinical trials or to obtain long-term safety and effectiveness data, the lack of harmonized approaches to the reimbursement of the high upfront costs by health systems, manufacturing processes, etc.

HORIZON-HLTH-2024-STAYHLTH-01-02-two-stage: Towards a holistic support to children and adolescents' health and care provisions in an increasingly digital society


Laying the ground for a healthy life starts in childhood. Accordingly, and in line with the HealthyLifestyles4All Initiative, the 'Healthier Together' – EU Non-Communicable Diseases Initiative, and the Communication of the Commission on enabling the Digital Transformation of Health and Care,

the main goal of the research and innovation should be to promote healthier societies by developing holistic solutions that foster healthy lifestyles from early age with long-term impact(s). Digitalization poses risks but can also be a driving force for empowering young citizens, who are growing up in an increasingly digitized world, in taking an active role in the management of their own health conditions, mental and social well-being, and promote healthy lives and disease prevention, through innovative solutions, coordinated person-centred care models and better health literacy. The topic encourages the participation of small and medium-sized enterprises (SMEs), as well as of European, national and regional authorities and civil society, in order to strengthen the scientific and technological expertise of SMEs in the health and care domain to promote the uptake of innovative health and care solutions in Europe.

OTHER SYNERGIES: Collaborations and peer-learning

Gender: Gender equality Strategy 2020-2025 of the European Commission.

Data protection: Guidelines of the European Commission on ethics and data protection.

REFERENCE	1.3
NAME OF THE INITIATIVE	EU4Health Programme
ACRONYM OF THE INITIATIVE	EU4Health
LOGO	
WEBPAGE	EU4Health (europa.eu)
DESCRIPTION OF THE INITIATIVE	
<p>EU4Health is the EU’s largest health programme in monetary terms, with a budget of €5.3 billion in current prices. The EU4Health programme goes beyond an ambitious response to the COVID-19 crisis to address the resilience of European healthcare systems. EU4Health provides funding to national authorities, health organisations and other bodies through grants and public procurement, contributing to a healthier Europe. The EU4Health programme is a key pillar to the Commission’s work to strengthen the European Health Union and contribute to the EU's health priorities. The actions funded under the EU4Health programme pursue 4 goals and 10 specific objectives. EU4Health will also be investing in urgent health priorities: response to COVID-19 pandemic and resilience for cross-border health threats; Europe’s Beating Cancer Plan; The Pharmaceutical Strategy for Europe. And other areas: the digitalisation of health systems, antimicrobial resistance, improved vaccination rates.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>DP-g-23-31-01 Direct grants to Member States’ authorities: ‘Healthier Together’ EU NCD initiative61 – chronic respiratory diseases (CRDs)</p> <p>The joint action will support the definition and roll-out of best practices for implementation through population-level disease prevention and health promotion interventions and other actions expected to reduce the burden of CRDs in the Member States.</p> <p>The short-term impact would be an increased number of public health interventions being scaled up in all Member States and improvements in health promotion and disease prevention, and management policies related to CRDs.</p>	

DP-g-23-34 Call for proposals for operating grants to NGOs: financial contribution to the functioning of health non-governmental bodies implementing one or more specific objectives of Regulation (EU) 2021/522

POLICY CONTEXT


NGOs play a major role among others in providing aid at EU, national and local levels. In the field of health, and specially public health, they provide services directly to patients and individuals being in some cases in the first line of action also during emergencies. NGOs are also essential in bridging the gap between institutions and patients and facilitating communication at national and EU level. These organisations are not-for-profit and therefore necessarily rely on funding from different sources, for instance private donations, national or international contributions.

The Commission considers important that there is continuity in the work carried out by the health NGOs in addressing current health challenges including the COVID-19 pandemic and its consequences, and intends to award operating grants under this work programme to eligible NGOs.

NGOs' expertise and contribution is expected to be of added value in relation to NCDs, health determinants, ageing society, vulnerable groups and rare diseases. Poor nutrition, physical inactivity, obesity, tobacco use and harmful use of alcohol are risk factors common to other chronic diseases, such as cardiovascular diseases may also require attention.

CP-p-23-15 Support to speed up the development of, access to and/or uptake of innovative technologies and critical medicines (HERA)

In accordance with its work plan 2022 (item 1.11), HERA is currently establishing the list of critical medical countermeasures (MCM) required to improve EU preparedness and response to serious cross-border health threats. Based on this list, including both existing and in development MCM, HERA will identify the most promising and innovative technologies for diagnostic, preventive and therapeutic purpose, whose development, access or uptake should be supported. Furthermore, in case of a future public health emergency, the Commission is tasked with establishing a list of crisis-relevant medical countermeasures and raw materials.

REFERENCE	1.4
NAME OF THE INITIATIVE	ERA-NET: Sustained collaboration of national and regional programmes in cancer research
ACRONYM OF THE INITIATIVE	TRANSCAN
LOGO	
WEBPAGE	<u>TRANSCAN-3</u>
DESCRIPTION OF THE INITIATIVE	

TRANSCAN-3 is an ERANET funded by Horizon Europe which brings together 31 funding organisations from 20 countries, with the common goal of supporting high-impact translational cancer research. Through cross-national joint calls for proposals and making the most of international and interregional cooperation, TRANSCAN-3 aims to provide influential contributions as well as a sustainable model of funding for ground-breaking translational cancer research in Europe and beyond.


SYNERGIES


OTHER SYNERGIES: Collaborations and peer-learning

Management & Governance: TRANSCAN-3 has developed a process for the identification and prioritization of new topics to be funded.

Early Career Network: TRANSCAN-3 gives support for early-career translational cancer scientists.

Patient involvement: TRANSCAN-3 has a specific task addressed to the empower of patients.

REFERENCE	1.5
NAME OF THE INITIATIVE	ERA-NET: Sustained collaboration of national and regional programmes in cancer research
ACRONYM OF THE INITIATIVE	ERA PerMed
LOGO	
WEBPAGE	ERA PerMed (isciii.es)
DESCRIPTION OF THE INITIATIVE	
<p>ERA PerMed is an ERA-Net Cofund, supported by 32 partners from 23 countries and cofunded by the European Commission. To align national research strategies, promote excellence, reinforce the competitiveness of European players in Personalised Medicine, and enhance the European collaboration with non-EU countries, national funding organisations have agreed to launch Joint Transnational Calls for collaborative innovative research projects in Personalised Medicine.</p> <p>5 Joint Transnational Calls (2018-2022) have been launched (the 1st cofunded by the EC) providing more than 130M€ to funded transnational research consortia.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Prevention in personalized medicine</p> <p>As personalised medicine is non-disease-specific, but rather an overall approach that can be adopted and adapted to a multiplicity of medical conditions, research projects in every disease entity are encouraged. The clinical relevance of the proposed PM approach needs to be convincingly demonstrated. Moreover, proposals must combine pre-clinical or clinical research with research on data and information and communication technology (ICT) as well as research on ethical, legal and social aspects (ELSA) or health economics/implementation support. ERA PerMed fosters research and innovation activities that build close linkages between the afore-mentioned research areas. This implies a wide range of multidisciplinary activities brought together by different stakeholders from academia, clinical/public health research and private partners such as small and medium-sized enterprises (SMEs), policy makers, regulatory/health technology assessment (HTA) agencies and patients/patient organisations. The involvement of partners with the respective expertise in the consortium is required.</p>	
OTHER SYNERGIES: Collaborations and peer-learning	
Management and Governance: ERA PerMED is an ERANET with may have similar governance structure.	

REFERENCE	1.6
NAME OF THE INITIATIVE	European Joint Programme on Rare Diseases
ACRONYM OF THE INITIATIVE	EJP RD
LOGO	
WEBPAGE	EJP RD – European Joint Programme on Rare Diseases (ejprarediseases.org)
DESCRIPTION OF THE INITIATIVE	
<p>The European Joint Programme on Rare Diseases (EJP RD) is a programme aiming to create an effective rare diseases research ecosystem for progress, innovation and for the benefit of everyone with a rare disease. They support rare diseases stakeholders by funding research, bringing together data resources & tools, providing dedicated training courses, and translating high quality research into effective treatments.</p> <p>The European Joint Programme on Rare Diseases (EJP RD) brings over 130 institutions (including all 24 ERNs) from 35 countries to create a comprehensive, sustainable ecosystem allowing a virtuous circle between research, care and medical innovation.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Natural History Studies addressing unmet needs in Rare Diseases</p> <p>The objective of this call is to conduct efficient, innovative and high-quality natural history studies which will facilitate understanding of the disease's or group of disorders' progression throughout the lifespan of a patient. The goal of these studies is to collect and analyze comprehensive patient data to define targets for future therapies, taking into consideration innovation, safety, and efficacy.</p> <p>Research proposals should cover at least one of the following areas:</p> <ul style="list-style-type: none"> • Estimation of disease prevalence; • Identification of biomarkers/companions for the diagnosis/prognosis of a RD; • Identification of biomarkers/indicators/predictors of a rare disease or group of disorders (e.g. having the same etiology) onset/progression (including collection of genetic, physiological, environmental data or variables....); • Identification of relevant endpoints for future studies that include potential biomarkers, querying patient-reported outcomes (PROs) and quality-of-life measures; • Identification of biomarkers/variables for therapeutic approaches (pharmacology, drug repurposing, gene therapy, RNA therapy, cell therapy, medical devices...) <p>Specific impact 1: Improve lives of rare disease patients by providing new and optimised treatment options and diagnostic tools for these diseases</p> <p>The contribution of the EJP RD to the improvement of lives of RD patients by providing new and optimized treatment options and diagnostic tools will be achieved as a sum of efforts provided within different pillars and transversal activities strengthened by the central coordination and close linkage with relevant policy stakeholders to translate these efforts at regional, national and EU levels.</p>	

REFERENCE	1.7
NAME OF THE INITIATIVE	Joint Programming Initiative on Antimicrobial Resistance
ACRONYM OF THE INITIATIVE	JPIAMR
LOGO	
WEBPAGE	JPIAMR – Joint Programming Initiative on Antimicrobial Resistance
DESCRIPTION OF THE INITIATIVE	
<p>The Joint Programming Initiative on Antimicrobial Resistance, JPIAMR, is an international collaborative organization and platform, engaging 29 nations and the European Commission to curb antimicrobial resistance (AMR) with a One Health approach. The JPIAMR coordinates national research funding and supports collaborative action for filling knowledge gaps on AMR with a One Health perspective. Their shared Strategic Research and Innovation Agenda outlines the key areas to be addressed and provides guidance for countries to align their AMR research agendas nationally and internationally. OH AMR (see initiative 1.13) is an evolution of JPIAMR.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Priority topic: Therapeutics Discovery of new antimicrobials and therapeutic alternatives, and the improvement of current antimicrobials and treatment regimens</p> <p>Research and innovation objectives:</p> <ul style="list-style-type: none"> • Find new antimicrobials and targets: based on traditional and novel technologies, including nanotechnologies. • Develop new chemical entities and scaffolds: including nanoparticles and nanostructures for targeted drug delivery. • Improve pharmacokinetics and pharmacodynamics of antimicrobials, including neglected antimicrobials • Use personalized medicine and artificial intelligence to improve therapies • Develop alternatives for antimicrobials: including nanomedical solutions or molecular scissors. • Develop treatment protocols based on combination therapy using new and existing antimicrobials • Develop policy measures and economic stimuli to minimize barriers for the development, availability and introduction of new therapies and alternatives • Assess how regulation modifies and influences production and use of antimicrobials 	

Priority topic: Diagnostics
Development and improvement of diagnostics to improve the use of antimicrobials and alternatives to antimicrobials.

Research and innovation objectives:

- Improve the efficacy of new and existing diagnostic tools to more effectively distinguish between infections, and/or detect antimicrobial susceptibility
- Create support for the implementation of innovative technologies and linkage to data platforms promoting the use of narrow spectrum antimicrobials
- Improve the use of rapid diagnostics in appropriate One Health settings
- Improve understanding and explore ways to overcome behavioral and socio-economic barriers limiting the adoption and use of rapid diagnostics.

Priority topic: Interventions
Investigation and improvement of infection prevention and control measures in One Health settings

Research and innovation objectives:

- Develop innovative interventions aimed to detect, prevent and control the spread of AMR in a One Health perspective: Technologies based on nano-active or antimicrobial materials, phage therapy, and innovative cleaning strategies for hospitals, farms and environmental reservoirs (e.g. wastewater treatment plants), and strategies to block gene transfer (e.g. conjugation inhibitors) are just some examples of innovative interventions that could prevent the spread of AMR.
- Investigate the effectiveness of AMR prevention and control strategies to increase uptake and acceptance in One Health settings
- Assess the effectiveness and cost-effectiveness of specific AMR prevention and control practices, considering different geographic and socio-economic settings
- Optimize implementation strategies, including drivers for and barriers to behavioral change, to reduce AMR
- Understand the prescription behaviors contributing to the responsible and prudent use of antimicrobials
- Assess educational and training programmes to enhance antimicrobial awareness and stewardship

REFERENCE	1.8
NAME OF THE INITIATIVE	Innovative Health Initiative
ACRONYM OF THE INITIATIVE	IHI
LOGO	
WEBPAGE	Innovative Health Initiative IHI Innovative Health Initiative (europa.eu)
DESCRIPTION OF THE INITIATIVE	

EU public-private partnership in health that runs under Horizon Europe, the European framework programme for research and innovation.

The Innovative Health Initiative (IHI) is a public-private partnership (PPP) between the European Union and the European life science industries. Their core goals are to translate health research and innovation into tangible benefits for patients and society and ensure that Europe remains at the cutting edge of interdisciplinary, sustainable, patient-centric health research.

The general objectives of IHI are to:

- turn health research and innovation into **real benefits for patients and society**;
- deliver safe, effective health innovations that **cover the entire spectrum of care** – from prevention to diagnosis and treatment – particularly in areas where there is an unmet public health need;
- make Europe’s health industries globally **competitive**.

SYNERGIES

Synergies related to Research Lines

Topics Calls 2023:

- Patient-centric blood sample collection to enable decentralized clinical trials and improve access to healthcare
- Inclusive clinical studies for equitable access to clinical research in Europe
- Establishing novel approaches to improve clinical trials for rare and ultra-rare diseases
- Development and proof of principle of new clinical applications of theragnostic solutions
- Improved prediction, detection, and treatment approaches for comprehensive stroke management.

OTHER SYNERGIES: Collaborations and peer-learning

Early Career Networks: Public-private partnerships (PPPs) offer early career researchers (ECRs, defined as those who have completed their PhD in the last few years) a wealth of opportunities for professional development.

As collaborative projects, PPPs allow early career researchers to gain practical experience of working in multidisciplinary teams with people from diverse backgrounds, such as government agencies, non-profit organisations, and industry. This exposure can provide early career researchers with a better understanding of industry practices, as well as valuable networking opportunities. Additionally, early career researchers can learn important skills such as project management, collaboration, and communication, which are transferable across different sectors. PPPs also offer early career researchers access to resources that may not be available through academic institutions.

IHI organised an event that demonstrated how Innovative Medicines Initiative (IMI) projects contribute to early career researchers’ career development. See <https://www.ih.europa.eu/news-events/events/impact-early-career-researchers>.

Raise citizens’awareness: Part of the IHI communication strategy. Interested in getting further clarity on E4H objective/expectations.

Stakeholders: Part of the IHI objectives by (1) supporting projects that bring together these industries as well as universities, small and medium-sized enterprises (SMEs), patients, regulators and others, and (2) exploring synergies with other EU initiatives. In addition, the ‘contributing partner’ category was created with the goal of opening up IHI to a wide range of health stakeholders who may want to invest in IHI without becoming full members. Some examples from IMI, our preceding initiative can be highlighted with over 30 IMI2 associated partners from around the world including philanthropic

organisations, patient groups, and companies in diverse fields such as diabetes, infectious diseases (including tuberculosis and Ebola), digital health, autism, cancer, neurodegenerative diseases, etc.

Translation of evidence into policy: IHI core goals are to translate health research and innovation into tangible benefits for patients and society and ensure that Europe remains at the cutting edge of interdisciplinary, sustainable, patient-centric health research. On the policy front, we expect IHI's projects to contribute to EU policies, most notably Horizon Europe (of which IHI is a part), as well as Europe's Beating Cancer Plan, the new Industrial Strategy for Europe, the Pharmaceutical Strategy for Europe and the European Health Data Space. In addition, IHI contributes to the United Nations Sustainable Development Goal (SDG) 3 on ensuring healthy lives and promoting well-being for all at all ages.

Digital Health: Nearly all IMI projects (on-going portfolio) have a strong data management element. We recognised this early, and made a data management plan compulsory for all projects (not compulsory under H2020). IHI also puts:

- strong emphasis on quality data management, funded several projects focused just on this, notably FAIRplus (could also mention IMI1 eTRIKS, OpenPHACTS), and have own guidance.
- a priority on making high quality data available for other researchers. Several catalogues of publicly accessible data available: dementia, diabetes, cancer, drug discovery.


Many projects are focussed on making use of these large, diverse datasets to answer questions that are relevant for patients and HCPs. This has been a high priority and includes BD4BO programme, Neuronet, Conception, EHDEN, Diabetes projects & others

Using modern tech, we can get a much better idea of the everyday lives of patients. The RADAR projects have answered many of these questions and demonstrated that technologies can provide very relevant, actionable information in a timely manner.

Building on these, Mobilise-D is taking the next step and getting these techs approved by regulators for gait analysis, which is common to many conditions. This will allow much more relevant treatments to be developed and tested.

Going even further, IDEA-FAST is using these tech to explore endpoints that were not previously possible: fatigue & sleep. These are also common to many conditions, and are much more important to patients than more traditional clinical trial endpoints. This perspective should be more and more embedded in the IHI Calls to be launched.

Health Technology Assessment: IMI is a platform where these stakeholders are happy to work together, especially pharma and regulators/HTA/patient groups. Some examples from the existing (IMI) portfolio may be highlighted eg. within our AMR portfolio COMBACTE-Net.

REFERENCE	1.9
NAME OF THE INITIATIVE	Towards a European Partnership for Personalised Medicine
ACRONYM OF THE INITIATIVE	EP PerMed
LOGO	
WEBPAGE	EP PerMed: Towards a European Partnership for Personalised Medicine - ICPeMed
DESCRIPTION OF THE INITIATIVE	

ICPerMed provides since 2017 a platform to initiate and support communication and exchange on personalised medicine research, funding and implementation, in which over 45 European and international members representing ministries, funding agencies and the European Commission (EC) work together to coordinate and foster research to develop and evaluate personalised medicine (PM) approaches.

- Furthermore, ICPerMed is together with **ERA PerMed** a crucial initiative for the preparation and collaboration with the future European Partnership for Personalised Medicine (**EP PerMed**). Parallel to the proposal submitted to the EC in April, a Strategic Research and Innovation Agenda for PM (**SRIA**) has recently been published in support of EP PerMed with 57 Triplets of Action (ToA) to foster and accelerate PM and personalised prevention strategies.

SYNERGIES

Synergies related to Research Lines

Topics SRIA EP PERMED:

- New targets for personalised therapies making use of an improved understanding of disease mechanism.
- Metabolic profiling.
- Clinically relevant experimental models.
- Robust and reproducible preclinical studies.
- Single-cell technologies in combination with AI and ML for PM.
- Early considerations of security, efficacy, and evidence for advanced therapies (ATMPs).
- A collaborative approach between pre-clinical and clinical research.
- Active involvement of patients in PM research.
- More biomarker evidence for PM.
- Combination Treatments.
- Broader biomarker approaches to enable more informed health decisions.
- Validity and Prognostic Value of a Polygenic Risk Scores
- Medical cohorts for collecting high-quality health and molecular data
- Standardisation framework for data integration and data-driven in silico models for PM
- PM clinical research in a wide variety of disease indications
- Inclusive clinical PM research that avoids bias
- Online recruitment strategies to support PM clinical research
- Health and patient-centred outcomes research in PM
- Connected large-scale health databases
- PM adapted and focused biobanks and real-world data registries
- Genome-wide association studies within and beyond

OTHER SYNERGIES: Collaborations and peer-learning

Management and Governance: Promoting communication of negative findings and thorough methodology reporting. Stimulate detailed reporting of research methods and justification of the methodological approach, and beneficial practices to enhance transparency and improved research. Promote Open Science approach to enable better methodological research.

Promoting and funding methodological research and validation studies: ensure that new and innovative PM methods are robust and reproducible and thorough validation studies are performed. Use the outcomes of validation studies to support the evolution of the regulatory framework.

Stakeholders: Sustaining dialogue among all the relevant stakeholders. Ensure all actors are aware of the evolution of methods in a timely manner and can anticipate, evaluate and integrate changes in the landscape. Facilitate a common understanding of personalized medicine concepts and methodology, bidirectional dialogue, platforms and tools for policy makers, regulatory authorities and funders to present and discuss innovative outcomes.

Evolution and adoption of regulatory frameworks: promote regulatory frameworks for PM that allow for innovation to thrive while ensuring patient safety. Consider the regulation perspective at all stages of PM research.

involvement: enable and encourage patient involvement, incentivize patient engagement.

REFERENCE	1.10
NAME OF THE INITIATIVE	Building a European strategic REsearch and innovation Area in Direct synergY with EU and International Initiatives for Pandemic Preparedness
ACRONYM OF THE INITIATIVE	BE READY
LOGO	
WEBPAGE	www.beready4pandemics.eu
DESCRIPTION OF THE INITIATIVE	
<p>The main goal of BE READY is to build a consolidated European Research and Innovation Area that provides the foundation of the candidate European partnership for pandemic preparedness so to improve the EU's preparedness to predict and respond to emerging health threats by better coordinating funding for research and innovation at EU, national (and regional) level towards common objectives and an agreed Strategic Research and Innovation Agenda. The Partnership is expected to build on existing pandemic preparedness networks, and work in synergy with the Health Emergency Response Authority (HERA), in close collaboration with ECDC, EMA and other relevant international and European actors. BE READY is composed by 24 organisations from 15 countries with complementary expertise and policy area ranging from Public Health Organisations, Ministries (of Science, University, Health, Innovation or Environment) and Research Performing Organisations that ensures a cross-cutting, interdisciplinary Global Health and One Health approach.</p>	
SYNERGIES	
Synergies related to Research Lines	

SRIA comprises:


Concerning the Research and Health part, the priority objectives will be to develop a plan to prevent or to achieve efficient and integrated control of Emerging Infectious Diseases(EID), both on an individual and global level. It aims to develop actions through a One Health approach that will contribute to shedding light on the basic molecular processes involved in infections by pathogenic microorganisms and their transmission from one individual to another, to predict, prevent, or control emerging phenomena at the global level, and thus directly or indirectly making our communities more resilient to emerging and re-emerging infectious diseases.

Regarding the Health & Bio-Tech Research and Innovation, it is needed to identify key emerging Health Technologies and Biotechnologies that enables innovative solutions to tackle the main challenges of pandemic preparedness. These enabling technologies for translational research and accelerated, effective and efficient innovation pathways, mainly focus on, among others:

- New R&I strategies to create a **more agile public health and healthcare response in public health emergency situations**, including Artificial Intelligence (AI), machine learning and robotics;
- **Better dissemination and uptake of evidence across the broader public** to tackle misinformation, which in itself undermines policy responses (e.g. anti-vax communities);
- Data analytics, AI, Robotics for Smart & Phygital solutions to assist understanding, tracking, monitoring and management of pandemics in synergy with EU Health Data Space;
- **Public health measures** (including modelling) and their impact on social resilience, mental health and vulnerable groups;
- Applying a cross-cutting, interdisciplinary **One Health innovation approach**; o Promoting EU-wide infrastructures, such as EU wide vaccine trials, pan European cohorts and data portals, improved data collection, methodology and tools, data sharing and harmonization across sectors, etc.

OTHER SYNERGIES: Collaborations and peer-learning

Management and Governance: BE READY will be a Partnership with governance and management approaches similar to other Partnerships.

REFERENCE	1.11
NAME OF THE INITIATIVE	Network of European Funding for Neuroscience Research
ACRONYM OF THE INITIATIVE	ERA-Net Neuron
LOGO	
WEBPAGE	Homepage Neuroscience Research Network - ERA-NET NEURON (neuron-eranet.eu)
DESCRIPTION OF THE INITIATIVE	

Since 2008, ERA-NET NEURON Cofund was designed to pursue the vision of a European and international Brain Research Area through which the burden of brain diseases for patients and society can be considerably lowered.

35 research funding organizations and ministries from 28 countries participate in this network to support basic, clinical and translational research in the diverse field of research into the brain and its diseases.

The means to address this vision is joint funding of excellent translational and clinical research into disorders of the brain and nervous system - except for neurodegenerative diseases - across national borders by alignment of national and regional research programmes in the areas of brain diseases and mental health carried out in partner countries.

SYNERGIES

Synergies related to Research Lines

Topic 1: Understanding Disease Mechanisms (NEURON SRA)

Priorities:

- Develop, improve, and validate pre-clinical models for use in experimental studies,
- Understand the role of ageing and comorbidity,
- Identify key mechanisms underlying multifactorial disease,
- Leverage novel technologies for tackling disease mechanisms,
- Make use of ‘smart’ data as well as ‘big’ data,
- Foster systems approaches to disease including modeling of diseases,
- Pave the way for approaches to personalized medicine
- Improve the reproducibility of research findings

Topic 2: Understanding Disease Progression (NEURON SRA)

Priorities:

- Improve and develop biologically-driven disease classifications,
- Identify markers for disease prediction, early diagnosis, and progression,
- Identify markers predicting therapeutic response,
- Understand diseases from a lifespan perspective,
Leverage novel methods for prognostic modelling

OTHER SYNERGIES: Collaborations and peer-learning

Management & Governance: Implementation of transnational calls (JTCs)

Early Career Network: Actions addressed to enhance the participation of Early Career Researchers and/or the Implementation of an ECN (Early Career Network)

Gender: Actions to promote gender equality within research projects or in the management of the Partnership.

Data Protection: Aspects to be considered to ensure the fulfilment of the European requirements of data protection and data confidentiality.

Stakeholders: Stakeholders involvement/engagement. NEURON brings together Researchers (Basic, Clinical, pre-clinical), National Funding Bodies, National Research Strategies, and Investments.


Patient involvement: Fostering public patient involvement (training of scientists and patients to PPI in research, training patients and patient advocates, Active participation of patients and patient advocates in research projects, in the JTC topic development and JTC project evaluation.

OTHER FIELDS:

Ethics particularly in the neuroscientific field because in NEURON the ELSA calls generated a knowledge base.

Enabling activities, particularly in the field of ECRs, as NEURON has a long experience with awards, symposia and training.

RRI, particularly in the field of open access to and of research results, and reproducibility of research results.

REFERENCE	1.12
NAME OF THE INITIATIVE	EU Joint Programme – Neurodegenerative Disease Research
ACRONYM OF THE INITIATIVE	JPND Research
LOGO	
WEBPAGE	Home - JPND Neurodegenerative Disease Research (neurodegenerationresearch.eu)
DESCRIPTION OF THE INITIATIVE	
<p>JPND is the largest global research initiative aimed at tackling the challenge of neurodegenerative diseases. JPND aims to confront the growing challenge posed by neurodegenerative diseases in our ageing population by bringing together researchers, existing research evidence and national funding bodies to investigate the key research questions and barriers to progress in this area.</p> <p>JPND aims to: Increase the critical mass of physicians and scientists involved in neurodegenerative disease research; Increase the funding dedicated to neurodegenerative disease research; Increase the number of collaborations globally.</p> <p>Scope of the JPND initiative: Disease areas, Alzheimer's disease and other dementias, Huntington's disease, Motor Neurone Diseases, Parkinson's disease and PD-related disorders, Prion disease, Spinal muscular atrophy (SMA), Spinocerebellar ataxia (SCA).</p> <p>Focus on Three Domains: Scientific (Animal models, Biobanks, Cohorts/registries, Disease pathology), Medical (Early diagnosis, Prevention, Clinical trials) and Social (Health care delivery, Home automation, Health economics, Ethics).</p>	
SYNERGIES	
Synergies related to Research Lines	

JPND Research and Innovation Strategy:
Theme Four: Developing therapies, preventive strategies and interventions

Emphasis on the following area would best advance research progress: Determine approaches to measure the impact of lifestyle or public health interventions across populations, in ‘at risk’ individuals and those already having ND. For example, studies are needed to better understand factors and interventions that could maintain or improve cognitive functioning in elderly ND patients.


One of the priorities is to develop novel systems for delivery and targeting of drugs/biological agents to sites in the brain (including crossing the blood brain barrier) and other parts of the nervous system. These could, for example, include nanoparticles, liposomes, peptides, cells, viruses, pumps, as well as targeting based on antisense technologies.

OTHER SYNERGIES: Collaborations and peer-learning

Management & Governance: Implementation (Trans national calls, Action groups, Working group calls, Networking (communities)).

Stakeholders: JPND brings together Researchers (Basic, Clinical, Healthcare/Social), National Funding Bodies, National Research Strategies, and Investments. Industry.

Patient involvement: Fostering public patient involvement (Acculturation of scientists and physicians to PPI, Training public, patients and patient advocates, Active participation of public and patients in research projects, Call topics encouraging public and patient) involvement.

REFERENCE	1.13
NAME OF THE INITIATIVE	Horizon Europe Candidate Partnership: One Health Antimicrobial Resistance
ACRONYM OF THE INITIATIVE	OH AMR
LOGO	
WEBPAGE	The Horizon Europe Candidate Partnership: One Health AMR – JPIAMR
DESCRIPTION OF THE INITIATIVE	
<p>The CSA DESIGN OH AMR, in collaboration with JPIAMR and other stakeholders is leading the development of the One Health AMR Partnership. The main goal is to contribute to achieving the objectives of the European One Health Action Plan against AMR and the WHO Global Action Plan on AMR, both aimed at reducing the threat of antimicrobial resistance (AMR). The SRIA and proposal submission to the EC is foreseen in 2024. The first call and launch of other activities of this joint research programme between the European Commission and Member States are planned to take place in 2025.</p>	
SYNERGIES	
Synergies related to Research Lines	

Thematic Area: Therapeutics. Synergies:

- Up to **pre-clinical studies on new antimicrobials, alternatives and repurposing/combination therapies.**
- JPIAMR has funded large portfolio of **therapeutics projects and supported several new pre-clinical candidates** and funded some **nanomedicine solutions.**

Research and Innovation Objectives:

1. Identify new antimicrobials, novel alternatives for antimicrobials, and improved delivery methods.
2. Unlock the unexplored potential of existing and neglected antimicrobials by improving PK/PD and enabling repurposing and combination therapies.
3. Develop methods to facilitate the approval and registration of new antimicrobial agents or novel therapeutic strategies.
4. Develop strategies to minimise the structural and economic barriers to research, development, availability of and access to new therapies and alternative therapeutic strategies.

Thematic Area: Diagnostics. Research and Innovation Objectives:

1. Discover, design, and evaluate new diagnostics and improve the efficacy of existing ones.
2. Evaluate field performance, feasibility and impact of diagnostics
3. Identify and overcome barriers for implementation and acceptance of diagnostics

Thematic Area: Interventions for prevention & mitigation. Research and Innovation Objectives:

1. Evaluate opportunities, acceptability and feasibility of interventions in different countries/local contexts.
2. Design and test interventions based on new and existing evidence and new technologies to prevent and mitigate AMR.
3. Estimate the impact and cost-effectiveness of new interventions and prevention strategies.
4. Identify the parameters that should be considered to adapt a successful intervention to different settings, or to scale up intervention.

OTHER SYNERGIES: Collaborations and peer-learning

Management & Governance: OH AMR is a candidate to Partnership which may have similarities with E4H on management & governance.

Early Career Network: support to Early Career Researchers (Giving consortia the possibility to extend the number of partners if one of the PIs is an ECR, Specific workshops, Hackathons, Prize)

Raise citizens' awareness: Join logo campaign at international level, Yearly participation in the global and European Antibiotic Awareness Week, Educational videos.

Stakeholders: Partner with European Public Health Alliance (EPHA) AMR Stakeholder Forum Engagement EU agencies. Participation in multiple international stakeholder forums.

Translation of evidence into policy: Workshops where research results are presented to policy makers/public health agencies, Close collaboration with WHO and Quadripartite.

REFERENCE	1.14
NAME OF THE INITIATIVE	International Consortium for Personalised Medicine
ACRONYM OF THE INITIATIVE	ICPerMed
LOGO	
WEBPAGE	International Consortium for Personalised Medicine - ICPerMed

DESCRIPTION OF THE INITIATIVE

ICPerMed provides since 2017 a platform to initiate and support communication and exchange on personalised medicine research, funding and implementation, in which over 45 European and international members representing ministries, funding agencies and the European Commission (EC) work together to coordinate and foster research to develop and evaluate personalised medicine (PM) approaches.

Furthermore, ICPerMed is together with ERA PerMed a crucial initiative for the preparation and collaboration with the future European Partnership for Personalised Medicine (EP PerMed). Parallel to the proposal submitted to the EC in April, a Strategic Research and Innovation Agenda for PM (SRIA) has recently been published in support of EP PerMed with 57 Triplets of Action (ToA) to foster and accelerate PM and personalised prevention strategies.

SYNERGIES

Synergies related to Research Lines

Topics with potential synergies:

- New targets for personalised therapies making use of an improved understanding of disease mechanism.
- Metabolic profiling.
- Clinically relevant experimental models.
- Robust and reproducible preclinical studies.
- Single-cell technologies in combination with AI and ML for PM.
- Early considerations of security, efficacy, and evidence for advanced therapies (ATMPs).
- A collaborative approach between pre-clinical and clinical research.
- Active involvement of patients in PM research.
- More biomarker evidence for PM.
- Combination Treatments.
- Broader biomarker approaches to enable more informed health decisions.
- Validity and Prognostic Value of a Polygenic Risk Scores
- Medical cohorts for collecting high-quality health and molecular data
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- Health and patient-centred outcomes research in PM
- Connected large-scale health databases
- PM adapted and focused biobanks and real-world data registries
- Genome-wide association studies within and beyond

OTHER SYNERGIES: Collaborations and peer-learning


Management and Governance: Promoting communication of negative findings and thorough methodology reporting. Stimulate detailed reporting of research methods and justification of the methodological approach, and beneficial practices to enhance transparency and improved research. Promote Open Science approach to enable better methodological research.

Promoting and funding methodological research and validation studies: ensure that new and innovative PM methods are robust and reproducible and thorough validation studies are performed. Use the outcomes of validation studies to support the evolution of the regulatory framework.

Stakeholders: Sustaining dialogue among all the relevant stakeholders. Ensure all actors are aware of the evolution of methods in a timely manner and can anticipate, evaluate and integrate changes in the landscape. Facilitate a common understanding of personalized medicine concepts and methodology, bidirectional dialogue, platforms and tools for policy makers, regulatory authorities and funders to present and discuss innovative outcomes.

Evolution and adoption of regulatory frameworks: promote regulatory frameworks for PM that allow for innovation to thrive while ensuring patient safety. Consider the regulation perspective at all stages of PM research.

Patient involvement: enable and encourage patient involvement, incentivize patient engagement.

REFERENCE	1.15
NAME OF THE INITIATIVE	International Rare Diseases Research Consortium
ACRONYM OF THE INITIATIVE	IRDiRC
LOGO	
WEBPAGE	IRDiRC – International Rare Diseases Research Consortium
DESCRIPTION OF THE INITIATIVE	
<p>IRDiRC is a global collaborative initiative launched in 2011 by the European Commission and the US National Institutes of Health to tackle rare diseases through research and accomplish the vision to enable all people living with a rare disease to receive an accurate diagnosis, care, and available therapy within one year of coming to medical attention.</p> <p>Today, the Consortium gathers 60 member organizations from all continents. Members’ representatives are organized into the Constituent Committees of Funders, Companies and Umbrella Patient Advocacy Groups, and collaborate with international experts nominated into the Diagnostics, Therapies and Interdisciplinary Scientific Committees.</p> <p>Through its broad representation, IRDiRC works towards the mission of advancing diagnostics and treatments, and of understanding the impact of these, for all people living with a rare disease (specific Task Force on Clinical Research Networks for Rare Diseases).</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>The vision: Enable all people living with a rare disease to receive an accurate diagnosis, care, and available therapy within one year of coming to medical attention.</p> <p>In order to work towards this bold and ambitious vision, IRDiRC has set three goals for the next decade:</p>	

Goal 1: All patients coming to medical attention with a suspected rare disease will be diagnosed within one year if their disorder is known in the medical literature; all currently undiagnosable individuals will enter a globally coordinated diagnostic and research pipeline

Goal 2: **1000 new therapies for rare diseases will be approved, the majority of which will focus on diseases without approved options.**

Goal 3: Methodologies will be developed to **assess the impact of diagnoses and therapies** on rare disease patients.

The progress on the previous goals has shown that the international rare diseases research community is eager to share knowledge and experience, and work collaboratively across borders in order to bring **diagnoses and therapies to patients**. The new IRDiRC goals can only be achieved with fundamental changes to the way science is conducted, shared, and applied to the care of rare disease patients.


IRDiRC comprises 5 themes:

- Theme 1: Shortening Diagnostic Journey
- Theme 2: Developing New Therapies
- Theme 3: Fostering Clinical Research
- Theme 4: Stimulating Multistakeholder Engagement
- Theme 5: Access to Care and Impact Assessment Methodologies


OTHER SYNERGIES: Collaborations and peer-learning

Stakeholders: Theme 4: Stimulating Multistakeholder Engagement

Clinical studies: Theme 3: Fostering Clinical Research

REFERENCE	1.16
NAME OF THE INITIATIVE	EU-Africa PerMed Project
ACRONYM OF THE INITIATIVE	EU-Africa PerMed Project
LOGO	
WEBPAGE	EU-Africa PerMed – Building links between Europe and Africa in Personalised Medicine (euafrica-permed.eu)
DESCRIPTION OF THE INITIATIVE	
<p>The EU-Africa PerMed project has the overall aim of integrating African countries into ICPeMed activities, thus contributing to a successful implementation of Personalised Medicine (PM) in the global context. It will foster joint PM projects and programmes between Europe and Africa, as well as strengthening bilateral EU-AU science, technology and innovation (STI) relations in the area of health. The project started on the 1st. of February 2021 and will last 4 years. It is implemented by a consortium of 13 partners, 6 from Europe and 7 from Africa and is organized around 7 main Work Packages.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Expected Results:</p> <ul style="list-style-type: none"> • Facilitate the integration of African organizations in ICPeMed • Support the EU-AU STI policy dialogues relevant to health • Foster collaboration and networking between EU and African health research organisations working in PM 	


<ul style="list-style-type: none"> • Support a wider adoption of PM research standards • Contribute to raise awareness and gain knowledge on the benefits that PM can have on the African population <p>Other synergies with E4H (medium-long term):</p> <ul style="list-style-type: none"> • Reduce global inequities in PM research that can contribute to better disease prevention, diagnosis and treatment. • Contribute towards the UN Sustainable Development Goal 3: Ensure healthy lives and promote well-being for all at all ages.
OTHER SYNERGIES: Collaborations and peer-learning
<p>Raise citizens' awareness: Objectives 6 of EU-Africa PerMed is addressed to Dissemination.</p> <p>Translation of evidence into policy: Objectives 3 & 4 of EU-Africa PerMed are addressed to foster Science to Policy.</p> <p>Stakeholders: to carry out the activities in the project.</p> <p>Others: Objectives 5 of EU-Africa PerMed is addressed to Capacity Building.</p>

REFERENCE	1.17
NAME OF THE INITIATIVE	Integrating China in the International Consortium for Personalised Medicine
ACRONYM OF THE INITIATIVE	IC2PerMed
LOGO	
WEBPAGE	IC2PerMed – Integrating China in the International Consortium for Personalised Medicine
DESCRIPTION OF THE INITIATIVE	
<p>Integrating China in the International Consortium for Personalised Medicine (IC2PerMed) project aims to support EU-China collaboration over the developments of Personalised Medicine research, innovations and policies through the ICPeMed initiative, providing people with access to personalised, smart and inclusive healthcare solutions in the near future.</p> <p>IC2PerMed is a Coordination and Support Action (CSA) project, funded by the European Commission in support of the ICPeMed network and composed of 10 partners.</p> <p>Under the ICPeMed initiative, the EU-funded IC2PerMed project will provide key solutions to enable the convergence of European and Chinese stakeholders towards a common approach in personalized medicine, involving policymakers and healthcare beneficiaries.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Approach:</p> <ul style="list-style-type: none"> • Mapping policies, programmes, standards and initiatives related to Preventive Medicine in the EU and China for identifying opportunities for research collaborations • Structuring an ecosystem of European and Chinese experts, collaborating in Working Groups (WG) centred on ICPeMed Action plan priorities • Exemplifying research collaboration frameworks between China and the EU for Preventive Medicine by connecting Biobanking initiatives 	

- Creating bridges with key official organisations involved in the definition and implementation of Preventive Medicine in health systems in both economic areas, through ICPeMed as well as relevant other initiatives and networks.

Additionally in the Working Group 3
Research and clinical studies in PM

This WG's activities focus on translating basic clinical research and beyond, and on research funding. In order for PM to reach its anticipated impact on human health and wellbeing, translation of discoveries and communication across the continuum of research is required. This starts with the integration of all 'omics' data to generate and implement meaningful interventions. Such processes should be supported by reclassifying diseases at the molecular level and by developing preclinical models to validate hypotheses resulting from molecular analyses. A Europe-wide process to evaluate and validate biomarkers, together with longitudinal and in-depth studies to further characterise diseases and their progression would support ongoing efforts towards this integration and reclassification. The development of new clinical trial designs that are adapted to these new approaches and the integration of preclinical testing with innovative clinical trials may further improve the effectiveness of interventions.


REFERENCE	1.18
NAME OF THE INITIATIVE	Transforming Health Care Systems Partnership
ACRONYM OF THE INITIATIVE	THCS
LOGO	
WEBPAGE	THCS (thcspartnership.eu)
DESCRIPTION OF THE INITIATIVE	
<p>The European Partnership on transforming health and care systems (THCS) is a Cofund action under the Horizon Europe Programme designed to support coordinated national and regional research and innovation programmes along with capacity building, networking, dissemination and other key activities to support health and care systems transformation. 64 partners build up the consortium. The general objective of THCS is to contribute to the transition towards more sustainable, efficient, resilient, inclusive, innovative and high-quality people-centred health and care systems equally accessible to all people. For this purpose, THCS aims not only to create new knowledge and scientific evidence but to co-design new solutions and support their transfer and scale-up across countries and regions while also fostering capacity building. The approach for a successful and smooth implementation of THCS will focus on three main work streams: 1) Filling the knowledge gaps with research actions aiming at providing the necessary evidence, 2) Implementation and transfer aiming at supporting actions focusing on the testing of existing solutions and adaptability in different national and regional contexts, and 3) Boosting health and care systems through dedicated activities (capacity building and trainings, study visits, technical assistance, twinning, networking) involving different health and care stakeholders.</p>	
SYNERGIES	
Synergies related to Research Lines	

- **Public health promotion and disease prevention** (including issues such as how to design an environment and public policies that support healthy eating, how substance abuse can be better addressed by healthcare services, what measures are needed to make lower alcohol consumption socially desirable, etc.)
- Inequities in health (including issues such as reducing inequities in health, monitoring social determinants of health, etc.)
- Integrate research and innovation findings in evidence-based decisions in health and care.
- Advance the co creation and the uptake of user-friendly innovative solutions in health and care (Actions contributing to the development of innovative tools to **promote healthy lifestyles and maintaining population health**).


OTHER SYNERGIES: Collaborations and peer-learning


Management & Governance: the partnership will support joint calls for proposals in priority areas identified by partners.

Stakeholders: strengthen the health and care community for a sustainable dialogue among different actors.

REFERENCE	1.19
NAME OF THE INITIATIVE	FLASH project - Flexible Approaches to Support Health through financing
ACRONYM OF THE INITIATIVE	FLASH
LOGO	
WEBPAGE	https://flash-project.com/
DESCRIPTION OF THE INITIATIVE	
FLASH is an Horizon Europe project which undertakes a comprehensive analysis of health care financing mechanisms in Europe and, by employing a wide range of methodological approaches, it provides evidence on the ability of existing financing mechanisms and contracts to address such challenges and study new solutions to achieve more effective, efficient and equitable health care systems. The project started on February 2023 and is built by 16 partners.	
SYNERGIES	
Synergies related to Research Lines	
RESILIENCE:	
<ul style="list-style-type: none"> • Rapid changes in demand (e.g. pandemic events): WP2 of FLASH investigates factors contributing to resilience of hospital care (collaboration with HOPE) • Structural changes (e.g. ageing): WP7 of FLASH studies models of integration of different levels of care for the elderly 	
EQUITY:	
<ul style="list-style-type: none"> • WP8 of FLASH investigates the equity implications of the diffusion of digital technologies • WP3 of FLASH investigates the link between funding and health needs at the local level, with a focus on the role of decentralization of healthcare systems 	
TECHNOLOGICAL INNOVATION	

<ul style="list-style-type: none"> WP4 of FLASH aims to develop innovative tools to enhance policy-makers' ability to predict and manage the financial impact of innovation <p>TRANSLATION OF EVIDENCE INTO POLICY:</p> <ul style="list-style-type: none"> Among the key actors in FLASH are institutions responsible for the delivery of healthcare services and other crucial stakeholders Policy-makers as key target of FLASH communication and dissemination strategy
OTHER SYNERGIES: Collaborations and peer-learning
<p>Translation of evidence into policy: central in the FLASH project.</p> <p>Digital Health: central in the FLASH project.</p>

REFERENCE	1.20
NAME OF THE INITIATIVE	Global Alliance for Chronic Diseases
ACRONYM OF THE INITIATIVE	GACD
LOGO	
WEBPAGE	Home page GACD
DESCRIPTION OF THE INITIATIVE	
<p>The Global Alliance for Chronic Diseases (GACD) brings together major international research funding agencies specifically to address the growing burden of NCDs in LMICs and vulnerable populations in high-income countries (HICs). The GACD: Invests in impactful NCD implementation research; Builds implementation science capacity and capability in relation to NCDs; Facilitates collaborations and partnerships to support GACD investment and impact. The GACD Research Network of investigators are active in more than 73 countries around the world.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>GACD invests in research to reduce health inequities resulting from NCDs, with a focus on low- and middle-income countries. Through this investment, GACD advances the development of high-quality evidence to inform the implementation of NCD prevention and management policies to lessen the burden of NCDs.</p> <p>Throughout the duration of the strategic plan, GACD will address the prevention and diagnosis of cancer and other NCDs; address the determinants and common-risk factors for NCDs (e.g., nutrition); and enhance the understanding of systems and services to manage multi-morbidities. As a fundamental activity of the Alliance, GACD will run one joint call for applications every one to two years, depending on member agencies' resources and the timing of funding cycles.</p>	
OTHER SYNERGIES: Collaborations and peer-learning	
<p>Translation of evidence into policy: GACD will invest time and resources to enhance researchers' capacity and capability to conduct scientifically rigorous and impactful implementation research that builds evidence on the effective prevention and management of NCDs and to facilitate its sustainable and broad uptake and integration into policy and practice.</p>	

REFERENCE	1.21
NAME OF THE INITIATIVE	Horizon Europe – Mission Cancer
ACRONYM OF THE INITIATIVE	Mission Cancer
LOGO	
WEBPAGE	Mission Cancer
DESCRIPTION OF THE INITIATIVE	
<p>EU Missions are a new way to bring concrete solutions to some of our greatest challenges. They have ambitious goals and will deliver tangible results by 2030.</p> <p>Cancer Goal is to Improve the lives of more than 3 million people by 2030, through prevention, cure and for those affected by cancer including their families, to live longer and better, jointly with the Europe’s Beating Cancer Plan.</p> <p>The challenges are:</p> <ul style="list-style-type: none"> • 2.7 million people in the EU are diagnosed each year • 1.3 million people die from cancer each year • Total cost of cancer in Europe in 2018: €199 billion • Impact of COVID-19 pandemic and war in Ukraine <p>Four Mission objectives: Understanding cancer, Prevention & early detection, Diagnosis and treatment and Quality of life.</p> <p>4 transversal R&I priorities: equity, innovation, childhood cancer and personalised medicine</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Past and future topics of the Cancer Mission:</p> <p>Prevent what is preventible Develop new methods and technologies for screening and early detection (MISS-2021-CANCER-02-01) Improving and upscaling primary prevention of cancer through implementation research (MISS-2022-CANCER-01-01) Enhance cancer prevention through behaviour change (MISS-2023-CANCER-01-02)</p> <p>Optimise diagnostic and treatments: Pragmatic clinical trials to optimise treatment for cancer patients (MISS-2022-CANCER-01-03) Strengthen research capacities of comprehensive cancer infrastructures HORIZON-MISS-2022-CANCER-01-02 Pragmatic clinical trials minimally invasive diagnostics HORIZON-MISS-2023-CANCER-01-03</p> <p>Support Quality of life: Develop and validate a set of quality of life measures for cancer patients and survivors HORIZON-MISS-2021-CANCER-02-02 Towards the creation of a European Cancer Patient Digital Centre HORIZON-MISS-2022-CANCER-01-04:</p>	

Improve quality of life for survivors of childhood cancer (Best practices and tools)

HORIZON-MISS-2023-CANCER-01-04:

Understand:
Preparing UNCAN.eu, a European initiative to understand cancer

HORIZON-MISS-2021-UNCAN-01-01

Better understand healthy versus cancer cells at individual and population level

HORIZON-MISS-2021-CANCER-02-03

Better understand tumour-host interactions in cancer patients

HORIZON-MISS-2023-CANCER-01-01

Creation of national cancer mission hubs to support the implementation of the Mission on Cancer -

HORIZON-MISS-2022-CANCER-01-05

OTHER SYNERGIES: Collaborations and peer-learning
Raise citizens' awareness: Is a point of contact with **European citizens**.

Stakeholders: a [Stakeholder Contact Group](#) under the EU Health Policy Platform as a basis for discussion and exchanges with stakeholders.


Translation of evidence into policy: 1) Dialogue with Member States: a [sub-group on cancer under the Public Health Expert Group](#) follows jointly the implementation of the Europe's Beating Cancer Plan and the Cancer Mission (Health & Research Ministries). 2) The Mission **supports its implementation** and creates a dynamic **link between R&I and policies** by:

- Generating knowledge and evidence in the areas of **understanding, prevention, diagnosis, treatment, and quality of life**.
- Be a point of contact with **European citizens**.
- Deliver **scientific advice** for the overall implementation of the Europe's Beating Cancer Plan.

REFERENCE	1.22
NAME OF THE INITIATIVE	European Institute of Innovation and Technology Health
ACRONYM OF THE INITIATIVE	EITH
LOGO	
WEBPAGE	https://eithealth.eu/
DESCRIPTION OF THE INITIATIVE	<p>EIT Health was established in 2015, as a 'knowledge and innovation community' (KIC) of the European Institute of Innovation and Technology (EIT). The EIT is made up of various KICs who each focus on a different sector, or area, of innovation – in our case, that is health and aging. The idea behind the EIT KICs is that innovation flourishes best when the right people are brought together to share expertise. The so called 'knowledge triangle', is the principle that when experts from business, research and education work together as one, an optimal environment for innovation is created.</p> <p>EITH works across borders with approximately 130 EIT Health Partner organisations and thousands of start-ups and entrepreneurs.</p>
SYNERGIES	
Synergies related to Research Lines	

Objectives:


- Directly improve quality of life of 4.8 million Europeans
- Educate 30,000 change-agents that can scale sustainable and systemic solutions
- Attract €1.3 billion of investment to start-ups
- All funded activities address health challenges co-creatively and collaboratively with strong European regional inclusion and mitigate the fragmented health market (RIS objective: at least 15% of impact can be brought back to RIS regions)
- Drive appropriate diversity (such as gender and ethnic equality), ensuring an inclusive culture and solutions that are built reflect the society they aim to serve.


REFERENCE	1.23
NAME OF THE INITIATIVE	Beyond 1 Million Genomes Project
ACRONYM OF THE INITIATIVE	B1MG
LOGO	
WEBPAGE	https://b1mg-project.eu/
DESCRIPTION OF THE INITIATIVE	
SYNERGIES	
Synergies related to Research Lines	
DESCRIPTION OF THE INITIATIVE	
<p>The Beyond 1 Million Genomes (B1MG) project aims to make it easier to share human health data around Europe. It will support the European Union's 1+ Million Genomes Initiative (1+MG), which aims to provide access to at least one million sequenced genomes in the EU by 2022.</p> <p>The goal is to make the personal genomic data and associated health information accessible in a secure manner for the different purposes in health care (prevention, diagnostics and therapy), research and innovation, and public health.</p> <p>This initiative is a commitment of 24 EU countries, the UK and Norway to give cross-border access to one million sequenced genomes by 2022. But B1MG will go 'beyond' the 1+MG Initiative by creating long-term means of sharing data beyond 2022, and enabling access to beyond 1 million genomes.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>No synergies related to research lines have been found.</p> <p>The B1MG project will create the infrastructure, the legal guidance and the best practices to enable this access to beyond 1 million genomes. It will make it possible for scientists and clinicians to study the genotypic and phenotypic data from over one million people. This data will be linked, so the genetic data from one individual can be matched with their phenotypic data (like their weight, blood group and medical history).</p> <p>But the project will look 'beyond' the 1+MG Initiative and drive the development of a data sharing infrastructure that goes beyond the lifetime of 1+MG, and beyond 1 million genomes.</p>	

The goal is to make the personal genomic data and associated health information accessible in a secure manner for the different purposes in health care (prevention, diagnostics and therapy), research and innovation, and public health.

OTHER SYNERGIES: Collaborations and peer-learning

Stakeholders: the countries will engage a range of stakeholders to support the creation of a pan-European genome based health data infrastructure, encompassing data quality and exchange standards, access protocols and legal guidance.

REFERENCE	1.24
NAME OF THE INITIATIVE	Mobilising novel finance models for health promotion and disease prevention
ACRONYM OF THE INITIATIVE	Invest4Health
LOGO	
WEBPAGE	https://eurohealthnet.eu/es/publication/invest4health-mobilising-novel-finance-models-for-health-promotion-and-disease-prevention/
DESCRIPTION OF THE INITIATIVE	
<p>The EU-funded Invest4Health project proposes to design new finance models based on the promotion of health and disease prevention. It will do it through interdisciplinary research and testing for optimal financing solutions in capacitating intelligent investment by creating a model collaborative platform. It would allow shared risks, environmental draws and localised benefits while empowering citizens and communities to invest in new spaces.</p> <p>The Invest4Health consortium brings together 18 partners from across Europe and will run 3.5 years from 2023-2026.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>No synergies related to research lines have been found.</p> <p>The Challenge:</p> <ul style="list-style-type: none"> • Hospital-focused healthcare models are not able to keep up with the demands of modern health systems. • Governments have less money to spend on healthcare and social services, but they still have to allocate their resources in a way that will meet the expectations and needs of citizens. • We need to encourage new ways of paying for things that help people stay healthy and avoid getting ill, even if they cost more upfront. • We are confident this will end up saving money in the long run and benefitting many different parts of society. 	

REFERENCE	1.25
NAME OF THE INITIATIVE	Prioritization, incentives and Resource use for sUstainable DENTistry
ACRONYM OF THE INITIATIVE	PRUDENT
LOGO	
WEBPAGE	https://www.prudentproject.eu/
DESCRIPTION OF THE INITIATIVE	
<p>The PRUDENT (Prioritization, incentives and Resource use for sUstainable DENTistry) project aims to develop and implement an innovative and context-adaptive framework for optimized financing of oral care. The resulting PRUDENT Financing Model will provide a blueprint model for co-developing better financing models for oral and general health systems. PRUDENT brings together top investigators from prestigious universities, public authorities and policymakers, civil society and patient organizations, health insurers, and health professionals, to achieve a step change in collective problem solving. Given the comprehensiveness of the topic, PRUDENT uses a targeted approach that is entirely focused on four major root-causes underlying the current limitations of oral care financing.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Synergies in relation to E4H SRIA:</p> <ul style="list-style-type: none"> • Cardiovascular diseases: as highlighted by the recent WHO Oral Health Resolution and the Lancet Oral Health Series, cardiovascular diseases share several common risk factors with oral diseases (e.g. diet/nutrition, tobacco and alcohol consumption, lifestyle more generally). Recent evidence also shows a causal effect of tooth loss on cardiovascular diseases (doi: 10.1177/00220345221120164). As such, there are many synergies with PRUDENT in terms of developing and implementing improved governance, financing, and delivery arrangements for integrative prevention strategies (public health & lifestyle interventions) to address common risk factors which are relevant to both cardiovascular diseases and oral diseases. • Nanotechnologies and advanced technologies for disease prevention, diagnosis, and therapy: PRUDENT develops blueprint models for assessing citizen/patient preferences, needs-based resource planning and deliberative resource prioritization to systematically incorporate innovative technologies for disease prevention, diagnosis and therapy in the future design of (oral) health systems. This provides synergies to adapt and adopt PRUDENT models across all areas of health systems. • Nutrition- and lifestyle-related diseases: sugar consumption is central in the etiology of dental caries and also of many other diseases, particularly NCDs such as diabetes and cardiovascular diseases. As such, there are many synergies with PRUDENT in terms of developing and implementing improved governance, financing, and delivery arrangements for integrative prevention & treatment strategies to address nutrition- and lifestyle-related diseases. • Prevention and public health strategies: as highlighted by the recent WHO Oral Health Resolution and the Lancet Oral Health Series, oral diseases are largely avoidable through prevention and public health strategies. They share common risk factors (e.g. sugar, tobacco, alcohol consumption) as well as social and commercial determinants with other NCDs such as diabetes and cardiovascular diseases. As such, 	

there are many synergies with PRUDENT in terms of developing/implementing prevention and public health strategies which target NCDs (including oral diseases), not least for improving health equity. Further synergies between E4H SRIA and PRUDENT with respect to oral health can be found through the RIA project DELIVER (<https://deliverproject.eu/>).

Project objectives: PRUDENT will create a learning oral health system that converts indicators, incentives, regulations, needs-adaptive resource planning & deliberative processes into sustainable oral health improvements. Through addressing these objectives, the PRUDENT Financing Model will provide a blueprint model for co-developing better financing models for oral and general health systems:

Objective 1 - Develop a harmonized core set of oral health system indicators, implement them in a novel EU-wide monitoring system and integrate them in deliberative processes to set priorities for oral care financing. **Objective 2** – Identify optimization strategies for oral health care financing. Real-world and lab experiments on provider payment and oral care insurance coverage, needs-adaptive resource planning, regulatory learning and digital decision aid tools will be leveraged to help accelerate transformations in oral care financing. **Objective 3** - Harness innovative knowledge transfer strategies for the co-development and co-production of sustainable implementation strategies for oral and general health care financing.

OTHER SYNERGIES: Collaborations and peer-learning

Raise citizens' awareness: PRUDENT strongly builds on citizen engagement and patient empowerment to identify people's needs and preferences with respect to essential packages of (oral) health care and engaging citizens/patients in deliberative processes to ensure more sustainable resource prioritization.

Data Protection: central in the PRUDENT project, particularly to ensure and enhance FAIR use, exchange and interoperability of data from various sources and various domains of health systems (historically, oral health systems data has often been disconnected from other data sources and data exchange).

Stakeholders: PRUDENT actively engages multiple stakeholder groups (citizens/patients, policymakers, health care providers, insurers/payors) in identifying/understanding existing (oral) health systems problems, identifying options to address them, as well as implementation and evaluation of new approaches.

Translation of evidence into policy: PRUDENT focus on evidence-informed policymaking through: Knowledge transfer: co-development and co-production of sustainable impact

- European Observatory on Health Systems Policy workshop: in close collaboration with partners of the European Observatory, this workshop will be geared towards knowledge brokering of evidence, cross-country learning & provide early insights into policymakers' views on concrete implementation.

- PRUDENT Financing Companion: a multi-day participatory conference will be organized to reflect on project results with stakeholders (national & EU policy makers, citizens/patients, providers

& researchers. Based on the feedback received, prioritized outputs will be consolidated in the form of:

→ Policy briefs: these will provide a road map for policy makers at national and EU level on how to prioritize oral health financing options and oral health interventions.


→ Decision aid tools: (i) monitoring dashboards; (ii) resource/workforce planning; (iii) priority setting

→ Regulatory sandbox: inventory of regulations which can be leveraged for better health financing


- Development of an Executive Leadership Module on oral health financing

Digital Health: to enhance the take-up of digital health innovations, PRUDENT will develop needs-adaptive resource & workforce planning approaches which take account of digital health innovations.

Health Technology Assessment: PRUDENT WP6 utilizes a range of deliberative, multi-criteria decision analysis methods tests in order to optimize Priority Setting and Resource Allocation (PRSA).


REFERENCE	1.26
NAME OF THE INITIATIVE	PROPHET – a PeRsOnalized Prevention roadmap for the future HEalThcare
ACRONYM OF THE INITIATIVE	PROPHET
LOGO	
WEBPAGE	https://prophetproject.eu/
DESCRIPTION OF THE INITIATIVE	
<p>PROPHET is funded by the European Commission under the Horizon Europe research and Innovation Programme, will engage organisations and individuals in order to contribute to building a Strategic Research Innovation Agenda to adopt Personalised Prevention approaches into EU health systems.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>The SRIA is under development, so not topics with synergies with E4H are in place at the moment. The Strategic Research and Innovation Agenda (SRIA) for Personalized Prevention will be developed to support the implementation of innovative, sustainable and effective personalized programmes to prevent common chronic diseases. The PROPHET approach is centred around stakeholder engagement and the SRIA co-creation process relates to three main strands of activities: Mapping, Assessment, and Building.</p> <p>Mapping: The mapping activities will provide inputs to the SRIA development by identifying main concepts, main research and innovation orientations, key priority areas for Personalized Prevention adoption in the health systems as well as main gaps and bottlenecks to overcome.</p> <p>Assessment</p> <p>To design a holistic framework (the PROPHET Framework) that will include all the necessary aspects to appraise Personalized Prevention approaches and their adoption by Public Health Authorities.</p>	
OTHER SYNERGIES: Collaborations and peer-learning	
<p>Raise citizens' awareness: Awareness Campaigns will be raised targeted to Citizen/Patient as well as Capacity Building activities/tools towards Public Authorities and Policy Makers will be developed.</p> <p>Data Protection: All Partners confirmed that a Data Protection Officer (DPO) has been appointed in their organization. Request of a consent form. Only data related to publications and public deliverables will be made openly available. In general, the General Assembly (GA) will decide on a case-by-case basis which data can be released in order to avoid issues related to IP rights protection or access.</p> <p>Stakeholders: activities that PROPHET is carrying out: Webinar, Workshop, Stakeholder interviews, Stakeholder survey.</p> <p>Translation of evidence into policy: 1) A Policy Brief on – “PROPHET: a Roadmap towards Personalized Prevention for future healthcare” which sum up SRIA main findings and recommendations for Personalized Prevention Programmes implementation 2) Dedicated Section on the PROPHET Toolbox will include Guidelines and tailored Training Modules on “Designing and Assessing Personalized Prevention Programmes”</p> <p>Digital Health: To integrate traditional public health approaches in disease prevention with personalized approaches that include –omic profiling and digital technologies.</p> <p>Health Technology Assessment: Mapping of current methods for HTA used to assess Personalized Prevention approaches in the healthcare system.</p>	

SYNERGIES WITH INITIATIVES IN THE OTHER FIELDS THAN HEALTH

REFERENCE	2.1
NAME OF THE INITIATIVE	Water security for the planet
ACRONYM OF THE INITIATIVE	Water4All
LOGO	
WEBPAGE	Water Security for the Planet (water4all-partnership.eu)
DESCRIPTION OF THE INITIATIVE	
<p>The Water4All Partnership - Water Security for the Planet - is co-funded by the European Union within the frame of the Horizon Europe programme. The Partnership duration is for seven years from 2022. The objectives are to tackle water challenges as means to face climate change, help to achieve the United Nations' Sustainable Development Goals and boost the EU's competitiveness and growth. There are 7 key themes: IV) Water and health. Anti-Microbial Resistance (AMR) is considered an imminent global public health threat.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Theme IV: Water and health. Water security embraces the safeguard of human health, especially on these sub-themes: IV.I Behaviour and effects of contaminants of emerging concern, litter, plastics, endocrine disruptors IV.II Water dimension in antimicrobial resistance IV.III Innovative water tools and technologies for water quality monitoring and water treatment, remediation and disinfection IV.IV Risk Assessment and threshold values for protection of human health and ecosystems</p>	
OTHER SYNERGIES: Collaborations and peer-learning	
<p>Early Career Network: activities carried out by Water4All: PhD Forum / a Call for early career researchers. Stakeholders: Water4All carries out several activities to enhance Networking and stakeholders involvement/engagement: Knowledge hubs/ Public consultations / Consultative workshop. Translation of evidence into policy: activities carried out by Water4All: Knowledge hubs & Thematic Annual Programming actions/ Transfer Project / Dedicated Pillar on Science - Policy - End-users Interface. High interest in the exchange of best practices for: Raise citizens' awareness / engagement of citizens, Foresight studies / methodology, Capacity building, Communication & dissemination strategy, International Cooperation strategy</p>	

REFERENCE	2.2
NAME OF THE INITIATIVE	European Partnership for a Sustainable Future of Food Systems
ACRONYM OF THE INITIATIVE	FutureFoodS
LOGO	Not developed yet
WEBPAGE	FOOD Systems Partnership (scar-europe.org)
DESCRIPTION OF THE INITIATIVE	
<p>FutureFoodS will be an European Partnership which gathers 87 partners from 22 EU Member States, 6 Associated Countries and 1 third country. FutureFoodS includes public and private actors, policy makers, foundations, locally, sub-nationally, nationally, EU-widely.</p> <p>The vision of FutureFoodS is to collectively achieve environmentally-friendly, socially secure, fair and economically viable healthy and safe Food Systems (FS) for Europe. Main objective: to mobilise European research and innovation to accelerate the transition to sustainable food systems with a wide range of stakeholders joining forces. Main Impact: a European Sustainable Food System in 2050 and beyond based on inter-connected, territorialised, sustainable food systems (being fair, safe, healthy, biodiverse, ..)</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Synergies identified:</p> <ul style="list-style-type: none"> • Regarding the societal transition towards healthy and sustainable diets for all and tackling all forms of malnutrition as well as Food preferences. • Broader perspective on the Food System, connecting the health aspects of nutrition to environmental sustainability aspects. • Health implications of Food processing and Technology. <p>Specific synergies with regards to E4H SRIA:</p>	
Synergie 1	
FutureFoodS	Era4Health
<p>SO1- Change the way we eat: Transition <u>to sustainable healthy diets</u> everywhere: shifting dietary patterns and consumption of safe, healthy, nutritious, affordable, accessible, equitable with reduced environmental footprint and culturally accepted foods</p> <p>Relevant Impacts: Accelerate the transition to sustainable, healthy and inclusive FSS; Delivering sustainable healthy diets and nutrition & food poverty reduction.</p>	<p>Priority Research Area:</p> <ul style="list-style-type: none"> ✓ <u>Prevention and Public Health strategies:</u> <ul style="list-style-type: none"> - Assessing and understanding determinants of health behaviours - Assessing and understanding the effects of public health interventions - System-level dynamics, interactions, and links between public health and other key societal challenges ✓ <u>Nutrition- and lifestyle-related-diseases</u> <ul style="list-style-type: none"> - Biology and basic science - Environments and sustainable diets - Applied science in the field of nutrition related to habitual diets and health care

Synergie 2	
FutureFoodS	Era4Health
<p>S02 - Change the way we process and supply food: Supply- and demand-side research and innovation topics reorienting the activities in post-farming and fishing to <u>reach sustainable healthy diets</u></p> <p>Relevant Impact: Delivering sustainable healthy diets and nutrition & food poverty reduction >> Reductions in environmental and climate impact with <u>improved nutritional composition</u> and <u>reduction of unhealthy components</u>.</p>	<p>Priority Research Area:</p> <ul style="list-style-type: none"> ✓ <u>Prevention and Public Health strategies:</u> - <u>System-level dynamics, interactions, and links between public health and other key societal challenges</u> ✓ <u>Nutrition- and lifestyle-related-diseases</u> - <u>Environments and sustainable diets</u> - <u>Applied science in the field of nutrition related to habitual diets and health care</u>
Synergie 3	
FutureFoodS	Era4Health
<p>S03 - Change the way we connect in food systems: Citizen engagement and consumer trust in reoriented food systems delivering sustainable diets.</p> <p>S04 - Change the way we govern food systems: Leverage points for local, national, EU and global transition pathways, public procurement, F2F code of conduct & local initiatives (incl. cities).</p> <p>Relevant Impact: Empowered citizens and communities; Deployment of global guidelines</p>	<p>Priority Research Area:</p> <ul style="list-style-type: none"> ✓ <u>Prevention and Public Health strategies:</u> - <u>System-level dynamics, interactions, and links between public health and other key societal challenges</u> ✓ <u>Nutrition- and lifestyle-related-diseases</u> - <u>Environments and sustainable diets</u>
OTHER SYNERGIES: Collaborations and peer-learning	
<p>Management & Governance: FutureFoodS will be a Partnership with possible similarities regarding the Management & Governance of E4H.</p>	

REFERENCE	2.3
NAME OF THE INITIATIVE	Sustainable Blue Economy Partnership
ACRONYM OF THE INITIATIVE	SBEP
LOGO	
WEBPAGE	home Bluepartnership
DESCRIPTION OF THE INITIATIVE	
<p>The Sustainable Blue Economy Partnership is a Horizon Europe co-funded partnership. It constitutes a network of 60 Partner institutions from 25 countries and the European Commission that enables an unprecedented effort to pool research and innovation investments and align national programmes at pan-European scale, taking into consideration the sea-basin (Mediterranean, Black Sea, Baltic and North Sea) and Atlantic Ocean dimension. Intervention areas: 4) Healthy 'Blue Food' under a 'One Health' approach; 5) Enabling the green transitions of 'Blue Food' production.</p>	
SYNERGIES	
Synergies related to Research Lines	

Thematic Pillar 3 - A thriving blue economy for the people
How can the blue economy contribute to people's health, well-being and prosperity in a sustainable, resilient and equitable way?"


R&I Objectives:

- A. Sustainable, accessible and safe food, feed and bioproducts
- B. Resilient, sustainable and safe coastal communities
- C. Equitable health and well-being**

- i. Investigating the benefits of blue spaces in enhancing human health**
- ii. Reducing human health risks from marine borne pathogens, toxins and toxicants**
- iii. Using biodiscovery to develop applications for human-health and wellbeing**
- D. A safe marine environment and blue economy"

OTHER SYNERGIES: Collaborations and peer-learning

Management & Governance: SBEP is a Partnership with possible similarities regarding the Management & Governance of E4H.


REFERENCE	2.4
NAME OF THE INITIATIVE	Joint Programming Initiative on Agriculture, Food Security and Climate Change
ACRONYM OF THE INITIATIVE	FACCE-JPI
LOGO	
WEBPAGE	FACCE-JPI Home - FACCE-JPI (faccejpi.net)
DESCRIPTION OF THE INITIATIVE	
<p>The Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI) was launched in 2010, and currently brings together 24 member countries. Its aim is to build the European Research Area (ERA) tackling the challenges at the intersection of agriculture, food security and climate change that cannot be addressed solely at the national level.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Core Theme 3 - Nutrition-sensitive agricultural production for food security</p> <p>"It addresses the need to provide sufficient, healthy and nutritious food for all. It highlights the changes necessary to get away from a diet mainly based on available calories and to go towards diverse diets based on nutritional quality. Dietary diversification and a focus on nutritional quality will not only help to increase the diversification of production systems but also support attempts to tackle serious issues such as malnutrition and obesity.</p> <p>The key areas of research to be addressed include the diversification of genetic resources, of agricultural practices, of production systems also considering presently less important crops as drivers of design and delivery of diverse healthy diets as seen in a food systems and value chain approach. This will also need the consideration of consumer/citizen engagement as a driver for diversification and healthy diets.</p>	

The **expected impact** is a higher level of nutritional quality of food and the diversification of production systems in terms of plant and animal genetic resources and practices, enabling a diversified set of sustainable and nutritious food choices for consumers. These food options will be more nutritious and possess an optimised nutritional content. They will achieve a number of desirable outcomes such as i) reducing obesity and micronutrient deficiency; ii) meeting the dietary needs of specific population groups, such as children, women and the elderly; iii) reducing the risk of transmission of foodborne diseases; **iv) reducing pressure on healthcare systems**; and iv) reducing the environmental footprint of food systems, including through improved nutrient cycling."

OTHER SYNERGIES: Collaborations and peer-learning

Translation of evidence into policy: FACCE activities in the Core Theme 3 have been focused on:

- The development of a **Knowledge Hub on Food and Nutrition Security (SYSTEMIC)**: It started on the 1st July 2020 and it will run for 3 years. The overall aim is to foster transnational and interdisciplinary collaboration and networking to catalyse and accelerate research that integrates the different facets of the food system to address climate and global change challenges. The SYSTEMIC project will work through a series of workshops on cross-cutting themes, building on and connecting existing initiatives, projects, and programs. Education, dialogue, data sharing, and co-design of solutions with stakeholders will support this new approach.
- **Exploratory Workshop on Policy Coherence:** Exploratory Workshop on Policy Coherence. The scope of the workshop was determined by a steering group consisting of FACCE-JPI Secretariat members, FACCE-JPI GB, SAB and StAB members, and experts in the field.

REFERENCE	2.5
NAME OF THE INITIATIVE	EU Partnership Animal Health and Welfare
ACRONYM OF THE INITIATIVE	EUP AH&W
LOGO	 European Animal Health & Welfare Research <small>COLLABORATIVE WORKING GROUP</small>
WEBPAGE	https://www.provaxs.com/eupahw
DESCRIPTION OF THE INITIATIVE	
<p>The European Partnership Animal Health & Welfare (EUP AH&W) intends to be a Research and Innovation Partnership set up in the context of Horizon Europe. Its general goals are to progress Europe towards healthy and sustainable livestock production systems (for both terrestrial and aquatic animals), including the reduction of anti-microbial usage, and to greatly improve production animal welfare, in line with the European Green Deal and farm-to-fork strategy. Furthermore, the EUP AH&W will enhance public health and well-being by facilitating cross-sector collaboration in a One Health – One Welfare perspective.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>Potential synergies with E4H:</p> <ul style="list-style-type: none"> • Prevention of disease is one of the objectives of E4H. • Animal Health and Welfare partnership aims at preventing zoonotic diseases. 	

- Human health and especially **nutrition** is related with **animal health** as ingestion of contaminated animal products is a major cause of disease.

One of the priority themes of EUP AH&W is:

Theme 1. Surveillance and Monitoring Systems

OO1. To design and harmonize surveillance and monitoring systems for animal health and welfare


At a time when the world is facing an unprecedented pandemic, the importance of surveillance for animal diseases is crucial. Surveillance systems and networks designed, and built-in recent years have an essential role in the management of new tools to safeguard the health and welfare of animals, to minimise animal production loss due to disease, to ensure quality assurance for trade in animals and animal products, and to **safeguard human health**.

ANNEX 3 - New procedures and strategies related to E4H:

- Integrating human health surveillance with animal health surveillance (One Health Surveillance).
- Environmental monitoring within disease surveillance (One Health Surveillance).

OTHER SYNERGIES: Collaborations and peer-learning

Management & Governance: EUP AH&W will be a Partnership and management and governance process may have synergies with E4H.

REFERENCE	2.6
NAME OF THE INITIATIVE	NordForsk
ACRONYM OF THE INITIATIVE	NordForsk
LOGO	 NordForsk
WEBPAGE	NordForsk NordForsk
DESCRIPTION OF THE INITIATIVE	
NordForsk is an organisation under the Nordic Council of Ministers that provides funding for and facilitates Nordic cooperation on research and research infrastructure.	
SYNERGIES	
Synergies related to Research Lines	
The overall goal of the programme on Health and Welfare is to improve health in the Nordic countries by finding solutions to societal and public health challenges through high-quality research. Objectives: The Programme seeks to generate knowledge on the effect of demographic, social, environmental and biological factors on human health and the challenges this implies for human welfare, and to translate this new knowledge into practical solutions in healthcare and welfare systems. Health and welfare are seen in a broad perspective. Welfare in this context entails not only welfare and unemployment benefits, but also education and the labour market.	
OTHER SYNERGIES: Collaborations and peer-learning	

Early Career Network: Actions addressed to enhance the participation of Early Career Researchers and/or the Implementation of an ECN (Early Career Network).

Gender: Active participation in CSAs on gender equality in research and innovation.


Raise citizens' awareness: specially involvement of citizens demanded in certain calls.

Stakeholders: Stakeholders involvement/engagement.

Translation of evidence into policy: experience on this field.

Digital Health: experience on this field.

Clinical studies: Support (financial or other type of support) investigator-initiated clinical studies.

REFERENCE	2.7
NAME OF THE INITIATIVE	Horizon Europe – Cluster 6
ACRONYM OF THE INITIATIVE	HE Cluster 6
LOGO	
WEBPAGE	Horizon Europe (europa.eu)
DESCRIPTION OF THE INITIATIVE	
<p>Cluster 6 aims at reducing environmental degradation, halting and reversing the decline of biodiversity on land, inland waters and sea and better managing natural resources through transformative changes of the economy and society in both urban and rural areas. It will ensure food and nutrition security for all within planetary boundaries through knowledge, innovation and digitalisation in agriculture, fisheries, aquaculture and food systems and steer and accelerate the transition to a low carbon, resource efficient circular economy and sustainable bioeconomy, including forestry.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>HORIZON-CL6-2023-FARM2FORK-01-2: European partnership on animal health and welfare. The partnership will contribute to a multidisciplinary approach across sectors dealing with animal health and animal welfare, public health, food safety and the environment, including adaptation to climate change, in particular regarding zoonoses and antimicrobial resistance.</p> <p>HORIZON-CL6-2024-FARM2FORK-02-2-two-stage: Sustainable organic food innovation labs: reinforcing the entire value chain. "Projects results are expected to contribute to all of the following expected outcomes: Increased availability, affordability and accessibility of organic food with positive impacts on sustainability, including on biodiversity, on climate, ecosystems services and public health."</p> <p>HORIZON-CL6-2023-FARM2FORK-01-9: European partnership on sustainable food systems for people, planet and climate. A successful proposal will contribute to the European Green Deal priorities, especially to the farm to fork strategy, and will deliver co-benefits on each of the Food 2030 priorities: nutrition for sustainable healthy diets, climate and environment, circularity and resource efficiency, innovation and empowering communities. The Partnership will also contribute to the common agricultural policy / common fisheries policy, circular economy action plan / blue economy, sustainable aquaculture, single market for green</p>	

products, Europe's digital decade, 2030 climate target plan, Waste Framework Directive, bioeconomy strategy and action plan, and the EU zero pollution action plan.

HORIZON-CL6-2023-FARM2FORK-01-13: Cultured meat and cultured seafood – state of play and future prospects in the EU.

"Proposals are expected to address the following:

- Study the social aspects related to cultured meat and cultured seafood (potential benefits and risks): including the consumers' perception on cultured meat and cultured seafood, animal welfare, religious and ethical aspects, health aspects (for example impacts on obesity or NCDs, nutrition aspects) beyond safety risks eventually assessed by EFSA, etc.
- Identify new sources of ingredients for the cultured meat and cultured seafood to increase the sustainability aspects of the products (including the nutritional value)."

HORIZON-CL6-2023-FARM2FORK-01-19: Support to the markets and trade of agroecological food products under the Food and Nutrition Security and Sustainable Agriculture (FNSSA) partnership.

In line with the European Green Deal priorities and the farm to fork strategy for a fair, healthy and environment-friendly food system, and in support of the African Free Trade Area and of the climate objectives of the African Union and the EU, the successful proposal will contribute to the AU-EU High Level Policy Dialogue (HLPD) on Science, Technology and Innovation, and its priority on Green Transition (and the respective R&I partnerships on Food and Nutrition Security and Sustainable Agriculture and Climate Change and Sustainable Energy), as well as to the implementation of the short-term actions outlined in the working document of the AU-EU Innovation Agenda, aiming to translate R&I efforts into tangible business, development and employment opportunities in Africa and Europe.

HORIZON-CL6-2024-FARM2FORK-01-5: Creating smart and attractive tools to enhance healthy and sustainable food provision, eating and treating of food at home.

"The overall aim of this topic and associated R&I activities is to enhance healthy and sustainable diets aligned with national dietary advice by **empowerment of citizens and their capacity to eat and cook at home** in line with budgetary and time constraints as well as their living situation. The activity will develop tools that can be considered by national competent authorities for implementation. Interventions should not target citizens directly, as full alignment with national policies and advice on nutrition and health needs to be ensured.

Projects results are expected to contribute to all the following expected outcomes:

- Empowered citizens supported by tools and applications to make healthy and sustainable food provision, cooking and eating, and treating of food at home the easiest choice;
- Enhanced uptake of beneficial tools and applications by citizens, especially those who need it most, considering socio-economic characteristics and differences across EU and Associated countries. "

HORIZON-CL6-2023-GOVERNANCE-01-4: Developing an interdisciplinary and inclusive pan-European academic network for food system science

"Project results are expected to contribute to all of the following expected outcomes:

- Contribution to the farm to fork objectives and Food 2030 priorities: **nutrition for sustainable healthy diets**, climate, biodiversity and environment, circularity and resource efficiency, innovation and

empowering communities (e.g., meeting the needs, values and expectations of society in a responsible and ethical way). "

HORIZON-CL6-2023-GOVERNANCE-01-17: Data-driven solutions to foster industry's contribution to inclusive and sustainable food systems

" It will contribute to the food 2030 priorities: **nutrition for sustainable healthy diets**, climate, environment, circularity and resource efficiency, innovation and empowering communities and improving the data economy for food systems and enhance transparency.

HORIZON-CL6-2024-GOVERNANCE-01-2: Regional ecosystems of innovation to foster food system transformation.

"Proposed activities should cover all of the following aspects:

- Strengthen existing ecosystems of innovation to broaden their scope and take on a "food systems approach" that delivers on the Food 2030 co-benefits (**nutrition, public health**, climate, circularity and communities) by: (a) deploying a quadruple helix model (that fully engages the four major actors in the innovation system: small and medium-sized enterprises and industrial clusters, universities/research centres, public authorities, and civil society organisations); and (b) delivering solutions that empower regional actors and their regional innovation ecosystems through an acceleration agenda."

HORIZON-CL6-2024-GOVERNANCE-01-3: The role of mainstream media, social media and marketing in fostering healthy and sustainable consumption patterns and how to encourage good practices

"Proposed activities should cover all of the following aspects:


- Explore the impact of negative news (e.g., information on food safety risks, information on impacts on biodiversity and ecosystems) as compared with messages promoting positive outcomes of food choices (e.g., information on nutritional and health benefits) by, for example, conducting surveys or employing sentiment analyses. Assess whether parental control can be considered an effective strategy given the real-world context and


levels of independent exposure of children to linear and non-linear media. Also explore the effects of misinformation (intentional or not), and how this propagates through different media.

- Identify innovative and effective tools to improve communication on sustainable healthy nutrition and diets, and more generally on sustainable food systems, thereby ensuring that all parts of the society are benefitting from access to information that foster uptake of healthy and sustainable diets and lead to the transformation of food systems, while respecting the EU and national legal framework and policies, national educational policies and advice on nutrition and food.

- Compile strategies and best practices – in compliance with the Best Practice Portal Protocols – for all food systems operators and actors for communication and outreach efforts to foster healthy, sustainable, and alternative consumption patterns and to encourage good practices, while respecting the EU and national legal framework and policies, national educational policies and advice on nutrition and food.

- Clearly explain how results will deliver co-benefits on Europe's Beating Cancer Plan, the farm to fork strategy and on each of the food 2030 priorities: nutrition for sustainable healthy diets, climate and environment, circularity and resource efficiency, innovation and empowering communities (e.g., meeting the needs, values and expectations of society in a responsible and ethical way). "

REFERENCE	2.8
NAME OF THE INITIATIVE	Partnership for the Assessment of Risks from Chemicals
ACRONYM OF THE INITIATIVE	PARC
LOGO	
WEBPAGE	Partnership for the Assessment of Risks from Chemicals Parc (eu-parc.eu)
DESCRIPTION OF THE INITIATIVE	
<p>PARC is an EU-wide research and innovation partnership programme to support EU and national chemical risk assessment and risk management bodies. PARC will facilitate the transition to next generation risk assessment to better protect human health and the environment, aiming in particular to underpin the concrete implementation of new orientations in European public policies to safeguard health and the environment in response to important issues for health.</p>	
SYNERGIES	
Synergies related to Research Lines	
<p>PARC will facilitate the transition to next generation risk assessment to better protect human health and environment. PARC will address end-users' needs to anticipate and respond to the challenges and priorities of the new European policies.</p>	
OTHER SYNERGIES: Collaborations and peer-learning	
<p>Management & Governance: PARC is a Partnership and management and governance process may have synergies with E4H.</p>	

REFERENCE	2.9
NAME OF THE INITIATIVE	European Regional Development Fund
ACRONYM OF THE INITIATIVE	ERDF
LOGO	
WEBPAGE	European Regional Development Fund (ERDF) (europa.eu)
DESCRIPTION OF THE INITIATIVE	
<p>The European Regional Development Fund (ERDF) provides funding to public and private bodies in all EU regions to reduce economic, social and territorial disparities. The Fund supports investments through dedicated national or regional programmes. In 2021-2027, the fund will enable investments to make Europe and its regions: more competitive and smarter, greener, more connected, more social, closer to citizens.</p>	
SYNERGIES	
Synergies related to Research Lines	


Specific Objective 19: Ensuring equal access to health care through developing infrastructure, including primary care

"Indicator 1: New or modernised capacity for health care facilities


Indicator 2: Annual users of new or modernised health care services".

The programme has been analyzed but not specific synergies on research lines have been found. **The link with this Programme is based on the capacity given to regions and countries of cofunding with ERDF their participation in E4H calls.**

SYNERGIES WITH INITIATIVES RELATED TO CLINICAL STUDIES AND RESEARCH INFRASTRUCTURES

REFERENCE	3.1
NAME OF THE INITIATIVE	European Clinical Research Infrastructure Network
ACRONYM OF THE INITIATIVE	ECRIN
LOGO	
WEBPAGE	Ecrin Facilitating European Clinical Research
DESCRIPTION OF THE INITIATIVE	
<p>ECRIN is a European research infrastructure that facilitates researchers to set up and conduct multinational clinical trials in Europe. We do this by linking with our national European Correspondents, the national networks of clinical trial units, and through our services and tools. ECRIN is based in Paris (France), we work with our 12 member countries across Europe, as well as, additional European or international partners. Our network consists of over 120 clinical trial units, our clinical trial portfolio now counts 70 multinational trials with a mean of 6.3 countries per trial, we have participated in more than 40 international infrastructure development projects, and ECRIN is ISO 9001:2015 certified for its core services.</p>	
SYNERGIES	
Synergies related to Clinical Trials	
<p>Clinical Trials Operations Supporting clinical trials across borders is the key mission of ECRIN. This support is given to investigators and sponsors in ECRIN Member and Observer countries, including the preparation of European funding applications and the coordination and management of multinational clinical research projects.</p> <p>Infrastructure Development Projects Through its participation in projects (most of them funded by the European Framework Programmes), ECRIN strengthens and or develops its capacity, tools, and services for the benefit of our user community.</p> <ul style="list-style-type: none"> . These projects further enable ECRIN to stay at the cutting edge of clinical research, enhance its the visibility, and develop synergies with the research infrastructure community. . These types of projects fall into five different possible domains. 	

REFERENCE	3.2
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NAME OF THE INITIATIVE	European Infrastructure for Translational Medicine
ACRONYM OF THE INITIATIVE	EATRIS
LOGO	
WEBPAGE	EATRIS
DESCRIPTION OF THE INITIATIVE	
<p>EATRIS is the European infrastructure for translational medicine. They bring together resources and services for research communities to translate scientific discoveries into benefits for patients. They are a non-profit organisation that provides access to a vast array of expertise and facilities from 150 top-tier academic centres across Europe. They focus on improving and optimising preclinical and early clinical development of drugs, vaccines and diagnostics, and overcome barriers to health innovation.</p> <p>Their research infrastructure offers a broad range of research services for both academia and industry across various research fields. In addition, EATRIS works with public funding agencies, charities and policy makers with tailored actions to help improve the translational research and innovation ecosystem.</p> <p>The EATRIS community comprises world class facilities providing collaborative services in ATMPs (Advanced Therapeutic Medicinal Products), among other areas.</p>	
SYNERGIES	
Synergies related to Clinical Trials	
RELEVANT PROJECTS, SERVICES AND RESOURCES	
Projects	
1.REMEDI4ALL (coordinated by EATRIS, 2022-2027, Horizon Europe)	
https://remedi4all.org/ R4A is a research initiative to drive forward the repurposing of medicines in Europe, focusing on: <ul style="list-style-type: none"> • building a state-of-the-art platform to provide expertise and services across the complete value chain for patient-centric medicine repurposing at every development stage and in any disease area. • assembling advanced in silico tools for Machine Learning (ML) and Artificial Intelligence (AI), open datasets and tools and expertise required to understand the mechanism of action of specific medicines. • creating a global community of practice connected in a think-tank-like environment, including through the already established “Funders Network” (see: https://remedi4all.org/funders/) • training and educating the next generation of researchers, clinicians, patients, policymakers, regulators and funders in cutting-edge drug repurposing tools and processes. • favouring dialogue and debate to advance policy and fair access to repurposed medicines across the EU. 	
2. European Joint Programme for Rare Diseases (EATRIS co-leader of the translational pillar, 2019-2023, Horizon 2020)	
EATRIS has been leading the Work Package dedicated to Innovation Management, which includes:	

- the development of the Innovation Management Toolbox, an open resource to help academia with tech transfer, regulatory, intellectual property <https://imt.ejprarediseases.org/> (sustained after the end of the project)
- The mentoring programme, supporting investigators between stage-1 and stage-2 funding applications or after receiving funding to strengthen the translational potential and patient benefit of their research projects. <https://eatris.eu/services/expert-mentoring-service-rare-disease-researchers/> (service offered to funders and funding programmes, not restricted to rare diseases)

3. EATRIS-Plus (coordinated by EATRIS, 2020-2023, Horizon 2020)

<https://eatris.eu/projects/eatris-plus/>

EATRIS-Plus aims to consolidate EATRIS capacities in the field of Personalised Medicine and strengthen EATRIS' long-term sustainability.

Services

EATRIS provides a wide range of innovation services to help strengthen the translational potential of research projects and drive innovation. Those include mentoring, regulatory services, health technology assessment, and translational feasibility assessment. Those services can be made available to the Partnership's applicants and/or grantees. (see: <https://eatris.eu/innovation-services/>)

OTHER SYNERGIES: Collaborations and peer-learning

Existing and future resources developed by the project relevant for ERA4Health may include:

- **Patient involvement: Patient Engagement Resource Centre**, an open platform to help academic researchers get started with patient engagement. Already available at <https://patient-engagement.eu>.
- **Multi-omics Toolbox**, an open platform to support cross-omic analysis and data integration in clinical samples, containing SOPs, guidelines, reference materials and a repository of multi-omics data among other resources. The Toolbox is now being piloted and will be available openly by end of 2023.

REFERENCE	3.3
NAME OF THE INITIATIVE	European Strategy Forum on Research Infrastructures
ACRONYM OF THE INITIATIVE	ESFRI
LOGO	
WEBPAGE	www.esfri.eu
DESCRIPTION OF THE INITIATIVE	The European Strategy Forum on Research Infrastructures was established in 2002, with a mandate from the EU Council to support a coherent and strategy-led approach to policy-making on research infrastructures in Europe, and to facilitate multilateral initiatives leading to the better use and development of research infrastructures, at EU and international level. The mission of ESFRI is to support a coherent and strategy-led approach to policy-making on research infrastructures in Europe,

and to facilitate multilateral initiatives leading to the better use and development of research infrastructures, at EU and international level. ESFRI's delegates are nominated by the Research Ministers of the Member and Associate Countries, and include a representative of the Commission, working together to develop a joint vision and a common strategy.

SYNERGIES

Synergies related to Clinical Trials

ESFRI periodically updates its Roadmap to provide a coherent and strategic vision ensuring that Europe has excellent Research Infrastructures (RIs) in all fields of science and innovation. There is currently a Landscape Analysis ongoing which will report in the first half 2024. A Roadmap will follow after. www.esfri.eu

ESFRI has 6 strategic working groups Health & Food, Environment, Energy, Physical Sciences & Engineering, Data Computing & Digital, Social & Cultural. The Health & Food group is chaired by Lucia Banci of the University of Florence. It currently has 4 projects and 12 Landmarks. The Health and Food subdomain has a large number of research areas, portfolio technologies, and connected services particularly since the SARS-CoV-2 pandemic.

The RIs against COVID-19 webpage lists the RIs working, individually or collectively, on the COVID-19 pandemic. Involvement of these RIs shows their crucial importance but also uncovers developing scientific challenges that could be defined as follows:

- interdisciplinary collaboration,
- thematic versus permanent clustering, intra- and inter-domains,
- development, adaptation and enrichment and new RIs,
- Health & Food diversity,
- cross-domain and inter-sectorial clusters

The current development of the Health & Food RIs brings a new interdisciplinary RI the ESFRI Project EIRENE RI on the roadmap. This RI fills the gap in the European infrastructural landscape and pioneers bridging the topic of environmental impact and human health with the topic of human exposome, i.e. environmental determinants of health.


Health

The Health subdomain is very rich regarding the number of research areas, portfolio technologies, and connected services, and the developmental dynamics, which is especially remarkable under the current situation caused by the SARS-CoV-2-based pandemics. The Covid-19 actions of RIs proved a striking example of concerted tackling of an urgent problem. The RIs against COVID-19 webpage¹¹ lists the RIs working, individually or collectively, on the COVID-19 pandemics. Involvement of these RIs shows their crucial importance but also uncovers developing scientific challenges that could be defined as follows:

- interdisciplinary collaboration,
- thematic versus permanent clustering, intra- and inter-domains,
- development, adaptation and enrichment and new RIs,
- Health & Food diversity,
- cross-domain and inter-sectorial clusters

The current development of the H&F RIs brings also a new interdisciplinary RI the ESFRI Project **EIRENE RI** on the roadmap. This RI fills the gap in the European infrastructural landscape and pioneers bridging the topic of environmental impact and human health with the topic of human exposome, i.e.

environmental determinants of health. This effort will lead to improved understanding of an impact of exposome on the European population, characterization of the risk factors behind development of chronic conditions, and discovery of **novel tools for their prevention and treatment**. It also brings together the leaders of the EU and US Environment & Health research to advance new scientific developments and establish a large-scale interdisciplinary research providing harmonized workflows covering all processes between the data and sample collection and knowledge provided to the end users accessible to academic researchers, private companies, public authorities and citizens. "

REFERENCE	3.4
NAME OF THE INITIATIVE	European University Hospital Alliance
ACRONYM OF THE INITIATIVE	EUHA
LOGO	
WEBPAGE	EUHA European University Hospital Alliance (euhalliance.eu)
DESCRIPTION OF THE INITIATIVE	
<p>The European University Hospital Alliance is formed by leading European university hospitals with demonstrated excellence in healthcare, education and research. The vision of the European University Hospital Alliance (EUHA) is to build a network of sustainable healthcare ecosystems in Europe which achieve the best possible quality of care with the resources available. EUHA's strategic plan for 2021-2023 challenges EUHA to 'Lead by Doing'. In these years EUHA will focus on applying the unique role of academic medicine to improve population health and healthcare outcomes, by leading the development of innovative solutions to the most important challenges facing European health and healthcare. EUHA includes a Clinical Trials Working Group.</p>	
SYNERGIES	
Synergies related to Clinical Trials	
<p><u>Sinergie 1:</u> <u>The vision of the European University Hospital Alliance (EUHA) is to build a network of sustainable healthcare ecosystems in Europe which achieve the best possible outcomes with the resources available. To support this EUHA has formulated the following mission statement:</u> To promote excellence and innovation in healthcare, research and education, by comparing practices and patient outcomes, providing knowledge exchange opportunities for staff, and collaborating in research and development projects. To emphasize the essential role of university hospitals within health systems by formulating and offering advice to policymakers and interacting with industry, patient organisations and other health care stakeholders.</p> <p><u>Sinergie 2:</u> <u>EUHA's strategic plan for 2021-2023 challenges EUHA to 'Lead by Doing'. In these years EUHA will focus on applying the unique role of academic medicine to improve population health and healthcare outcomes, by leading the development of innovative solutions to the most important challenges facing European health and healthcare.</u></p>	

EUHA increases the sustainability of health care by establishing, sharing and implementing best practices, supported by benchmarking of patient-centred outcomes.

EUHA drives the sustainable development of innovative cancer therapies by establishing the **European Centre for Cell and Gene Cancer Therapies (EUCCAT) – incl. clinical trials**

EUHA harnesses the potential of data exchange by understanding our unique strengths and shared challenges, increasing interoperability and developing common approaches to help establish the **European Health Data Space**.

Synergie 3

EUHA develops common solutions to challenges within rare diseases, including in partnership with the European Reference Networks.

EUHA develops a **Responsible Research and Innovation Culture** through joint projects in clinical trial results publication, recruitment and promotion practices and FAIR Research Data.

EUHA members have provided training sessions to each other on the registration of clinical trials data on EUDRA-CT, following this and institutional investment trials are being registered as is legally mandatory.

Synergie 4:

Achieving a sustainable healthcare workforce for European societies - create innovative solutions to address the needed skills and sustainability of the healthcare workforce of the future.

OTHER SYNERGIES: Collaborations and peer-learning

Early Career Network: Actions addressed to enhance the participation of Early Career Researchers and/or the Implementation of an ECN (Early Career Network). Junior and senior colleagues of the EUHA 'Learning In Value' working group (Erasmus+) have created the ECHORM early career researchers network for outcomes research. This will be formally launched on June 15th <http://echorm.org/> (web still under construction) alongside the EUHA Members' Assembly.


Data Protection: Aspects to be considered to ensure the fulfilment of the European requirements of data protection and data confidentiality.

Digital Health: Collaboration through the EHDEN IMI Project to translate healthcare data to the OMOP standard.

Patient involvement: EUHA engages and empowers patients through data and tools which enable them to optimize their outcomes and experience.


Clinical studies:

- The EUHA Clinical Trials Working Group has developed a template contract between EUHA members to facilitate the start of IICS.
- Through the EUCCAT project a multi-centre clinical trial in CAR T-Cell therapy has started which has sites in three countries.

REFERENCE	3.5
NAME OF THE INITIATIVE	Collaborative Network for European Clinical Trials for Children
ACRONYM OF THE INITIATIVE	conect4children
LOGO	

WEBPAGE	conect4children is a pan-European clinical trial network
DESCRIPTION OF THE INITIATIVE	
<p>Large collaborative European network that aims to facilitate the development of new drugs and other therapies for the entire paediatric population.</p> <p>It is a pioneering opportunity to build capacity for the implementation of multinational paediatric clinical trials whilst ensuring the needs of babies, children, young people and their families are met. It is committed to meeting the needs of paediatric patients thanks to a novel collaboration between the academic and the private sectors, which includes 35 academic and 10 industry partners and around 500 affiliated partners.</p> <p>c4c will use a coordinated approach to deliver high quality “regulatory grade” clinical trials by supporting:</p> <ul style="list-style-type: none"> • Trial implementation using resources shared between studies. • Trial design through a combination of information about natural history, feasibility, appropriate innovation, and expert opinion. • Education and awareness within and beyond the network. 	
SYNERGIES	
Synergies related to Clinical Trials	
<p>Conect4children is an established infrastructure that provides tried and tested services that address selected difficulties with paediatric clinical research. Main aspects:</p> <ol style="list-style-type: none"> 1. Focus on involving children and young people in clinical research during study preparation and conduct. We do this through collaboration with the European Young People’s Advisory Group Network. 2. Expert advice for study design including experts and real-world experience to support decision making by Sponsors and Regulators. 3. Work closely with clinical sites to increase their capacity and capability through education of individuals and quality improvement of sites mediated by National Hubs (in order to support linguistically, culturally, and legally appropriate engagement). 4. The c4c Young Investigators’ Community provides peer support and is setting up a mentorship programme. 5. Work towards global interoperability for the support of the preparation and conduct of clinical research with our partners in USA, Canada, and Japan. We are also working with the RJP-RD, ERICA, and proposed RDP on clinical sites for rare diseases in Europe. 6. Multinational pharmacovigilance service based on national reference people to allow rapid and accurate adaptation to local requirements. 7. Management of supplies of medicines during clinical trials taking account of trial needs, national legal requirements, and site level specificities. 8. Co-development of processes with industry to overcome selected, important challenges in paediatric clinical research. 9. Experience with transition to sustainable legal entity based on sustainability-by-design from inception. 10. Coordination of the global forum for discussions about the paediatric specificities of data standards used in clinical research. 11. Movement toward global interoperability for paediatric clinical research through collaboration with similar networks in other high income countries. 	

<p>12. Experience with a public private partnership that strategically integrates multiple services across multiple jurisdictions and multiple scales.</p> <p>Conect4children seek opportunities and resource for:</p> <ol style="list-style-type: none"> Integration and interoperability with similar infrastructures. Stable contribution to support for national coordination for site activities.
<p>OTHER SYNERGIES: Collaborations and peer-learning</p>
<p>Early Career Network: c4f has an active Young Investigators’ Network that provides peer support and is setting up a mentorship programme</p> <p>Raise citizens’awareness: Nothing specific yet, but some partners have plans to do this. c4f is particularly interested in working with ethics committees and also with hospital managers to explain the importance of clinical research</p> <p>Stakeholders: c4f focuses on involving children and young people in clinical research during study preparation and conduct. c4f does this through collaboration with the European Young People’s Advisory Group Network.</p> <p>Translation of evidence into policy: c4f focuses on the design and conduct of research that is suitable for submission to regulatory agencies</p> <p>Clinical studies: c4f is very keen to support IICS that have funding for the trial as long as c4f is supported for the work that c4f does.</p>

REFERENCE	3.6
NAME OF THE INITIATIVE	Microbial Resource Research Infrastructure
ACRONYM OF THE INITIATIVE	MIRRI
LOGO	
WEBPAGE	MIRRI-ERIC – MICROBIAL RESOURCE RESEARCH INFRASTRUCTURE
DESCRIPTION OF THE INITIATIVE	
<p>The Microbial Resource Research Infrastructure (MIRRI) is the pan-European distributed Research Infrastructure for the preservation, systematic investigation, provision and valorisation of microbial resources and biodiversity. MIRRI brings together 50+ microbial domain Biological Resource Centres (mBRCs), culture collections and research institutes from ten European countries. MIRRI serves the bioscience and the bioindustry communities by facilitating the access, through a single point, to the broadest range of high-quality microorganisms, their derivatives, associated data and services, with a special focus on the domains of Health & Food, Agro-Food, and Environment & Energy.</p> <p>In short, MIRRI offers to researchers and to companies:</p> <ul style="list-style-type: none"> • Single point of access to ~50 world-class microbial biorepositories. • Broad catalogue of 400,000+ high-quality microbial resources and data. • State-of-the-art facilities and technological platforms. • Cutting-edge services, techniques and technologies. • Top-level scientific/technical expertise. • Training opportunities. • Tailor-made, flexible and cost-competitive/cost-free solutions. 	
SYNERGIES	

Synergies related to Clinical Trials
<p>STRATEGIC AREA 1 -RESEARCH ON PATHOGENIC MICROORGANISMS AND HUMAN / HUMAN-ANIMAL INFECTIOUS DISEASES</p> <ul style="list-style-type: none"> • Human & animal health. • Microbial pathogens. • Infectious diseases, emerging diseases & zoonoses. Epidemic/pandemic prevention and response. • Diagnostics. <p>STRATEGIC AREA 2 -RESEARCH & DEVELOPMENT OF NEW (BIO)PHARMACEUTICALS / THERAPEUTIC SOLUTIONS (INCLUDING ANTIMICROBIALS, VACCINES, PHAGE THERAPIES AND MICROBIOME THERAPEUTICS –FOR HUMAN USE)</p> <ul style="list-style-type: none"> • Innovative medicines/ biopharmaceuticals. • Antimicrobial resistance. • Antimicrobials. • Vaccines. • Phage therapies. • Microbiota&microbiometherapeutics <p>STRATEGIC AREA 3 -RESEARCH & DEVELOPMENT OF NEW, SAFE, HEALTHY AND SUSTAINABLE FOOD AND FEED PRODUCTS</p> <ul style="list-style-type: none"> • Food security. • Food safety. • Food processing & preservation. • Food microbiome. • Sustainable and nutritious foods/diets. Functional foods, pre-, pro- and postbiotics.

REFERENCE	3.7
NAME OF THE INITIATIVE	European Research Infrastructure on Highly Pathogenic Agents
ACRONYM OF THE INITIATIVE	ERINHA
LOGO	
WEBPAGE	Home - ERINHA - https://erinha.eu/ ; Twitter: @ERINHA_RI
DESCRIPTION OF THE INITIATIVE	
<p>The European Research Infrastructure on Highly Pathogenic (ERINHA) is a pan-European distributed Research Infrastructure dedicated to the study of high-consequence emerging and re-emerging pathogens. It brings together leading European high containment (Bio-Safety Level 3 and 4) facilities with longstanding experience of research in the field of highly infectious diseases. It provides a coordinated access to its capacities and facilities to researchers worldwide. Such a coordinated approach is vital in a context marked by frequent globalization of infectious diseases with high risk for public health, society and economy, as demonstrated by the COVID-19 pandemic.</p> <p>MISSION: Contribute to protect human health by advancing high-containment research and increasing European and global preparedness for and capability to respond to highly infectious disease threats.</p>	

The over-arching goal of ERINHA is to provide capacities to conduct projects which are broad in scope, ambition and require a range of capabilities that no single facility or even country can provide on its own.

SYNERGIES

Synergies related to Clinical Trials

ERINHA's research Focus

ERINHA priority pathogens are the ones which require high-containment environment. This includes Risk Group 4 (RG4) pathogens (such as Ebola, Marburg, Lassa fever, Crimean-Congo Hemorrhagic Fever (CCHF), NIPAH/HENDRA) as well as emerging highly infectious diseases (e.g; SARS-CoV-2; Disease X) Research goals: FROM increasing the understanding of diseases caused by highly pathogenic agents (Study of viral biology, Pathogenesis, Natural history of pathogens in animal models, Immune responses etc.) TO preclinical development & assessment of MCMs – Vaccines, therapeutics and diagnosis tools.

From Discovery to prevention of infectious diseases

- Provision of Diagnostic capabilities
- Increasing the understanding of disease
- Developing and adapting interventions
- Helping to translate the interventions (e.g. analytical capacities; GLP like testing)


ERINHA's impact on health and preparedness to Public Health emergencies

- Increasing preparedness and rapid response to highly infectious (re)-emerging disease threats where no or very limited MCMs are available through supporting R&D of MCMs (e.g. large scale Integrated Services for Infectious Disease Outbreak Research (ISIDORE) project.
- Increasing knowledge and expertise, with large pool of highly qualified and trained personnel able to be quickly involved in outbreak response activities.
- Increasing Global Health Security

ERINHA's research portfolio

ERINHA has developed its scientific strategy – a Research Portfolio, which is an evolving strategy with systematic updates to match with European and Global Research and Innovation and Public Health needs.

- **ERINHA coordinates the ISIDORE action which provides FREE access to all European research infrastructure resources required to advance research on epidemic/pandemic-prone pathogens. From structural biology to clinical trials including social sciences.**

REFERENCE	3.8
NAME OF THE INITIATIVE	European Open Science Cloud
ACRONYM OF THE INITIATIVE	EOSC
LOGO	
WEBPAGE	Advancing Open Science in Europe EOSC Association
DESCRIPTION OF THE INITIATIVE	
<p>EOSC is the European web of FAIR data and related services for research. Research data that is easy to find, access, interoperate and reuse (FAIR) Trusted and sustainable research outputs are available within and across scientific disciplines</p>	

With the aim of Unlock the full potential of research data to accelerate discoveries and innovation European Open Science Cloud (EOSC) Partnership aims to deploy and consolidate by 2030 an open, trusted virtual environment to enable the estimated 2 million European researchers to store, share and reuse research data across borders and disciplines.

SYNERGIES

Synergies related to Clinical Trials

EOSC is the basis for a science, research and innovation data space that will bring together data resulting from research and deployment programmes and will be connected and articulated with the sectoral data spaces” (European Data Strategy, COM(2020) 66 final).

Europe-wide common data spaces:

The European strategy for data defines nine initial common European data spaces that should be developed, building on the ongoing experience with the research community gained through the European Open Science Cloud. These data spaces are very diverse, among them:


- **A health data space**, essential for advances in preventing, detecting and curing diseases as well as for informed, evidence-based decisions to improve the healthcare systems.

As described in the Strategic Research and Innovation Agenda (SRIA) it pretends:

- Ensure that Open Science practices and skills are rewarded and taught, becoming the ‘new normal’.
- Enable the definition of standards, and the development of tools and services, to allow researchers to find, access, reuse and combine results.
- Establish a sustainable and federated infrastructure enabling open sharing of scientific results

OTHER SYNERGIES: Collaborations and peer-learning

Management & Governance: EOSC is a Partnership with potential similarities in terms of Management and Governance.

REFERENCE	3.9
NAME OF THE INITIATIVE	Trials@Home - Centre of Excellence for Decentralised Clinical Trials
ACRONYM OF THE INITIATIVE	Trials@Home
LOGO	
WEBPAGE	Trials@Home – Centre of Excellence Remote and Decentralised Clinical Trials (trialsathome.com)
DESCRIPTION OF THE INITIATIVE	The Trials@Home project aims to provide recommendations on Decentralised Clinical Trials (DCTs) in Europe. The Trials@Home consortium explores the opportunities of moving clinical trials from the traditional clinic setting to the participant’s immediate surroundings. These so-called DCTs make use of new, digital innovations and enable participants to visit a clinical trial centre less frequently, if at all. Trials@Home follows a co-creative multi-stakeholder approach where academic partners, Small and Medium-sized Enterprises (SMEs), private foundations, and EFPIA partners will work together with other stakeholders from across the medical, technological, regulatory, ethical and social aspects of

DCTs, with a common goal to develop concrete and practical recommendations, and pilot tools supporting widespread acceptance and use of DCTs in Europe.

SYNERGIES

Synergies related to Clinical Trials


Clinical trials are a crucial step in the development and testing of medical treatments. They are essential to ensure that new treatments are safe and effective.

Traditionally, clinical trials have taken place in hospitals or other research sites, often requiring participants to attend several face-to-face study visits. While these trials produce results, they can do so at a great burden to participants and risk excluding people who are unable or unwilling to travel to study visits.


Remote decentralised clinical trials (RDCTs) are one way to make trials more accessible. RDCTs are centred around participants. Using technology can allow people to take part in clinical trials in their own home with no need to travel to attend study visits or to take substantial time off work or away from family. RDCTs have the potential to make taking part in a clinical trial simple and convenient.

What are Decentralised Clinical Trial approaches?


- Operational model in which trial activities are designed to take place at or in the vicinity of the participant's home. Rather than at a traditional clinical site. This approach may make use of technologies and other innovative operational approaches to facilitate data collection
- Not a methodology
- Can be fully decentralised or hybrid
- Can be steered towards pragmatic or towards explanatory methodology


REFERENCE	3.10
NAME OF THE INITIATIVE	Core Outcome Measures in Effectiveness Trials
ACRONYM OF THE INITIATIVE	COMET
LOGO	
WEBPAGE	COMET Initiative Home (comet-initiative.org)
DESCRIPTION OF THE INITIATIVE	
<p>The COMET Initiative brings together people interested in the development and application of agreed standardised sets of outcomes, known as 'core outcome sets' (COS). These sets represent the minimum that should be measured and reported in all clinical trials of a specific condition, but COS are also suitable for use in routine care, clinical audit and research other than randomised trials. You can read the core outcome set/COMET plain language summary here. A video is available in the next link The existence or use of a core outcome set does not imply that outcomes in a particular study should be restricted to those in the relevant core outcome set. Rather, there is an expectation that the core outcomes will be collected and reported, making it easier for the results of studies to be compared, contrasted and combined as appropriate; while researchers continue to explore other outcomes as well. COMET aims to collate and stimulate relevant resources, both applied and methodological, to facilitate exchange of ideas and information, and to foster methodological research in this area.</p>	

SYNERGIES
Synergies related to Clinical Trials
<p>COMET aims to collate and stimulate relevant resources, both applied and methodological, to facilitate exchange of ideas and information, and to foster methodological research in this area.</p> <p>Specific objectives are to:</p> <ul style="list-style-type: none"> • Raise awareness of current problems with outcomes in clinical trials • Encourage COS development and uptake • Promote Patient and Public Involvement (PPI) in COS development • Provide resources to facilitate these aims • Avoid unnecessary duplication of effort • Encourage evidence-based COS development
OTHER SYNERGIES: Collaborations and peer-learning
<p>Early Career Network: Paula Williamson was partner in the project MiRoR (METHODS IN RESEARCH ON RESEARCH).</p> <p>Patient involvement: See COMET Initiative Patients and the public (comet-initiative.org) https://training.cochrane.org/resource/no-choice-outcomes-about-us-without-us</p>

REFERENCE	3.11
NAME OF THE INITIATIVE	European Research Infrastructure for Biological Information
ACRONYM OF THE INITIATIVE	ELIXIR
LOGO	
WEBPAGE	ELIXIR A distributed infrastructure for life-science information (elixir-europe.org)
DESCRIPTION OF THE INITIATIVE	
<p>ELIXIR is a European life sciences infrastructure, bringing together scientists from 23 countries and over 250 research institutes. ELIXIR unites Europe’s leading life science organisations in managing and safeguarding the increasing volume of data being generated by publicly funded research. It coordinates, integrates and sustains bioinformatics resources across its member states and enables users in academia and industry to access services that are vital for their research.</p> <p>ELIXIR is a distributed research infrastructure, connecting: 23 countries, 240+ institutes, 400+ services, 800+ bioinformaticians.</p>	
SYNERGIES	
Synergies related to Clinical Trials	
<p>Delivering value to wider society from Research Infrastructures: ELIXIR operates at the interface between life science data generation and the application of bioinformatics in the fields of health, food security, and the environment. It provides free access to services including:</p> <ul style="list-style-type: none"> • Databases (ie, Orphadata, European Genome phenome Archive, European COVID-19 Data Platform) • Software tools and workflows to analyse data • Standards and resources to make data FAIR 	


- Training
- Compute (some costs for users)
- Data management support
- Data experts brought together in health-related domains (ie Cancer, health data, rare diseases, federated human data)
- Coordinates major EU projects (ie, Beyond 1 Million Genomes, Genomics Data Infrastructure, EOSC4Cancer....)


REFERENCE	3.12
NAME OF THE INITIATIVE	REMEDI4All - Repurposing of MEDicines 4 All
ACRONYM OF THE INITIATIVE	REMEDI4All
LOGO	
WEBPAGE	https://remedi4all.org/
DESCRIPTION OF THE INITIATIVE	
<p>REMEDI4ALL is an EU-funded research initiative to drive forward the repurposing of medicines in Europe.</p> <p>VISION:</p> <ul style="list-style-type: none"> • Developing a comprehensive, accessible and standardised platform that provides the expertise, tools and resources required in all stages of the repurposing journey. This will ensure that more (and better) repurposed medicines are available to patients and will contribute to more sustainable health systems. • Generating a more favourable policy environment for drug repurposing by bringing together key stakeholders in a forum of debate to identify current barriers and explore creative solutions and incentives. • Building a dynamic global community practising drug repurposing. 	
SYNERGIES	
Synergies related to Clinical Trials	
EXPERTISE AND COLLABORATION	
<p>Under the leadership of EATRIS, the European infrastructure for translational medicine, 24 European organisations are closely collaborating to improve the existing ecosystem and make drug repurposing the new normal.</p> <p>REMEDI4ALL partners bring a unique mix of expertise in the fields of:</p> <ul style="list-style-type: none"> - Patient engagement and co-design - In silico and computational methods - In vitro and in vivo nonclinical drug development - Drug screening - Clinical operations and trial management - Regulatory science - Research funding - Health technology and reimbursement - Policy and eco-system monitoring. 	

REFERENCE	3.13
NAME OF THE INITIATIVE	Biobanking and Biomolecular Resources Research Infrastructure
ACRONYM OF THE INITIATIVE	BBMRI
LOGO	
WEBPAGE	Home - BBMRI-ERIC: Making New Treatments Possible
DESCRIPTION OF THE INITIATIVE	
<p>BBMRI-ERIC is a European research infrastructure for biobanking that brings together all the main players from the biobanking field – researchers, biobankers, industry, and patients – to boost biomedical research. To that end, they offer quality management services, support with ethical, legal and societal issues, and a number of online tools and software solutions. Ultimately, their goal is to make new treatments possible.</p>	
SYNERGIES	
Synergies related to Clinical Trials	
<p>Main services of interest for E4H:</p> <ul style="list-style-type: none"> QUALITY MANAGEMENT If we want researchers to be able to produce reliable findings, we need to make sure that they have access to samples and data of appropriate, defined quality. As a European research infrastructure, the ultimate goal of BBMRI is to make samples comparable across different countries and different biobanking system. ultimate goal is to make samples comparable across different countries and different biobanking system FIND AND ACCESS SAMPLES & DATA ONLINE BBMRI is operating the world’s largest biobank catalogue – the BBMRI-ERIC Directory. Anyone can use it to identify candidate biobanks to get access to samples and data sets. Alternately, use BBMRI Federated Search Platforms for a more detailed search of selected biobanks. Then, proceed to the Negotiator to communicate directly with the relevant biobanks to gain access to the samples and data you need. ELSI How does the EU General Data Protection Regulation affect health research? Have I addressed all the relevant topics in the compulsory ethics self-assessment section of my proposal? If you have any questions concerning legislation or any other ethical topics, BBMRI has a team of experts from all over Europe that offer guidance on ethical, legal, and societal issues (ELSI) that biobankers and researchers may encounter. COMMON SERVICE IT BBMRI-ERIC serves biobanks and biomedical researchers by helping ensure that biomolecular resources are FAIR: Findable, Accessible, Interoperable and Reusable. 	

- **GDPR CODE OF CONDUCT FOR HEALTH RESEARCH**

Now that the new EU General Data Protection Regulation has entered into force, there are a lot of question marks around the use of data in health research. For this reason, BBMRI-ERIC has launched an initiative to draft a code of conduct for health research.

REFERENCE	3.14
NAME OF THE INITIATIVE	EU-Openscreen ERIC
ACRONYM OF THE INITIATIVE	EU-OPENSREEN
LOGO	
WEBPAGE	EU-OPENSREEN 2022: About EU-OPENSREEN ERIC
DESCRIPTION OF THE INITIATIVE	
<p>EU-OPENSREEN is a not-for-profit European Research Infrastructure Consortium (ERIC) for chemical biology and early drug discovery. We support all stages of a chemical tool development project, including assay adaptation, high-throughput screening, and chemical optimisation of the ‘hit’ compounds. EU-OPENSREEN aims to support global scientific and economic competitiveness of Europe through delivering public health benefits. In the future, they will act as an innovation accelerator for new start-ups.</p> <p>Their mission is to be the leading European research infrastructure for chemical biology – developing small molecule modulators. EU-OPENSREEN provides open access to the most advanced screening and medicinal chemistry technologies and expertise. Our common compound collection advances our understanding of complex biological phenomena.</p>	
SYNERGIES	
Synergies related to Clinical Trials	
<p>EU-OPENSREEN supports all stages of a chemical tool development project, including assay adaptation, high-throughput screening, and chemical optimisation of the ‘hit’ compounds.</p> <p>EU-OPENSREEN operates an open-access database and a unique, common compound collection. Their main library, the European Chemical Biology Library (ECBL), consists of over 100.000 compounds.</p> <p>EU-OPENSREEN has over 20 affiliated high-throughput screening and chemistry facilities at partner sites in 10 European countries. These partner facilities provide researchers with access to cutting-edge technologies to develop their own tool compounds.</p>	

REFERENCE	3.15
NAME OF THE INITIATIVE	European Research Infrastructure for Modelling Human Diseases
ACRONYM OF THE INITIATIVE	INFRAFRONTIER
LOGO	 INFRAFRONTIER
WEBPAGE	INFRAFRONTIER
DESCRIPTION OF THE INITIATIVE	

In the INFRAFRONTIER consortium, more than **20 leading biomedical research** institutes in 15 countries join forces to **investigate the link between gene function and human diseases by the use of model organisms**. They contribute to human health by advancing **disease prevention and therapies** through appropriate models. INFRAFRONTIER is also a part of the European Joint Programme on Rare Diseases (EJP RD).

SYNERGIES

Synergies related to Clinical Trials

INFRAFRONTIER Resources and Services

INFRAFRONTIER offers a host of state-of-the-art resources and services to the biomedical community with the aim to understand and combat human diseases. They are provided by members of the INFRAFRONTIER consortium consisting of some of Europe's leading biomedical institutions with unparalleled experience and expertise in using mouse models for biomedical research. Researchers worldwide use our services to complement their projects with valuable in vivo insights.

INFRAFRONTIER Core Services


INFRAFRONTIER Core Services. These services are our long-standing, widely-used and standardised services available to the biomedical research community. These define our service portfolio and outline our contributions to understanding and combating human diseases.

- **Mouse Model Development:** Generation of custom mutant strains using the latest genome-editing technologies by expert laboratories.
- **Cryopreservation:** Mutant mouse models generated by researchers around the world are archived using the latest cryopreservation techniques in the European Mouse Mutant Archive (EEMA).
- **Strain Distribution:** the deposited mutant mouse lines are sent to researchers around the globe as frozen gametes or live cohorts.
- **Mouse Phenotyping:** these systematic phenotyping platforms incorporate whole-system screens covering different diseases and organ systems.

Specialised Services and Offers for the Scientific Community

In addition to the core services, INFRAFRONTIER also offers a wide-range of specialised services and free-of-charge access provision to the scientific community for generating a specific mouse strain, re-deriving mouse strains in germ-free conditions and more.

- **INFRAFRONTIER Open Calls:** These are specific free-of-charge calls for project proposals funded by prominent third parties like the European Commission or National Ministries of our partners. Users can submit their proposals to utilise cutting-edge services provided by INFRAFRONTIER partners.
- **Axenic Service: Germ-free mice** are important models to study the effects of microbiota in living organisms and their generation is an expensive, complex and time-consuming process. INFRAFRONTIER partners offer this service to the biomedical research community on a non-profit pay-for-service or collaborative basis.
- **Data services:** services related to the data analysis and FAIRification.

NAME OF THE INITIATIVE	European Clinical Research Alliance on Infectious Diseases
ACRONYM OF THE INITIATIVE	ECRAID
LOGO	
WEBPAGE	Ecraid home Ecraid
DESCRIPTION OF THE INITIATIVE	
<p>ECRAID advances clinical research in the field of infectious diseases by establishing a long-term, financially self-sustainable, clinical research network in Europe. Ecraid offers access to a ‘warm base’ pan-European clinical research network experienced in delivering rapid, cost-efficient and high-quality clinical research. This unique network can perform a wide range of 'on demand' clinical trials.</p> <p>VISION: to build a permanent, not-for-profit, pan-European clinical research network capable of rapidly initiating and completing high-quality clinical studies with greater speed and efficiency.</p> <p>ECRAID 's clinical research network will become one of the backbones of Europe's coordinated preparedness and response to infectious disease threats and attract more industry investments in innovating infectious diseases interventions by accelerating clinical trials and making them more affordable.</p> <ul style="list-style-type: none"> • Ecraid is the envisaged, long-term successor of the European-funded projects COMBACTE and PREPARE. Over the next five years, ECRAID-Base will continue to develop Ecraid into a sustainable not-for-profit clinical research network. <ul style="list-style-type: none"> • COMBACTE (Combatting Bacterial Resistance in Europe) is part of the IMI-funded programme ND4BB (New Drugs for Bad Bugs) and focuses on improving the clinical development of antibiotics. • PREPARE (the Platform for European Preparedness Against (Re-)emerging Epidemics) is a large scale European network, including 27 beneficiaries and is funded by the EU FP7 Programme. PREPARE started its activities in February 2014. 	
SYNERGIES	
Synergies related to Clinical Trials	

13. SERVICES:
14. Pan-European Clinical Research Network

- ECRAID facilitates clinical trials that can be completed much faster, more efficiently, and therefore at a lower cost. Ecraid's ultimate goal is to have an ongoing platform for trials for major diseases and symptoms in Europe. These networks will significantly benefit society in the face of antimicrobial resistance, emerging infectious diseases and pandemics: Hospital Care Network, Pediatric Care Network, Laboratory Network, Primary Care Network, Long-term Care Facility Network.

15. Clinical Research

- The core service offering of Ecraid consists of clinical research supported by laboratory analyses, epidemiological analyses, statistical analyses, data management, biobanking, training, and public engagement. Ecraid will provide the full breadth of clinical studies on infectious diseases.
 - Types of studies: Observational and Interventional.
 - Types of research: Prevention, Treatment, Diagnostic, Screening, Epidemiological, Quality of Life, Health Economics.
 - Trial phases: Phase I - Phase IV

16. Supporting Clinical Research Services

- Supporting our clinical research services, ECRAID offers laboratory research and biobanking, epidemiological research, statistical research, data management, training and public engagement services and rapid response services.


17. Rapid Response Research Services for Infectious Disease Threats


- In the absence of any unusual infectious disease outbreaks in Europe, ECRAID will operate in a so-called 'inter-epidemic' mode, providing clinical research and supporting services. During this 'inter-epidemic mode', emerging outbreaks of epidemic-prone infectious diseases can occur at any time, including those of potential public health concern to Europe.


REFERENCE	3.17
NAME OF THE INITIATIVE	EU Patient-centric clinical trial Platforms
ACRONYM OF THE INITIATIVE	EU-PEARL
LOGO	
WEBPAGE	EU-PEARL - Innovative Patient Centric Clinical Trial Platforms
DESCRIPTION OF THE INITIATIVE	
EU-PEARL is a strategic partnership between the public and private sectors to shape the future of clinical trials . This innovative and challenging enterprise aims to create a framework for patient-centric integrated research platform (IRP) trials, through which novel techniques and treatments developed by multiple companies and organizations are tested in a platform trial. To achieve this objective, EU-PEARL promotes cooperation amongst pharmaceutical companies, clinicians, patients and researchers and encourages knowledge sharing and open discussion amongst all stakeholders, including regulators.	
SYNERGIES	
Synergies related to Clinical Trials	

WP3 - Clinical network and network of patient-level data

WP3 is responsible for identifying the common requirements for Clinical networks from all disease specific areas to develop a best-case scenario on what kind of network might be applicable for EU-PEARL. Existing clinical data network IT infrastructures in IRPs are being leveraged and extended to support the development of a suitable tool for EU-PEARL. Different existing IT solutions are being evaluated and a blueprint that integrates clinical investigator and patient data network resources for conducting IRPs is being developed. This work package will outline the clinical and patient network requirements necessary to develop a specific tool.

REFERENCE	3.18
NAME OF THE INITIATIVE	Global Health EDCTP3 Joint Undertaking
ACRONYM OF THE INITIATIVE	EDCTP3
LOGO	 <p>Global Health EDCTP3</p>
WEBPAGE	https://www.globalhealth-edctp3.eu/
DESCRIPTION OF THE INITIATIVE	
<p>The African and European research partnership on infectious diseases. Established in 2021, the Global Health EDCTP3 Joint Undertaking (Global Health EDCTP3) builds on the first and second European and Developing Countries Clinical Trials Partnership (EDCTP) programmes. This new joint undertaking is a partnership between the EU and the EDCTP Association, whose members are (currently) 15 European and 25 African countries.</p> <p>The partnership will deliver new solutions for reducing the burden of infectious diseases in sub-Saharan Africa and strengthen research capacities to prepare and respond to re-emerging infectious diseases in this region and across the world.</p>	
SYNERGIES	
Synergies related to Clinical Trials	
<p>About EDCTP</p> <p>Global Health EDCTP3's mission is to accelerate the development of new or improved medicinal products for the identification, treatment and prevention of infectious diseases, including emerging and re-emerging diseases, through funding of clinical studies, with emphasis on phase II and III clinical trials. The Joint Undertaking also supports activities for research capacity building in Africa, supporting researchers' careers and strengthening national health research systems.</p> <p>Background The initial partnership (EDCTP, established 2003) focused on HIV/AIDS, tuberculosis and malaria, with its remit being expanded during the second EDCTP programme (EDCTP2) to also include neglected tropical diseases, diarrhoeal disease, lower respiratory tract infections, and emerging and re-emerging infections. The third iteration of the programme, Global Health EDCTP3 has subsequently expanded its scope to include antimicrobial resistance and the impact of the climate crisis on infectious diseases. The Global Health EDCTP3 Joint Undertaking focuses on all stages of clinical evaluation but particularly later-stage (phase III and phase IV) studies and has a particular focus on vulnerable population groups, including children, adolescents, pregnant and lactating women, older persons, and people with co-morbidities (including non-communicable conditions).</p>	

REFERENCE	3.19
NAME OF THE INITIATIVE	European Alliance of Medical Research Infrastructures
ACRONYM OF THE INITIATIVE	EU-AMRI
LOGO	
WEBPAGE	Home - EDCTP
DESCRIPTION OF THE INITIATIVE	
<p>EU-AMRI, the European Alliance of Medical Research Infrastructures, is the collaboration between the European research infrastructures BBMRI-ERIC, EATRIS-ERIC, and ECRIN-ERIC. The three research infrastructures work in parallel to provide complementary services to researchers in the field of biomedical sciences and support the development of personalised medicine and new treatments.</p> <ul style="list-style-type: none"> • 3 European Research Infrastructures • Over 700 research institutions and university hospitals • 29 European countries as members and observers • Launched in 2021 but co-operating since 2014 	
SYNERGIES	
Synergies related to Clinical Trials	
<p>EU-AMRI has been created to offer a comprehensive workflow for researchers in biomedical science, a one-stop-shop for industry and academia, to conveniently choose from a range of services according to their needs.</p> <p>Resources and Tools:</p> <ul style="list-style-type: none"> • Biobank Samples & Data Directory • Clinical Research Meta Data Repository • ELSI Knowledge Base • Regulatory Tools • Marketplace for Clinical Trials 	

REFERENCE	3.20
NAME OF THE INITIATIVE	European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences
ACRONYM OF THE INITIATIVE	EuroBioImaging ERIC
LOGO	
WEBPAGE	Euro Bioimaging
DESCRIPTION OF THE INITIATIVE	

Euro-Biolmaging is a **research infrastructure** that offers **open access to imaging technologies, training and data services in biological and biomedical imaging**. Euro-Biolmaging is the European landmark research infrastructure for biological and biomedical imaging as recognised by the European Strategy Forum on Research Infrastructures (ESFRI). Through Euro-Biolmaging, life scientists can access imaging instruments, expertise, training opportunities and data management services that they might not find at their home institutions or among their collaboration partners. All scientists, regardless of their affiliation, area of expertise or field of activity can benefit from these pan-European open access services, which are provided with high quality standards by leading imaging facilities.

SYNERGIES


Synergies related to Clinical Trials


Euro-Biolmaging has evolved, becoming a European research infrastructure that combines advanced imaging technologies and expertise in the field with a commitment to support the scientific community.

Other research & technology topics

Cardiovascular disease: Assessment of efficacy of sacubitril/valsartan for treating heart failure with preserved ejection fraction.

Inflammation: A new pet ligand targeting vascular adhesion protein 1 for imaging inflammation. Biodistribution was favorable for testing of the tracer in larger groups of patients with rheumatoid arthritis, as is planned for the next phase of **clinical trials**.

REFERENCE	3.21
NAME OF THE INITIATIVE	Survey of Health Ageing and Retirement in Europe
ACRONYM OF THE INITIATIVE	SHARE ERIC
LOGO	
WEBPAGE	SHARE Home (share-eric.eu)
DESCRIPTION OF THE INITIATIVE	
<p>SHARE, the Survey of Health, Ageing and Retirement in Europe, is a research infrastructure for studying the effects of health, social, economic and environmental policies over the life-course of European citizens and beyond. SHARE has global impact since it not only covers all EU member countries in a strictly harmonized way but additionally is embedded in a network of sister studies all over the world, from the Americas to Eastern Asia.</p>	
SYNERGIES	
Synergies related to Clinical Trials	
About the SHARE-COVID19 Research Project	
<p>Hence, SHARE strives to contribute to make healthcare systems and societies in the EU more resilient to pandemics in terms of prevention, protection and treatment of the population 50+.</p>	
The SHARE 2.0 Process. Planning the future of SHARE	
<p>The focus for SHARE 2.0 was adapted to include four research areas, covering the retirement of the baby-boomers and its relation to the Silver Economy and digitalization, health prevention and maintenance in an ageing world threatened by new infections and chronic diseases, flexible oldage care, as well as rising inequality in income, wealth, and health.</p>	


REFERENCE	3.22
NAME OF THE INITIATIVE	Clinical trials transformation initiative
ACRONYM OF THE INITIATIVE	CTTI
LOGO	
WEBPAGE	Clinical Trials Transformation Initiative - CTTI (ctti-clinicaltrials.org)
DESCRIPTION OF THE INITIATIVE	
<p>The Clinical Trials Transformation Initiative (CTTI) is a group of individuals and organizations that want to improve the quality and efficiency of clinical trials. It was co-founded by Duke University and the U.S. Food and Drug Administration in 2007 in an effort to identify and address challenges to well-designed, properly executed clinical trials, and offer recommendations to improve and modernize research.</p> <p>CTTI Mission: To develop and drive adoption of practices that will increase the quality and efficiency of clinical trials.</p> <p>CTTI fosters an open forum for all stakeholders - 500+ organizations and approximately 80 member organizations - to discuss issues, exchange ideas, and come to a consensus on solutions. Through this unique approach of blending diverse viewpoints, our work is actionable; it helps re-shape policies and procedures across the research community to run more efficient trials, generate high-quality evidence faster and, - ultimately - improve the health of people.</p>	
SYNERGIES	
Synergies related to Clinical Trials	
<p>CTTI's broad suite of recommendations and resources have been developed to be used to design and run a successful, fit-for-purpose digital health trial that meets to research goals.</p> <p>Areas of Focus:</p> <p>DEVELOPING NOVEL ENDPOINTS: Develop novel endpoints that more accurately represent the patient experience – and therefore – may be more meaningful to patients, providers, and others.</p> <p>PLANNING DECENTRALIZED TRIALS: Learn about the foundational recommendations for designing and running a fit-for-purpose decentralized clinical trial.</p> <p>SELECTING & TESTING A DIGITAL HEALTH TECHNOLOGY: Understand what needs to be considered and measured before selecting a digital health technology.</p> <p>MANAGING DATA: Understand, plan for, and address the new challenges associated with managing data from digital health technologies.</p> <p>SUPPORTING SITES: Develop a robust digital health technology management plan, accounting for testing, documentation, technical support, training, communication, data integrity, and participant safety.</p> <p>INTERACTING WITH REGULATORS: Develop an appropriate strategy for collecting and sharing digital health trial data with regulatory bodies.</p>	
Novel Clinical Trial Designs	

Harnessing data from electronic health records, claims, registries, and other sources of real-world data creates new opportunities that can transform research, drive care, and achieve a fully integrated health process. However, understanding which approach is best suited (or not) for a specific clinical research question is critical. CTTI want to help. they have examined the evidence, learned from experience, and gathered diverse perspectives to create pathways and tools that can help to implement the most appropriate novel approach to efficiently achieve your specific research goals.

OTHER SYNERGIES: Collaborations and peer-learning


Patient involvement: Incorporating perspectives from patients and patient organization leads to more meaningful clinical trials with increased feasibility, enhanced recruitment and retention, and real-world outcomes. CTTI’s work helps to ensure patients are engaged as partners early and often in the research process.

Health Technology Assessment: see description above.

REFERENCE	3.23
NAME OF THE INITIATIVE	The Global Health Network
ACRONYM OF THE INITIATIVE	TGHN
LOGO	
WEBPAGE	Home • The Global Health Network (tghn.org)
DESCRIPTION OF THE INITIATIVE	
<p>The Global Health Network is an international network that enables easier, faster, and better research in the world’s most challenging settings.</p> <p>TGHN works across all aspects of health research to address the following aims:</p> <ul style="list-style-type: none"> • To embed health research in places, diseases and regions where evidence is lacking by bringing support, training and guiding faster, easier and better research processes. • To drive equity in who takes part and who benefits from health research by enabling the open movement of health research information, data and know-how between diseases areas, regions, organisations and communities. • To build lasting capable research teams in low-resource settings who are able to lead research studies and compete internationally for recognition, reward, engagement and visibility. 	
SYNERGIES	
Synergies related to Clinical Trials	
<p>TGHN has developed an online platform for knowledge sharing and by connection and building strategic partnerships, online and in person. Much of this is facilitated through a vast digital platform (The Global Health Network - theglobalhealthnetwork.org).</p> <p>There are two highly connected elements:</p> <ul style="list-style-type: none"> • The knowledge hubs which operate as an open online science park. Different consortia, organisations, networks and programmes have their own hubs. These hubs provide highly functional working spaces, where members of each community of practice can access their specific project documents, each other and work efficiently across networks. The hubs also work to raise engagement, visibility and access to each organisation, network or project’s 	

outputs and activities, because through The Global Health Network they are made discoverable to the research community. Further, as these hubs are all connected within this wider community of practice and because the topics of these hubs cut across disease and research areas, researchers can learn from each other and share best practice and know-how, thereby speeding up progress, removing duplication and bringing efficacy.

- **Teaching, training and career development for research teams, healthcare workers and laboratory staff. Online training courses, teaching resources and vast numbers of toolkits and learning materials.** All aiming to support safe, ethical and robust research in places, regions and settings where evidence is lacking by delivering skills, methods and building competencies and careers.

REFERENCE	3.24
NAME OF THE INITIATIVE	European Medicines Agency
ACRONYM OF THE INITIATIVE	EMA
LOGO	
WEBPAGE	https://www.ema.europa.eu/en
DESCRIPTION OF THE INITIATIVE	
<p>The European Medicines Agency (EMA) is a decentralised agency of the European Union (EU) responsible for the scientific evaluation, supervision and safety monitoring of medicines in the EU. The mission of the European Medicines Agency (EMA) is to foster scientific excellence in the evaluation and supervision of medicines, for the benefit of public and animal health in the European Union (EU).</p>	
SYNERGIES	
Synergies related to Clinical Trials	
<p>Medical Devices. The Agency's scope of action in the medical devices area was significantly increased by Regulation (EU) 2017/745, and now by Regulation (EU) 123/2022 on EMA's extended mandate. Following continuous dialogue with partners and stakeholders, the Agency realises that it may be more and more involved in the medical devices area, an industry which is at the forefront of innovation (e.g., use of software, nanotechnology, sensor technologies, robotics, 3D printing, and materials science) and with a significant influence on healthcare delivery. In the context of the MDR and in vitro regulations and its newly extended mandate, specifically through issuing of scientific opinions related to consultation procedures initiated by notified bodies on specific categories of medical devices and the management of medical devices expert panels, the Agency monitors the evolution of the medical devices' sector, to better understand required capabilities in this area.</p> <p>Classification and certification of advanced therapy medicinal products (ATMPs). The Agency issues a scientific recommendation, after consultation with the European Commission, on whether a given product based on genes, cells, or tissues, falls, on scientific grounds, within the definition of an advanced therapy medicinal product (ATMP classification). The Agency also carries out a scientific evaluation of quality data and, when available, non-clinical data, for advanced therapy products under development by small and medium-sized enterprises. Subject to this evaluation, the Agency may issue a certificate confirming the extent to which the available data comply with the standards that apply for evaluating a marketing-authorisation application (ATMP certification).</p>	

4. CONCLUSIONS

On the 9th of June 2023 the 1st International workshop for the search of synergies of the ERA4Health PS took place in remote mode. More than 90 people among PS members, regional/national authorities, research infrastructures and European Commission representatives took part in the workshop, which aim was to explore synergies between activities in ERA4Health and other relevant networks. A total of 59 initiatives, divided into 3 different domains - Initiatives related to Health (25 initiatives), Initiatives related to other fields than Health (10 initiatives), Initiatives related to Clinical Studies and Research Infrastructures (24 initiatives)- at European and international level have been presented by the members of a Synergies Working Group set up for this purpose. This body will constantly investigate potential synergies with the PS and will organise annual workshops to update and present the new initiatives identified, widening and enhancing the network in order to facilitate their alignment with national policies.

This deliverable has in fact been made available to the SWG members to confirm that the synergies identified and collected are correct and the suggestions raised by the SWG members as well as those of the E4H partners have been introduced.

The workshop has also served not only to produce a completed portfolio of synergies, but also to establish collaborations with other European initiatives, thus becoming a strong point of the partnership.

The main conclusion reached after the elaboration of this deliverable is that the elaboration of a portfolio of European/international initiatives and the identification of synergies with each of them, will provide:

- Essential information to avoid duplicities in funding around Europe.
- A very accurate and complete tool for the European, National and regional policy makers and funding programmes managers to better align their policies and funding programmes.
- A complete and useful document for E4H and for the coordinators and managers of the existing European/international initiatives identified to be aware of the existing initiatives and initiate potential collaborations with E4H.
- A strong dissemination of the portfolios elaborated that is essential for achieving the goals of the actions carried out in the framework of this deliverable to be available for those who

were not able to attend the workshop in which all the initiatives were presented. The portfolio will be published on the E4H website and disseminated throughout the social networks and dissemination channels of E4H, or the E4H partners and of the SWG members.

The strengths of this deliverable and the results obtained are:

- A very complete list of European/international initiatives has been collected: 59 initiatives have been analysed, which means that an accurate mapping of the existing of international and EU initiatives with potential synergies with E4H has been created to avoid overlaps and duplicities regarding European, National and regional R&I funding.
- A contact person for many of the initiatives has been identified: this will make the identification of synergies with those initiatives easier and more accurate (see D8.1 of E4H.the deliverable is public on the Era4Health website: <https://era4health.eu/>).
- The SWG members have been involved in its review and have reached a consensus on the content of their initiatives.
- All the persons contacted to be part of the SWG found the identification of such a large number of initiatives very interesting and necessary to avoid duplicities at European, national and regional level and know each other to initiate collaborations.

Some difficulties have been found during the elaboration of the portfolio of synergies:

- Some initiatives had already finished at the time of the elaboration of the portfolio: these initiatives initially considered for the definition of the SRIA and the JTC2022 were removed from the final list included in the portfolio.
- The strategic documents considered for the search for synergies were not always easy to find.
- Contact persons for all the initiatives were not easy to find.

5. DOCUMENTATION/SITES CONSULTED

Reference	Initiative	Document
1.1	JPI-HDHL	SRA2019 JPI HDHL
1.2	HE Cluster 1	Horizon Europe-Cluster 1 Work Programme 2023-2024
1.3	EU4Health	EU4Health Work Programme 2023
1.4	TRANSCAN-3	TRANSCAN JTC2022/JTC2023 / TRANSCAN website
1.5	ERA PerMed	ERA PerMed 2022 Call
1.6	EJP RD	EJP RD JTC2023 Call
1.7	JPI-AMR	JPI AMR SRIA 2021
1.8	IHI	IHI SRIA/Call 2023
1.9	EP PerMed	EP PerMed SRIA
1.10	BE READY	Partnership Pandemic Preparedness draft 2022
1.11	ERA-Net Neuron	Neuron SRA 2021-2025
1.12	JPND Research	JPND Research and Innovation Strategy
1.13	OH AMR	OH AMR Objectives Draft Doc 2022
1.14	ICPerMed	PerMed SRIA
1.15	IRDiRC	State of Play Rare Diseases Report 2019-2021 IRDiRC / Website
1.16	EU-Africa PerMed	EU-Africa-PerMed-project-general-description
1.17	CSA IC2PerMed	IC2PerMed Roadmap Deliverable 1.4 / Website
1.18	THCS	THCS Partnership draft SRIA 2021
1.19	FLASH	FLASH presentation networking / Website
1.20	GACD	GACD Strategic Plan 2019-2024
1.21	Mission Cancer	Horizon Europe-Missions Work Programme 2023-2024 / Implementation Plan
1.22	EIT Health-KIC	EITH Strategic Agenda 2021-2027 / Website
1.23	B1MG	State of Play Rare Diseases Report 2019-2021 IRDiRC
1.24	Invest4Health	Invest4Health Briefing HaDEA networking
1.25	PRUDENT	PRUDENT presentation
1.26	PROPHET	SRIA
2.1	Water4All	Water4All SRIA 2022-2025
2.2	FutureFoods	SFS_Partnership_SRIA (draft, la versión definitiva es la 3.13)
2.3	SBEP	Sustainable Blue Economy Partnership draft SRIA
2.4	FACCE-JPI	FACCE-JPI_SRA2020
2.5	EUP AH&W	EUP_AH&W_SRIA_Addendum
2.6	NordFosk	Webiste
2.7	HE Cluster 6	3.1 Horizon Europe work programme Cluster 6 2023-2024
2.8	PARC	PARC_BMR2022
2.9	ERDF	ERDF-Programme-Statement

3.1	ECRIN	Ecrin Annual Report 2021
3.2	EATRIS	EATRIS_Strategic-Plan-2023–2026
3.3	ESFRI	ESFRI-Roadmap-2021
3.4	EUHA	Website
3.5	conect4children	Website
3.6	MIRRI	MIRRI_SRIA2021-30
3.7	ERINHA	ERINHA-Portfolio-2019
3.8	EOSC	EOSC_SRIA
3.9	Trials@Home	Website
3.10	COMET	Website
3.11	ELIXIR	ELIXIR Scientific Programme 2019-2023
3.12	REMEDIA4All	Website
3.13	BBMRI	Website
3.14	EU-OPENSREEN	Website
3.15	INFRAFRONTIER	Website
3.16	ECRAID	Website
3.17	EU-PEARL	Website
3.18	EDCTP3	EDCTP-Fellowship-Programme-2022
3.19	EU_AMRI	Website
3.20	EuroBioimaging	Euro-Bioimaging_Annual_Report_2021
3.21	SHARE ERIC	AnnualActivityReport2020
3.22	CTTI	Website
3.23	TGHN	Website
3.24	EMA	Final programming document 2023-2025