



IDIH

INTERNATIONAL COLLABORATION
DIGITAL TRANSFORMATION
HEALTHY AGEING

D2.4

Briefing note on (priority) topics for the Expert Groups

APRE – AGENZIA PER LA PROMOZIONE DELLA RICERCA EUROPEA

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Abstract

The *Briefing note on (priority) topics for the Expert Groups* is aimed at the experts of the Digital Health Transformation Forum, a long lasting and umbrella mechanism set by the IDIH project to foster collaboration in the field of digital health for Active and Healthy Ageing (AHA) between the European Union and five Strategic Partner Countries (USA, Canada, China, Japan and South Korea). It is based on the desk research on policy priorities that has driven Research and Innovation (R&I) in the field of Digital Health and AHA in these regions and countries since 2014, and also includes brief references regarding future priority topics in these domains. Therefore, the Briefing Note provides an overview of Funding Agencies and the state-of-the-art on policy agendas around Digital Health for AHA (part 3), reported *per country/region*. Funding Programs and a selection of projects in these fields are, then, presented *per area* (Preventive care, Integrated care, Independent and connected living, Inclusive living), reflecting the specialization of Experts Groups (EGs) within the Digital Health Transformation Forum.

Keywords

Digital Health, Active and Healthy Ageing, Funding Agencies, Funding Programmes, Policy, Projects

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Abbreviations and Acronyms

Abbreviation, Acronym	Description
AAL	Active and Assisted Living
ACA	Affordable Care Act
AHA	Active and Healthy Ageing
AI	Aging Institute (CIHR)
AI	Artificial Intelligence
AMED	Japan Agency for Medical Research and Development
APRE	Agenzia per la Promozione della Ricerca Europea (project partner)
ATC	Athens Technology Center S.A. (project partner)
CAMD	Center for Development of Advanced Medicine for Dementia
CEF	Connecting Europe Facility
CF	Cohesion Fund
CGSS	Center for Gerontology and Social Science
CHAFEA	Consumers, Health, Agriculture and Food Executive Agency
CIHR	Canadian Institutes of Health Research (project partner)
COST	Cooperation in Science and Technology
CSTI	Council for Science, Technology and Innovation
DG	Directorate-General of the European Commission
DGMIF	Daegu-Gyeongbuk Medical Innovation Foundation
DSM	Digital Single Market
EG	Expert Group
eHDSI	eHealth Digital Service Infrastructure
ERDF	European Regional Development Fund
ESF	European Social Fund
ESI	European Structural and Investment
ETRI	Electronics and Telecommunications Research Institute
EU	European Union
GSBC	Global SMEs Business Council (project partner)
Health 2.0 LLC	Health 2.0 LLC (project partner)
HITECH	Health Information Technology for Economic and Clinical Health
ICT	Information and communications technology
IDIH	International Digital Health Cooperation for Preventive, Integrated, Independent and Inclusive Living (IDIH project)



Abbreviation, Acronym	Description
inno	inno TSD (project partner)
JEED	Japan Organization for Employment of the Elderly and Persons with Disabilities
JSPS	Japan Society for the Promotion of Science
JST	Japan Science and Technology Agency
KAKENHI	Grants-in-Aid for Scientific Research
KCDC	Centres for Disease Control and Prevention
KRIBB	Korea Research Institute of Biosciences and Biotechnology
MedPeer Inc.	MedPeer Inc. (project partner)
MEXT	Ministry of Education, Culture, Sports, Science And Technology
MHLW	Ministry of Health, Labour And Welfare
MIST	Ministry of Science and Technology (South Korea)
MOHW	Ministry of Health And Welfare
MOST	Ministry of Science and Technology
NCGG	National Center for Geriatrics and Gerontology
NIA	National Institute on Aging
NIH	National Institute of Health
NIST	National Institute of Standards and Technology
NRF	National Research Foundation of Korea
NSFC	National Natural Science Foundation of China
NST	National Research Council of Science and Technology
OAA	Older Americans Act
PDs	Program Directors
R&D	Research & Development
R&I	Research and Innovation
RFA	Request for Applications
RISTEX	Research Institute of Science and Technology for Society
S&T	Science & Technology
S2i	Steinbeis 2i GmbH (project partner)
SC1	Societal Challenge 1
SDGs	Sustainable Development Goals
SPS	School of Pharmaceutical Science Tsinghua University (project partner)
TO	Themathic Objective (EU Cohesion Policy)



Executive Summary

This Briefing Note addresses the experts of the *Digital Health Transformation Forum*, a long lasting and umbrella mechanism set by *International Digital Health Cooperation for Preventive, Integrated, Independent and Inclusive Living* (IDIH) project. IDIH pursues to foster collaboration in the field of digital health for Active and Healthy Ageing (AHA) between the European Union and five Strategic Partner Countries (USA, Canada, China, Japan and South Korea).

IDIH - funded under the European Union Horizon 2020 Research and Innovation Programme – focuses on four key areas that embrace common priorities of all countries/regions involved: Preventive care, Integrated care, Independent and connected living, Inclusive living.

This Briefing Note is based on the desk research on policy priorities that has driven Research and Innovation (R&I) in the field of Digital Health and AHA in the EU and in the Strategic Partner Countries since 2014, and includes brief references regarding future priority topics in these domains as well. Therefore, the Briefing Note provides an overview of relevant Funding Agencies and the state-of-the-art on policy agendas (part 3), as well as funding programmes and funded projects (part 4) in these regions and countries.

The information collected are organized per country/region (Part 3 on policy priorities) and per area (Preventive care, Integrated care, Independent and connected living, Inclusive living), reflecting the specialization of Experts Groups (EGs) within the Digital Health Transformation Forum (Part 4 on Funded projects and the related funding programs). **The Experts of the Forum, as primary recipients of this Briefing Note, are invited to take into consideration these preliminary findings of the IDIH Consortium to start working in their respective group and in synergy with the other EGs. The fruitful joint effort of the EGs will give ground to the development of a Roadmap for international cooperation in Digital Health for AHA that will address policy makers by suggesting collaboration pathways between countries and regions, including potential funding schemes.**

Experts informed with the same background on the current policy scenario around Digital Health and AHA in an international perspective will be able to better align the works within the operative stage of the Digital Health Transformation Forum, and converge efforts towards the advancement of the state-of-the-art and developing effective policy recommendations.

1 Methodology

IDIH partners have carried out **desk research** on policy priorities and topics that have driven R&I in the field of Digital Health and AHA, in the EU and in the Strategic Partner Countries since 2014.

Each partner has focused its research referring to its own regional/country context. As such, all Strategic Partner Countries have identified and evaluated the most relevant programmes of their Funding Agencies regarding the main topics of the IDIH project. The European IDIH partners assessed programmes and policies of different Directorate Generals (DGs) of the European Commission dealing with the IDIH areas of interest.

The desk research focused on **three main levels of investigation**:



1. Recognise Funding Agencies and policy documents setting priorities of investment in the IDIH relevant fields
2. Identify Funding Programmes in the IDIH relevant fields
3. Select Funded Projects in the IDIH relevant fields

IDIH Partners has approached to these levels of investigation starting from the recognition of the relevant Funding Agencies in the framework of IDIH (Level 1), then proceeding by the identification of the related Funding Programmes (Level 2) and funded projects (Level 3). This allows to provide an image of **policy making process** (Figure 1) showing the translation of the political vision into programmes and actions delivering 'outcomes' to Society, having a measurable socio-economic impact that will further feed the definifiton of new policy improvements.

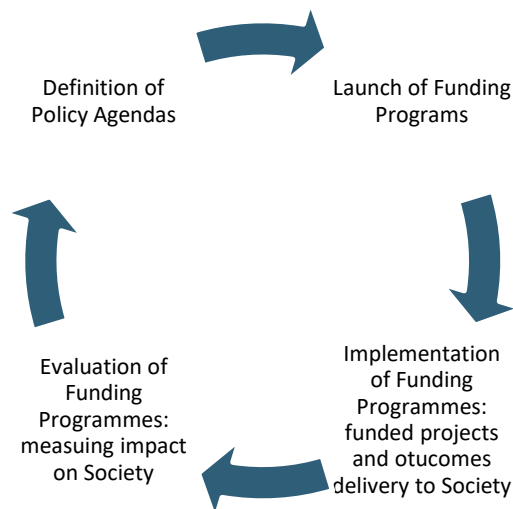


Figure 1: Policy making process

This Briefing Note is meant to be a collection of relevant information aimed at the experts who are in the process of being engaged in the Digital Health Transformation Forum. All the information here collected, included those concerning future priority policies, derive from the analysis of the already published documentation and communication material currently available on the official channels of information of relevant Funding Agencies. The eventual exercise of contents re-elaboration by the author is minimal and does not change the core contents of the official documentation/communication material.

2 IDIH and the Digital Health Transformation Forum

IDIH - International Digital Health Cooperation for Preventive, Integrated, Independent and Inclusive Living is a Coordination and Support Action funded by the European Union (EU) within the framework of the Horizon 2020 research and innovation programme (Grant Agreement No. 826092). The purpose of IDIH project is to **promote and increase international cooperation to advance digital health in the EU and five Strategic Partner Countries (USA, Canada, China, Japan and South Korea) to support active and healthy aging through innovation**. Therefore, four target objectives drives IDIH action towards this achievement:

- To **support the definition of common priorities** to enhance strategic international cooperation in digital health in line with policy orientations through a thorough analysis of priorities in the EU and each of the Strategic Partner Countries and close involvement of the relevant funding agencies.
- To provide specific contributions to the international dialogue in digital health with the creation of a **Digital Health Transformation Forum** acting as an umbrella for high-level experts in four thematic groups (preventive care, integrated care, independent and connected living and inclusive living).
- To **facilitate the exchanges between RTI stakeholders** from the EU and the Strategic Partner Countries in digital health through international workshops, promotion of cooperation opportunities and joining forces with other digital health initiatives.
- To **foster international collaboration** for digital solutions for health care benefitting the society and industry through networking and co-creation sessions in RTI workshops.

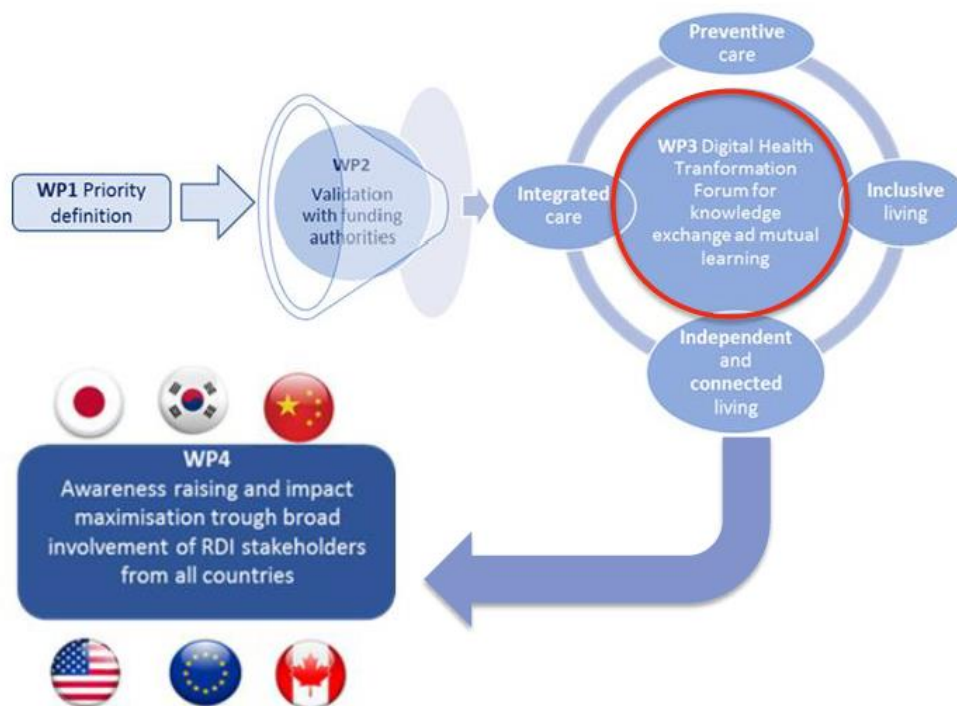


Figure 2: IDIH project graphic representation and the central role of the Digital Health Transformation Forum

2.1 An expert-driven approach to address 4 priority areas in Digital Health Transformation

Digital Health Transformation

It indicates that health care services and systems are in a transition in which more health services and processes will be digitalised. The digital transformation encompasses the instrumented effort to meaningfully introduce new digital information and communication technologies and corresponding new processes into the health care sector. Some of this digitalisation is health care specific, another part is a consequence of the broader digitalisation trend in society. Both can lead to changes and innovations in health technologies and health care delivery processes, and thus impact health, health care, and health systems. The digital transformation in some of its aspects therefore represents a fundamental change in the mode and culture of care delivery of organisations.

Assessing the impact of digital transformation of health services, EXPH - Expert Panel on Effective Ways of Investing in Health (Publications Office of the European Union, 2019)

Established through IDIH as a long-lasting and expert-driven umbrella mechanism to foster collaboration in the field of digital health between the European Union and the five Strategic Partner Countries, the **Digital Health Transformation Forum** will ensure the **involvement of research, technology, innovation and policy stakeholders, as well as user associations where relevant**. Therefore, through an *expert-driven approach*, the project will take the context of society, technology and industry, but also the policy framework into consideration for the development of international cooperation activities in the digital transformation of health and care.

Its four **Expert Groups (EGs)** will work on four strategic topics (*Preventive care, Integrated care, Independent and connected living, Inclusive living*) in order to investigate collaboration pathways in digital health between countries and regions, including potential funding schemes (Figure 3).



Figure 3: IDIH Strategic topics

By participating in the **Digital Health Transformation Forum** established in IDIH, experts will be contributing towards a sustainable platform for international cooperation in digital health. As part of this, they will have the opportunity to network with *peers* in the field at international level.



2.1.1 The Expert Groups within the Digital Health Transformation Forum

All Expert Groups (EGs) will operate on an individual **Action Plan** aimed to *advance on the focus topic* and to *elaborate on strategies to enhance collaboration of Research, Technology and Innovation stakeholders*.

Each Action Plan will schedule experts' activities within the Digital Health Transformation Forum, such as:

- **Innovation & Policy observatory for digital health:** establishing a “soft” monitoring mechanism to record any recent advancements/trends on innovation and policy aspects related to the areas of interest;
- **Foresight exercises:** defining or predicting where specific digital health areas will be 10 years from now;
- **Networking and community building activities:** i.e. organisation of webinars, workshops, etc.

Over the project lifetime (36 months; project end: April 2022), all Expert Groups will meet at least three times in person - in **three Expert Group Workshops** - and virtually, as needed.

- **1st Expert Group workshop:** It will set the foundations for each Expert Group and support knowledge exchange and mutual learning on the topics of interest, including discussion on: the current status in the domains of the Expert Group and relevant application domains; policy gaps in the thematic group domains, future perspectives, needs for future development; research and innovation challenges. A report will be written on the results of the workshop, and a first version of the roadmap “*Towards an international collaboration in digital health*” will be prepared.
- **2nd Expert Group workshop:** It will aim to update previous findings and develop concrete steps for collaboration between all countries in the field of digital health. The report “*Towards an international collaboration in digital health, version 1.0*” will be updated if necessary. A report will be written on the results of the workshop.
- **3rd Expert Group workshop:** It will be co-organised with the Final Event of the project, setting up the final agenda for collaboration in digital health in all countries, and validating the results of the roadmap “*Towards an international collaboration in digital health, version 2*”. A separate report will gather the results of the workshop. ***The major outcome of the work undertaken during the Expert Groups' activities will be the development of the “Towards an international collaboration in digital health roadmap”.*** This will be addressed mainly to policy makers and funding agencies of all engaged countries and regions, while dedicated chapters (per each Expert Group) will provide clear suggestions per topic of interest.

3 Digital Health and AHA. Policy priorities and topics in the EU and in Strategic Partner Countries

Enhancing the use of digital technology through the creation of a **Digital Single Market (DSM)** is one of the European Commission's main priorities. Launched in 2015¹, the DSM aims to open up digital opportunities to people and business, and to bring the EU's single market into the digital age. Health is one of the sectors included in this agenda, given the potential benefits that digital services have to offer citizens and enterprises in this area. A mid-term review of the DSM conducted in May 2017² highlighted a strong willingness to **facilitate the accessing and sharing of health data for research or treatment purposes, and to encourage patient feedback regarding the quality of health services**.

The **Commission's Communication on the Transformation of Digital Health and Care** of April 2018³ aims to enhance the digitisation of the health and care sectors. The Communication identifies three pillars to build activities around:

- PILLAR 1 - Secure data access and sharing
- PILLAR 2 - Connecting and sharing health data for research, faster diagnosis and improved health
- PILLAR 3 - Strengthening citizen empowerment and individual care through digital services

In the light of the digital transformation of health care systems, the IDIH project is focusing on the global issue of the aging of population. **According to data from *World Population Prospects: the 2019 Revision*⁴, by 2050, one in six people in the world will be over age 65 (16%), up from one in 11 in 2019 (9%).** By 2050, one in four persons living in Europe and Northern America could be aged 65 or over. In 2018, for the first time in history, persons aged 65 or above outnumbered children under five years of age globally. The number of persons aged 80 years or over is projected to triple, from 143 million in 2019 to 426 million in 2050. **While every nation is facing growth in its older population, this is occurring faster in certain regions.** This situation is particularly relevant in Japan, Spain, Portugal, Italy, Greece, Taiwan, and South Korea (Figure 4). Japan, for example, in under 30 years came to have the largest elder population in the world. In 2017, 33% of the Japanese population was over the age of 60 and it is projected to reach 42% by 2050. In the EU, 25% of the population was over 60 in 2017 but that figure is estimated to increase to 35% by 2050. Even the USA, which has historically younger populations and a higher natural birth rate than the EU, will see its 65+ population extend from 22% to 28% by 2050.

¹ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on *A Digital Single Market Strategy for Europe* (COM/2015/0192)

² <https://ec.europa.eu/digital-single-market/en/news/digital-single-market-mid-term-review>

³ Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on *enabling the digital transformation of health and care in the Digital Single Market; empowering citizens and building a healthier society* (COM/2018/233)

⁴ See <https://population.un.org/wpp/>

Rank	1980		2017		2050	
	Country or area	Percentage aged 60 years or over	Country or area	Percentage aged 60 years or over	Country or area	Percentage aged 60 years or over
1	Sweden	22.0	Japan	33.4	Japan	42.4
2	Norway	20.2	Italy	29.4	Spain	41.9
3	Channel Islands	20.1	Germany	28.0	Portugal	41.7
4	United Kingdom	20.0	Portugal	27.9	Greece	41.6
5	Denmark	19.5	Finland	27.8	Republic of Korea	41.6
6	Germany	19.3	Bulgaria	27.7	China, Taiwan Province of China	41.3
7	Austria	19.0	Croatia	26.8	China, Hong Kong SAR	40.6
8	Belgium	18.4	Greece	26.5	Italy	40.3
9	Switzerland	18.2	Slovenia	26.3	Singapore	40.1
10	Luxembourg	17.8	Latvia	26.2	Poland	39.5

Figure 4: Ten countries or areas with the largest share of persons aged 60 years or over in 1980, 2017 and 2050. World Population Prospects: the 2019 Revision by the Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat

In the face of this challenge, IDIH Strategic Partner Countries have also set Digital/eHealth priorities: by focusing on specific aspects where significant improvements may result from digital solutions, such as dementia, ambient living and palliative care (Canada)⁵; by strengthening large data infrastructures (China)⁶; by transferring medical records from paper to digital, and feeding this data into AI analytics tools for better and more cost-efficient care (Japan)⁷; by focusing on eSkills and prevention policies based on digital solutions (South Korea)⁸; by enhancing quality and Healthcare services for the elderly through eHealth (USA)⁹.

If global societies embrace strategies to maximize healthy longevity, the aging population presents also an opportunity, rather than a burden. Interdisciplinary research and innovation are urgently needed globally to generate important advances and breakthroughs that can help aging global populations achieve healthy longevity.

In these perspectives, IDIH provides a solution through the set up of the Digital Health Transformation Forum bringing together relevant stakeholders on an international level to support strategy development of research and innovation directions. The following sections of this Briefing Note provide an overview of policy priorities and topics in the field of Digital Health for AHA, addressed by Funding Agencies in the different regions and countries for the benefit of RTI stakeholders and users.

⁵ See the [Canada Mortgage and Housing Corporation's \(CMHC\)](#).

⁶ See the China's National Planning Guidelines for the Healthcare Service System.

⁷ See the Japan 2019 Growth Strategy. Japan is also putting more effort into robotics, sensors and high-end ICT services to create patient monitoring systems that minimize human and financial burdens.

⁸ See the Elderly Health Promotion Program and the [U-health Advocacy Program](#)

⁹ See <https://www.medicare.gov/manage-your-health>

3.1 Policy priorities and topics in the EU

Here follows an overview of the most relevant EU Funding Agencies and current Programs in the framework of IDIH (Figure 5). A brief description of these Agencies and their current and future policy priorities in the field of Digital Health for AHA are included in the following boxes.



Figure 5: Funding Agencies and Programs supporting Digital Health and AHA in the EU

EUROPEAN UNION | Funding Agencies supporting Digital Health and AHA**DIRECTORATE-GENERAL | RTD****Research and Innovation**

The Directorate-General for Research and Innovation of the European Commission defines and implements European Research and Innovation (R&I) policy with a view to **reinforcing the science and technology base, spurring innovation and turning societal challenges into innovation opportunities** that will help deliver on the European Commission priorities ([Europe 2020 strategy](#)). DG RTD contributes to the Commission's priorities for **growth, jobs and investment**, the [Digital Single Market](#), the [Resilient Energy Union](#) and strong global action.

The last Horizon 2020 work programme 2018-2020 for [Societal Challenge 1 - Health, demographic change and wellbeing](#) gathers 50% of the available investment in Research and Innovation for this challenge.

The SC1 Work Programme set as its primary challenge the need to address the aging of population and, in particular, the “rising and potentially unsustainable health and care costs, mainly due to the increasing prevalence of chronic diseases”.

Building on the principle of openness – open science, open innovation and open to the world, among its aims, SC1 Work Programme 2018-2020 intended to deliver solutions for a better health for all by:

- **Addressing the needs of the most vulnerable groups and the global increase of chronic diseases;**
- **Exploring the digital potential for health innovation and healthcare, including the building of a 'European health research and innovation cloud';**
- **Stimulating innovation in the European healthcare domain and industry by exploring the application of advanced technologies, improve the health of the workforce and promote regulatory science.**

Therefore, three Calls for proposals have been launched under H2020 SC1-2018-2020, identifying seven priority areas, as follows:

- **Call 1 – Better Health and care, economic growth and sustainable health systems**
 - ✓ Priority 1.1: Personalised medicine
 - ✓ Priority 1.2: Innovative health and care industry
 - ✓ Priority 1.3: Infectious diseases and improving global health
 - ✓ Priority 1.4: Innovative health and care systems – Integration of care
 - ✓ Priority 1.5: Decoding the role of the environment, including climate change, for health and wellbeing
 - ✓ Priority 1.6: Supporting the digital transformation in health and care
- **Call 2 – Digital transformation in Health and Care (managed with DG CONNECT)**
- **Call 3 – Trusted digital solutions and Cybersecurity in Health and Care (managed by DG CONNECT)**

In the 2014-2020 programming period, Health R&I has also leveraged Member State activities in areas including neuroscience, digitalization, cancer and systems medicine. It contributed to European and international initiatives such as the [European Innovation Partnership on Active and Healthy Ageing](#), the [Global Alliance for Chronic Diseases](#), the [Joint Programming Initiative "More Years, Better Lives - the Challenges and Opportunities of Demographic Change"](#) and the [Joint Programming on Neurodegenerative Diseases Research](#).

➤ **POLICY PRIORITIES FOR THE NEXT FUTURE** | For the 2021-2027 period, health and well-being of its people is a central aim of the European Union, its policies and programmes. According to Article 168 of the Treaty on the Functioning of the EU, high level of human health protection shall be ensured in the definition and implementation of all Union policies and activities. With the proclamation of the European Pillar of Social Rights, the EU set the direction towards a fairer, inclusive and more social Europe for all European citizens based on a European social model that is fit for the challenges of the 21st century. Providing timely access to affordable, preventive and curative health care of good quality to everyone is amongst the key aspirations the EU and its Member States are aiming for, supported by dedicated regulations, policy strategies and programmes. *The EU is strongly committed to the UN Sustainable Development Goals (SDGs), many of which have an important impact on health and well-being, notably SDG 3 (Good Health and Well-being for People) with its nine health-specific targets aiming for **universal health coverage for all at all ages by 2030, leaving no one behind, and ending preventable deaths.*** EU health-related actions aim to complement national health policies and thus support EU Member States in reaching those ambitious goals, which will not be possible without a massive investment in R&I at the national, European and international level. Cooperation with other sectors will maximise societal benefits, drive innovation and ensure optimal impact. Accordingly, [Horizon Europe](#) R&I interventions under the next 2021-2027 period will be oriented towards the following **six health-related challenges** (the most relevant in the framework of IDIH are underlined):

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

DIRECTORATE-GENERAL | CONNECT

Communications Networks, Content and Technology



DG CONNECT is responsible to develop a Digital Single Market to generate smart, sustainable and inclusive growth in Europe. Therefore, it develops and carries out the Commission's policies on:

- Digital economy and society
- Research and innovation
- Business and industry
- Culture and media

DG CONNECT - as reported in its Mission statement - strives to develop a long-term vision investing in potential technology breakthroughs and flagships, which can improve peoples' lives, increasing the competitiveness of the European economy at large and its key sectors. As such, DG CONNECT aims to **drive the digital transformation of European industry and public services using innovative digital technology** and support for the development of digital skills, in line with the [Digital Single Market Strategy](#).

[Connecting Europe Facility programme \(2014-2020\) - CEF](#) funding is supporting continuity of care for European citizens across borders through the progressive introduction in EU Member States of the following two electronic crossborder health services:

1. ePrescription and eDispensation
2. Patient Summaries

The **CEF eHealth Digital Service Infrastructure (eHDSI)** remedies this by facilitating the movement of health data across national borders, thus ensuring continuity of care and highly specialised treatment across borders to EU citizens. The actions supported by the eHDSI aim to set up the infrastructure necessary for such data exchanges. It also supports infrastructure enabling sustainable patient access to highly specialised care.

Currently the [Strategic Plan 2016-2020](#) of the DG CONNECT defined the strategy of the DG to Contribute to the Commission General Objectives:

1. EC General Objective 1 | A Connected Digital Single Market

- **Specific Objective 1.1:** Digital goods and services are available to consumers and businesses across;
- **Specific Objective 1.2:** Electronic communications networks and services, digital content and innovative services benefit from favourable conditions and compete on a level playing field;
- **Specific Objective 1.3:** The digital economy can develop to its full potential underpinned by initiatives enabling full growth of digital and data technologies;
- **Specific Objective 1.4:** All Europeans enjoy effective world-class connectivity through future-proof and ubiquitous digital networks and service infrastructures as underlying basis for the digital society and data economy;
- **Specific Objective 1.5:** A modern, open and pluralistic society building on Europe's cultural diversity, creativity and respect of creators' rights and its values, in particular democracy, freedom of expression and tolerance.

2. EC General Objective 2 | A New Boost for Jobs, Growth and Investment

- **Specific Objective 2.1:** Europe maintains its position as a world leader in the digital economy, where European companies can grow globally, drawing on strong digital entrepreneurship and performing start-ups and where industry and public services master the digital transformation
- **Specific Objective 2.2:** Europe's research finds investment opportunities for potential technology breakthroughs and flagships, in particular through the Horizon 2020 programme and using Private Public Partnerships.

➤ **POLICY PRIORITIES FOR THE NEXT FUTURE** | As part of the next long-term EU budget - the Multiannual Financial Framework 2021-2027 - the Commission has proposed the Digital Europe programme, the EU's programme focused on building the strategic digital capacities of the EU and on facilitating the wide deployment of digital technologies, to be used by Europe's citizens and businesses. With a planned overall budget of €9.2 billion, it will shape and support the digital transformation of Europe's society and economy. Digital Europe will complement other EU programmes, such as the proposed Horizon Europe programme for research and innovation, as well as the Connecting Europe Facility for digital infrastructure. Among the topics that will be funded under the **Digital Europe Programme**:

- **Increase accessibility and broaden the use of supercomputing** in areas of public interest such as **health**, environment and security, and in industry, including small and medium-sized enterprises.

- **Strengthen and support existing artificial intelligence testing and experimentation facilities** in areas such as *health* and mobility in Member States and encourage their cooperation
- **Ensure that the public sector and areas of public interests**, such as *health and care*, education, transport, and the cultural and creative sectors, can deploy and access state-of-the-art digital technologies

DIRECTORATE-GENERAL | SANTE

Health and Food Safety



DG SANTE is responsible for EU policy on food safety and health and for monitoring the implementation of related laws. **Its ultimate mission is to make Europe a healthier, safer place, where citizens can be confident that their interests are**

protected.

Therefore, DG SANTE intervenes in 4 main areas:

- protect and improve public health
- ensure Europe's food is safe and wholesome
- protect the health and welfare of farm animals
- protect the health of crops and forests

As part of its intervention on Public Health, DG SANTE supports the efforts of EU countries to protect and improve the health of their citizens and to ensure the accessibility, effectiveness and resilience of their health systems. This is done through various means, including by:

- Proposing legislation
- Providing financial support
- Coordinating and facilitating the exchange of best practices between EU countries and health experts
- Health promotion activities.

The Commission promotes investing in health as a broader means of achieving smart sustainable and inclusive growth. This takes the form of:

- Promoting effective, accessible and resilient health systems
- Investing in health through disease prevention and health promotion
- Fostering health coverage as a way of reducing inequalities and tackling social exclusion.

The Health and food safety – strategic plan 2014-2020 has set out the department's vision for a five-year period, up until 2020. Currently, the DG is implementing [Strategic Plan 2016-2020](#). In this framework, the European Commission has an important supporting role to play, providing guidance and tools to promote cooperation and help national systems operate more effectively.

The Health Programme is a funding instrument managed by DG SANTE in cooperation with [CHAFEA](#) (Consumers, Health, Agriculture and Food Executive Agency)¹⁰, that – in line with the [Europe 2020 strategy](#) – outlines the strategy for ensuring good health and healthcare in the EU. The **3rd Health Program** (2014-2020) currently serves four specific objectives (€449.4 million budget):

- **Promote health, prevent disease and foster healthy lifestyles through 'health in all policies'**,
- **Protect EU citizens from serious cross-border health threats**

¹⁰ See [here](#) the Factsheet about SANTE & CHAFEA roles in the 3rd Health Program.

- **Contribute to innovative, efficient and sustainable health systems¹¹**
 - **Facilitate access to high quality, safe healthcare for EU citizens.**
- ➔ **POLICY PRIORITIES FOR THE NEXT FUTURE** | For the 2021-2027 period, the next MFF – Multiannual Financial Framework has incorporated the Health Program in the [European Social Fund+](#) under the goal “Investing in People for more cohesion”¹². The Commission is proposing a total budget of €101 billion for the EFS+, as a result of a merging of the existing European Social Fund, the Youth Employment Initiative (YEI), the Fund for Aid to the Most Deprived (FEAD), the EU Programme for Employment and Social Innovation (EaSI) and the **EU Health programme (EUR 413 million)**. As part of the EFS+ and its 11 objectives, the **Health strand¹³** is aimed at:
- *(iii) promoting women’s labour market participation, a better work/life balance including access to childcare, a healthy and well–adapted working environment addressing health risks, adaptation of workers, enterprises and entrepreneurs to change, and **active and healthy ageing**;*
 - *(ix) enhancing the equal and timely access to quality, sustainable and affordable services; modernising social protection systems, including promoting access to social protection; **improving accessibility, effectiveness and resilience of healthcare systems and long-term care services**.* Moreover, this strand of ESF+ shall support health promotion and disease prevention, contribute to effectiveness, accessibility and resilience of health systems, make healthcare safer, reduce health inequalities, protect citizens from cross-border health threats, and support EU health legislation.

However, the Health strands will be present in several other funding programs, from [Horizon Europe](#) to the [Digital Europe Programme and Connecting Europe Facility](#), and from the [European Regional Development Fund](#) to the [InvestEU Program](#).

DIRECTORATE-GENERAL | REGIO

Regional and Urban Policy



DG REGIO is responsible for the EU measures to assist the economic and social development of the less-favored regions of the European Union under Articles 158 and 160 of the Treaty of Rome, as part of the EU Cohesion policy that promotes and

supports the **overall harmonious development of Member States and regions**. In a nutshell, the DG REGIO targets all regions and cities in the European Union in order to support job creation, business competitiveness, economic growth, sustainable development, and improve citizens’ quality of life. **Its ultimate mission is to improve the economy and quality of life for everybody, wherever they live.**

In the 2014-2020 programming period, DG REGIO has operated notably through the European Regional Development Fund (ERDF), the European Social Fund (ESF), and the Cohesion Fund (CF), known as [ESF Funds](#), the European Union’s main instrument for investment, based on [11 thematic objectives](#).

¹¹ E.g. the Work Programme for 2019 includes a *Joint Action on implementation of digitally enabled integrated person-centred care* (Thematic priority 3.4. of Annex I to the Programme Regulation) and a *Actions in support of the implementation of Communication 233(2018) on 8.12. enabling the Digital Transformation of Health and Care in the Digital Single Market* (Thematic priority 3.2 and 4.1. of Annex I to the Programme Regulation).

¹² See the EU Health Programme Conference in Brussels, 30 September 2019. Presentations and audio-video recording are available [here](#).

¹³ See the Proposal for a Regulation of the European Parliament and of the Council on the European Social Fund Plus (ESF+). COM/2018/382

➤ **POLICY PRIORITIES FOR THE NEXT FUTURE** | For the 2021-2027 period, the 11 thematic objectives used in 2014-2020 have been simplified to **5 clear policy objectives**¹⁴:

1. A Smarter Europe, through innovation, digitisation, economic transformation and support to small and medium-sized businesses
2. A Greener, carbon free Europe, implementing the Paris Agreement and investing in energy transition, renewables and the fight against climate change
3. A more Connected Europe, with strategic transport and digital networks
4. A more Social Europe, delivering on the European Pillar of Social Rights and supporting quality employment, education, skills, social inclusion and equal access to healthcare
5. A Europe closer to citizens, by supporting locally led development strategies and sustainable urban development across the EU.

The new Cohesion Policy will support not only research and innovation on e-health related technologies, but also promote a better work/life balance including access to childcare, a healthy and well-adapted working environment addressing health risks, adaptation of workers to change, and healthy and active ageing. Regional development investments will strongly focus on objectives 1 and Objective 2, since 65% to 85% of ERDF and Cohesion Fund resources will be allocated to these priorities, depending on Member States' relative wealth. Moreover, here follow the Policy objectives considered as relevant in the framework of IDIH:

- **Policy objective 1: A smarter Europe by promoting innovative and smart economic transformation**
 - ✓ *Intervention 013: e-Health services and applications (including e-Care, Internet of Things for physical activity and ambient assisted living)*
- **Policy objective 4: A more social Europe by implementing the European Pillar of Social Rights**
 - ✓ *Intervention 094: Health mobile assets*
 - ✓ *Intervention 095: Digitalisation in health care*
 - ✓ *Intervention 110: Measures encouraging active and healthy ageing*
 - ✓ *Intervention 123: Measures to improve the accessibility, effectiveness and resilience of healthcare systems (excluding infrastructure).*

ART. 185 TFEU | AAL Programme - European Cooperation in Science and Technology Active and Assisted Living Programme



Article 185 initiatives are **long-term public-public partnerships (P2P)** established on a voluntary basis by EU Member States that are also eligible for a substantial financial contribution from the EU Research Framework Programme. They are established through the EU ordinary legislative procedure and require a Dedicated Implementation Structure (DIS). By legislation, they appear under Article 185 TFEU (ex Article 169 TEC).

P2P aim at addressing common challenges in specific research areas by creating economies of scale and synergies between national and EU research programmes and investments. Their ambition is to achieve scientific, managerial and financial integration amongst national research programmes in a given field.

¹⁴ About the New Cohesion Policy: https://ec.europa.eu/regional_policy/en/2021_2027/

The Active and Assisted Living Programme (AAL Programme) is a P2P initiative that has been implementing funding activity since 2014 with the aim of **enhancing the quality of life of older people and strengthening the industrial base in Europe using Information and Communication Technologies (ICT)**. AAL is co-financed by the European Commission (through Horizon 2020) and 17 countries until 2020 for an approximate budget of €700 million.

The AAL Association and the funding authorities of its member countries implement this funding activity. **Every year a call for proposal is being launched for research and development projects in the field of ICT for Active and Healthy Ageing.**

Through the funding of new projects, the AAL Programme aims to reinforce the European market for Ambient Assisted Living products and services.

The specific aims of AAL Programme are to:

- **Foster the emergence of innovative ICT-based products, services and systems** for ageing well at home, in the community, and at work.
- **Create a critical mass of research, development and innovation at EU level** in technologies and services for ageing well, including the establishment of a favourable environment for participation of SMEs.
- **Help create the market conditions for the industrial exploitation of healthy ageing products** by providing a European framework that supports the development of standardised solutions and facilitates their adaptation to local, regional and national levels to account for varying social preferences and regulatory requirements.

➔ **PRIORITIES FOR THE NEXT FUTURE** | As part of the next long-term EU budget - the Multiannual Financial Framework 2021-2027 - the Commission has proposed the establishment of a Co-funded Partnership (a type of partnership based on a joint programme agreed by partners, including the commitment of partners for financial and in-kind contributions & financial contribution by Horizon Europe):

Large-scale innovation and transformation of health systems in a digital and ageing society

COST | European Cooperation in Science and Technology



European Cooperation in Science and Technology (COST) is the longest-running European framework for research and innovation. For over 45 years, it has offered European researchers and innovators, a simple and flexible pathway to take part in the best science and technology networks in Europe and across the world. COST is, therefore, a funding organisation for the creation of research networks, called **COST Actions**. These **networks** offer an open space for collaboration among scientists across Europe (and beyond) and thereby give impetus to research advancements and innovation.

COST is **bottom up**, this means that researchers can create a network – based on their own research interests and ideas – by submitting a proposal to the COST Open Call. *The proposal can be in any science field.* COST Actions are highly interdisciplinary and open. It is possible to join ongoing Actions, which therefore keep expanding over the funding period of four years. They are multi-stakeholder, often involving the private sector, policymakers as well as civil society.

Since 1971, COST receives EU funding under the various research and innovation framework programmes, such as Horizon 2020.



COST funding intends to complement national research funds, as they are exclusively dedicated to cover collaboration activities, such as ***workshops, conferences, working group meetings, training schools, short-term scientific missions, and dissemination and communication activities.***

- **PRIORITIES FOR THE NEXT FUTURE** | Participants are invited to submit COST Action proposals contributing to the scientific, technological, economic, cultural or societal knowledge advancement and development of Europe. Multi- and interdisciplinary proposals will be encouraged through Open Calls in the next future. An Open Call Action proposal submission, evaluation, selection and approval (SESA) procedure is foreseen as a fully science and technology-driven mechanism and will ensure a simple, transparent and competitive proposal evaluation and selection process, reflecting the bottom-up, open and inclusive principles of COST. **The next date for Proposals collection is planned for 29 October 2020 at 12:00 noon (CET).**

3.2 Policy priorities and topics in the USA

Here follows an overview of the most relevant USA Funding Agencies and current Programs in the framework of IDIH (Figure 6). A brief description of these Agencies and their current and future policy priorities in the field of Digital Health for AHA are included in the following boxes.



Figure 6: Funding Agencies and Programs supporting Digital Health and AHA in the USA

UNITED STATES OF AMERICA | Funding Agencies dealing with Digital Health and AHA

US DEPARTMENT | Department of Health and Human Services



The Department has addressed Digital Health and AHA at policy level through several recent Public Laws.

- **Health Information Technology for Economic and Clinical Health (HITECH) Act (passed under American Recovery and Reinvestment Act of 2009)¹⁵:**
 - ✓ **Priority/Key Areas:** Implement meaningful use of interoperable EHR adoption and incentivize the adoption of health information technology¹⁶.
 - ✓ **Relevance:** The HITECH Act was a pivotal legislation in the adoption of health information technology and electronic health records in the US. Although it is not directly applicable to active and healthy aging, the act created the foundation for America's embracement of digital health and established the Office of the National Coordinator for Health Information Technology (ONC). The ONC is a key stakeholder in developing standards for health IT and advancing digital health innovation through its challenges and pilot programs.
- **Patient Protection and Affordable Care Act (ACA)¹⁷:**
 - ✓ **Priority/Key Areas:** Increase access to care, reduce costs, and improve health outcomes¹⁸
 - ✓ **Relevance:** The ACA's triple aim is to increase access to care, reduce costs, and improve health outcomes. The landmark act began to shift America's fee for service model to one that focused on prevention and overall wellness. The act penalized avoidable readmissions and sought ways to increase access to services, which incentivized the use of connective health technologies such as telehealth that helped providers care for patients outside of the traditional setting. The ACA also created the Center for Medicare and Medicaid Innovation, which studies innovative payment and service delivery models. While the act does not specifically address digital health, the benefits of digital health is in alignment with its triple aim and the ACA continues to be a core policy driver for health innovation.
- **Older Americans Act (OAA) Reauthorization Act¹⁹**
 - ✓ **Priority/Key Areas:** (i) Protect vulnerable elders by strengthening the Long-Term Care Ombudsman program and elder abuse screening and prevention efforts; (ii) Promote the delivery of evidence-based programs, such as falls prevention and chronic disease self-management programs²⁰.
 - ✓ **Relevance:** The Older Americans Act was reauthorized in 2016 with an updated focus on helping older individuals live independently in their home and communities through evidence based interventions. Through the OAA, the Administration on Aging has developed a network with Area Agencies on Aging, State Units on Aging, and Senior Centers to support home and community based services (HCBS) as well as programs to support fall prevention & chronic diseases self-

¹⁵ Public Law No:111-5

¹⁶ See: https://www.healthit.gov/sites/default/files/hitech_act_excerpt_from_arra_with_index.pdf

¹⁷ H.R.3590; Public Law No:111-149

¹⁸ See: <https://www.hhs.gov/healthcare/about-the-aca/index.html>

¹⁹ Ref. S.192; Public Law No: 114-144

²⁰ See: <https://www.congress.gov/bill/114th-congress/senate-bill/192>

management education. The act also allowed the Federal government to distribute funds to states for supportive services for individuals over the age of 60.

- **POLICY PRIORITIES FOR THE NEXT FUTURE** | Two main policy frameworks are currently driving R&D, as well as Health Care and assistance, in IDIH relevant fields of intervention:
 - **21st Century Cures Act**²¹
 - ✓ **Priority/Key Areas:** (i) Accelerate research into preventing and curing serious illnesses; (ii) Accelerate drug and medical device development; (iii) Address the opioid abuse crisis; (iv) Improve mental health service delivery²².
 - ✓ **Relevance:** The 21st Century Cures Act is widely known to help fund efforts in precision medicine but it also aims to improve healthcare IT by addressing interoperability and information blocking. Under the act, providers and insurers may be penalized if they implement health IT in nonstandard ways or health IT that restricts the access, exchange, or use of authorized electronic health information. In addition, the act also barred the FDA from regulating mobile health apps designed to maintain and encourage a healthy lifestyle if it is not related to the diagnosis, prevention, or treatment of disease. Therefore, innovative, but low-risk technologies may be more readily available.
 - **Creating High Quality Results and Outcomes Necessary to Improve Chronic (CHRONIC) Care Act (signed as part of the Bipartisan Budget Act of 2018)**²³
 - ✓ **Priority/Key Areas:** (i) Promote high quality care in the home; (ii) Advance team based care; (iii) Expand innovation and technology; (iv) Identify the chronically ill population prospectively; (v) Empower individuals and caregivers in care delivery²⁴
 - ✓ **Relevance:** Nearly 20mm American seniors are covered by Medicare Advantage insurance plans, which previously had very limited coverage on telehealth services and "non-medical" benefits. The CHRONIC Care Act gave MA plans more flexibility on what they can cover under "non-medical" benefits for the chronically ill and increased the availability of telehealth services especially for those who have stroke symptoms. The act also expanded the Independence at Home (IAH) demonstration, which allows seniors with multiple chronic conditions to receive care from primary care teams in their homes to reduce hospital readmissions.

²¹ Ref. H.R.34; Public Law No: 114-255

²² See: <https://www.congress.gov/114/plaws/publ255/PLAW-114publ255.pdf>

²³ Ref. S.870

²⁴ See: <https://www.congress.gov/bill/115th-congress/senate-bill/870>

NIH | NIA – National Institute of Aging



A part of the U.S. Department of Health and Human Services, NIH – National Institute of Health is the largest biomedical research agency in the world. NIH's mission is to seek fundamental knowledge about the nature and behavior of living systems and the application of that knowledge to enhance health, lengthen life, and reduce illness and

disability²⁵. NIH is made up of 27 Institutes and Centers, each with a specific research agenda, often focusing on particular diseases or body systems. Among these, the **NIA – National Institute on Aging leads a broad scientific effort to understand the nature of aging and to extend the healthy, active years of life**. In particular, NIA is the primary Federal agency supporting and conducting Alzheimer's disease research. NIA aims can be summarized as follows:

- Understanding the interpersonal and societal factors of aging
- Creating effective interventions for age-related diseases, disorders, and disabilities
- Addressing Alzheimer's and dementia, as well as caregiver burden

NIA pursues its mission by funding extramural research at universities and medical centers across the United States and around the world; maintaining an active communications and outreach program; and conducting a vibrant intramural research program at NIA laboratories in Baltimore and Bethesda, Maryland.

➤ **POLICY PRIORITIES FOR THE NEXT FUTURE** | [Aging Well in the 21st Century: Strategic Directions for Research on Aging](#), most recently updated in 2016, is NIA's "road map" for progress in aging

research and outlines our goals and vision. It provides a point of reference for setting priorities and a framework for systematically analyzing the Institute's scientific portfolio and assessing progress. In particular, the Goals set by this strategy are:

1. **Understanding the Dynamics of the Aging Process**

- **Goal A:** Better understand the biology of aging and its impact on the prevention, progression, and prognosis of disease and disability.
- **Goal B:** Better understand the effects of personal, interpersonal, and societal factors on aging, including the mechanisms through which these factors exert their effects.

2. **Improving the Health, Well-Being, and Independence of Adults as They Age**

- **Goal C:** Develop effective interventions to maintain health, well-being, and function and prevent or reduce the burden of age-related diseases, disorders, and disabilities.
- **Goal D:** Improve our understanding of the aging brain, Alzheimer's disease, and other neurodegenerative diseases. Develop interventions to address Alzheimer's and other age-related neurological conditions.
- **Goal E:** Improve our understanding of the consequences of an aging society to inform intervention development and policy decisions.
- **Goal F:** Understand health differences and develop strategies to improve the health status of older adults in diverse populations.

3. **Supporting the Research Enterprise**

- **Goal G:** Support the infrastructure and resources needed to promote high quality research.
- **Goal H:** Disseminate information to the public, medical and scientific communities, and policy makers about research and interventions.

²⁵ For further details, see: <https://www.nih.gov/about-nih/what-we-do/mission-goals>

PRIVATE SECTOR/NO PROFIT | AARP Foundation



AARP Foundation is a not-for-profit organization that serves vulnerable people 50 and older by creating and advancing effective solutions that help them secure the essentials.

AARP tackles senior poverty by sparking bold, innovative solutions that help vulnerable older adults build economic opportunity and social connectedness — fostering resilience and strengthening communities. Bringing together industry, government, activists, and volunteers, it operates at the intersection of collaboration, innovation, legal advocacy and grantmaking. In particular, AARP Foundation support enables grantees to help more people, work more efficiently, bring proven new approaches to scale, and make resources go further.

With these Request for Applications (RFAs), one for **Direct Service projects** and one for **Education, Outreach or Field-Building projects**, AARP Foundation seeks projects that advance economic opportunity among low-income older adults. Application requirements and funding levels vary based on the type of project²⁶.

- **PRIORITIES FOR THE NEXT FUTURE** | In 2019, AARP Foundation has launched new tools designed to equip low-income older adults with skills and resources to increase financial stability and connection to their communities. Among these, [Connect2Affect Connected Communities](#). This Pilot program investigates the viability of using hands-free, voice-activated technology to maintain sustained social connectedness for low-income older adults, age 50+, living in independent housing or federally subsidized rental properties. In partnership with LeadingAge Center for Aging Service Technologies, AARP Foundation studied 59 participants and found that voice-activated tech increased the participants' social interaction score and subjective social support score as well as decreased their loneliness score. The pilot study served as the foundation for the Connected Communities program, which currently seeks to expand this model to more senior living facilities.

²⁶ For further details about grants: <https://www.aarp.org/aarp-foundation/grants/>

3.3 Policy priorities and topics in South Korea

Here follows an overview of the most relevant South Korea Funding Agencies and current Programs in the framework of IDIH (Figure 7). A brief description of these Agencies and their current and future policy priorities in the field of Digital Health for AHA are included in the following boxes.

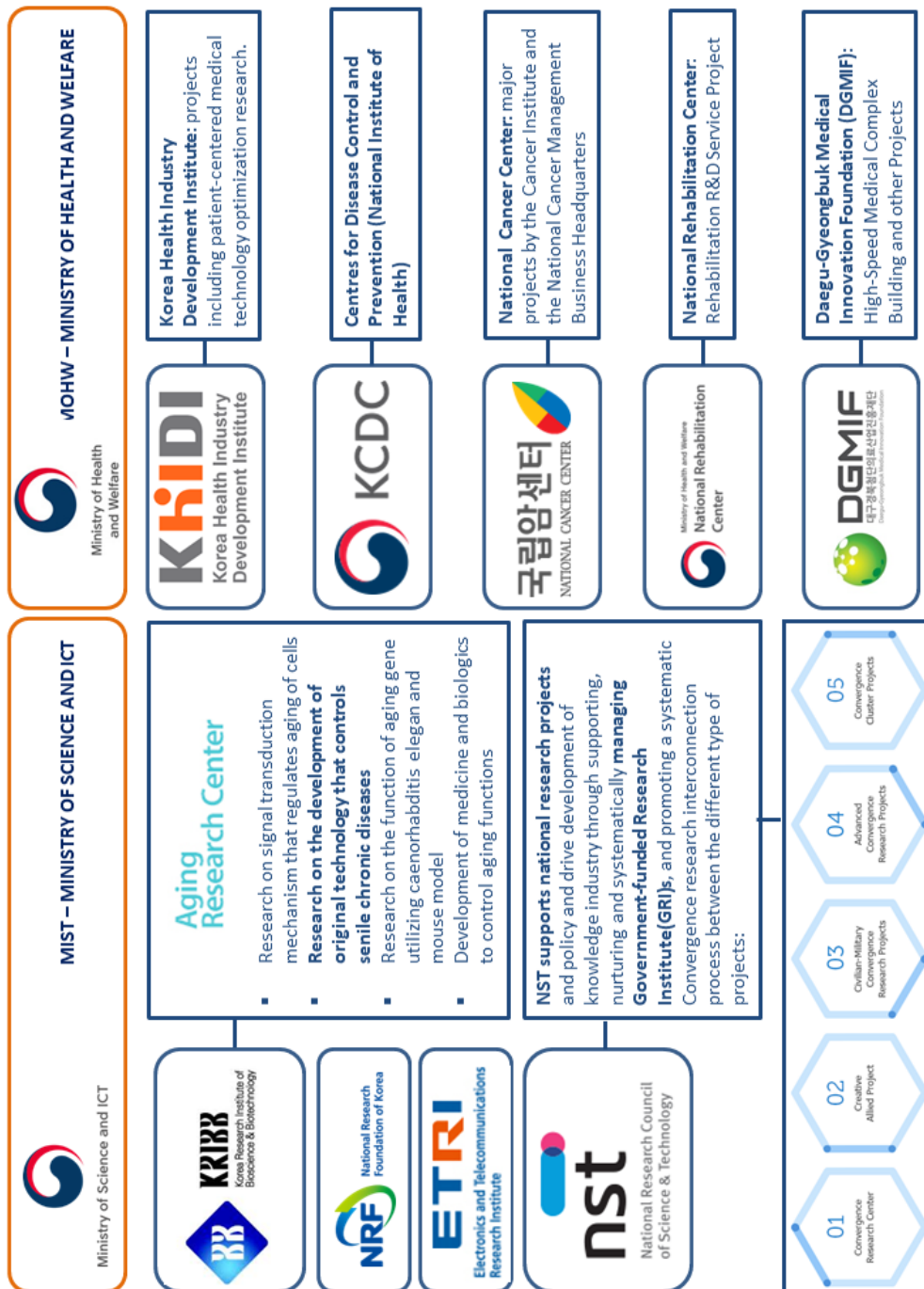


Figure 7: Funding Agencies and Programs supporting Digital Health and AHA in the South Korea

SOUTH KOREA | Funding Agencies dealing with Digital Health and AHA**MINISTRY | Ministry of Science and ICT****Ministry of Science and ICT have spent 684.4 billion KRW on innovative basic science and research on digital healthcare related projects in 2017.**

Ministry of Science and ICT

The Ministry implement comprehensive policies for scientific and technological innovation and the development of economy and society through the innovation (Framework Act on Science and Technology, Act No.12869, December 30th, 2014). In the field of R&D, the Ministry determine goals and direction for medium- and long-term policies on the promotion of basic research, formulate and implement a comprehensive plan for the promotion of basic research according to the goals and direction (Basic Research Promotion and Technology Development Support Act, Act No.13211, March 11th, 2015). In 1999, the Prime Ministry's Office had established three Korea Research Councils (Fundamental Science and Technology, Public Science and Technology, Industrial Science and Technology) fostering Government-funded Research Institutions. In 2004, the supervisory authority of these institutions switched to the Ministry of Science and Technology, currently "Ministry of Science and ICT" since 2014. In the meantime, the **National Research Council of Science and Technology**, which currently supports and promotes 25 government-funded research institutes, has replaced the Research Councils²⁷. Among these, the Korea Research Institute of Biosciences and Biotechnology (KRIBB) has established the **Aging Research Center**, as a Strategic Research Group, aimed at: (i) *the identification of new aging gene and understanding the mechanism*; (ii) *the development of original technology related to aging diagnosis and control*.²⁸

Moreover, under the same Ministry, it is operating the **Electronics and Telecommunications Research Institute (ETRI)** - funded in 1976, committed in contributing to the nation's economic and social development through research, development and distribution of industrial core technologies in the field of Information, Communications, Electronics, Broadcasting and Convergence technologies.

- **POLICY PRIORITIES FOR THE NEXT FUTURE |** The Korean government established a National Strategy for AI on December 17th, 2019²⁹. With the vision of '**Toward AI World Leader beyond IT**', Korea aims to achieve digital competitiveness, create huge economic effect of AI, and improve quality of life for people by 2030. The strategy consists of 100 government-wide action tasks under nine strategies in three main areas of AI (*AI ecosystem, AI utilization, People-centered*). In particular, its ambition of creating an innovative AI ecosystem includes the promotion of **convergence of AI and the region's flagship industries**, such as automobiles, energy and **healthcare** ('Gwangju AI Cluster', 2020-2024, total project cost of 393.9 billion KRW). In this context, with the intent of expanding the investment and funding for promising AI startups, the Strategy supports AI innovators, startups in the innovative growth fields such as DNA (Data, Network, AI) and three major new industries (system semiconductors, bio-health and future vehicles) by establishing a '**Future Technology Development Fund**' (2020).

²⁷ https://www.nst.re.kr/nst_en/member/03_01.jsp

²⁸ https://www.kribb.re.kr/eng/sub02/sub02_01_03.jsp

²⁹ See: "Toward AI World Leader, beyond IT". National Strategy for Artificial Intelligence, Ministry of Science and ICT Artificial Intelligence Policy Division, December 2019.

MINISTRY | Ministry of Health and Welfare



In its efforts towards a *Happy Society for All*, the Ministry pursues a **life-course approach** to the healthy life of Korean citizens. In particular, the action of the Ministry is focused on four main goals: (i) Social Security System, (ii) Individualized Care, (iii) Challenges & Tasks Ahead, (iv) Global Cooperation. In the framework of Individualized Care, the Ministry has included the **Services for Senior Citizens**, while, as part of the Challenges & Tasks Ahead, a strategy to **Overcoming the Demographic Crisis** is also included, besides the measures for Health Promotion. On this regard, the Republic of Korea is indeed facing a demographic crisis, due to **low birthrates and an aging population** that poses a growing threat to the sustainability of its economy, education, finances, and defense. Therefore, since 2006, the Ministry has been introducing three five-year plans to address demographic crisis. In 2017, addressing demographic challenges was chosen as one of the top policy priorities under President Moon Jae-in's administration.

Moreover, in **response to chronic diseases** that come with a rapidly aging population, the Ministry is committed to promoting preventative health measures. Diverse health promotion programs at local and municipal public health centers have been launched, within which health promotion services using ICT technology, such as mobile chronic disease care, are also provided.

In 2017, the Ministry of Health and Welfare has spent 451.6 billion KRW in digital healthcare.

The Ministry of Health and Welfare's major R&D budget is distributed between the following five **Agencies**:

1. **Korea Health Industry Development Institute**: 33 projects including patient-centered medical technology optimization research (347.8 billion KRW).
2. **Centres for Disease Control and Prevention (National Institute of Health)**: 7 projects including research on the development of infectious disease management technologies (74.9 billion KRW).
3. **National Cancer Center**: Major projects of the Cancer Institute and the National Cancer Management Business Headquarters (33.4 billion KRW).
4. **Daegu-Gyeongbuk Medical Innovation Foundation (DGMIF)**: High-Speed Medical Complex Building and Two Projects (5.5 billion KRW).
5. **National Rehabilitation Center**: Rehabilitation R&D Service Project (5.4 billion KRW).

➔ **POLICY PRIORITIES FOR THE NEXT FUTURE** | The Ministry of Health and Welfare plans to carry out new long-term and large-scale flagship projects for the following items, among which the most relevant drivers for IDIH are here highlighted:

- **Advanced Medical Technology**: Promoting precise medical and rehabilitation-related projects that can create jobs in new industries based on the Fourth Industrial Revolution, by:
 - ✓ *Building Genetic Big Data to realize 'Personalized Healthcare' based on health data, Promoting 'Development of Precision Medical Data Platform'*;
- **High value-added industry**: Expanding the business related to innovative new drugs and advanced medical devices so that technology export performance will lead to full-fledged industrial growth:
 - ✓ *A project to develop advanced medical devices that can be customized for prevention and management by converging biotechnology with leading technology in the 4th Industrial Revolution.*
- **Reducing social burdens**: Expanding the project to solve the health and medical problems of large social and economic losses and suffering of the people.



- ✓ *Investing in areas with high public health burden such as **dementia, diabetes** and cancer, and strengthening public health crisis response capabilities such as towards new infections and antibiotic resistant bacteria.*
- ✓ *Development of technology for localization of ancillary equipment, such as wheelchairs, and support for the development of community smart health care service models and empirical research using ICT convergence technology*

3.4 Policy priorities and topics in Japan

Here follows an overview of the most relevant Japan Funding Agencies and current Programs in the framework of IDIH (Figure 8). A brief description of these Agencies and their current and future policy priorities in the field of Digital Health for AHA are included in the following boxes.



Figure 8: Funding Agencies and Programs supporting Digital Health and AHA in Japan

JAPAN | Funding Agencies dealing with Digital Health and AHA

POLICY IMPLEMENTATION AGENCY | JST - Japan Science and Technology Agency

**Japan Science and Technology Agency**

As a policy implementation agency of the Ministry of Education, Culture, Sports, Science and Technology ([MEXT](#)), JST - Japan Science and Technology Agency JST plays a central role in Japan's Science and Technology Basic Plan³⁰. Based on science and technology targets issued by the government, JST funds **basic research, commercialization of new technologies, distribution of science and technology information, and in recent years promote international joint research and the fostering of next generation human resources**. Its comprehensive contribution stimulates real progress in science and technology and helps tackle a variety of social issues.

As a network-based research institute, JST takes the initiative to promote research and development activities linked to innovation, and tackles economic and social issues through the practical application of its research output as well as international collaborative research.

Funding Programs³¹ under JST are regrouped in three main categories:

1. *Strategic Basic Research*
2. *Industry-Academia Collaboration and Technology Transfer*
3. *International Collaborations*

RISTEX – Research Institute of Science and Technology for Society, as part of the JST Strategic Basic Research Programmes, conducts R&D programmes with the aim to produce and promote **innovative solutions to directly address human society**. Such issues include the effects of global warming, **aging populations** and declining birthrates, and improvement of safety and security. To gain practical wisdom and methods that will lead to solutions to societal issues, RISTEX values transdisciplinary research, which is carried out by researchers from various fields, practitioners and other stakeholders. In addition to the projects, RISTEX runs programs to support implementation and introduce the R&D results into society.

As part of RISTEX strands, two are particularly relevant:

- **[Designing a Sustainable Society through Intergenerational Co-creation](#)** - The Programme is primarily oriented to clarify how intergenerational co-creation is effective in achieving sustainability in cities and regions. In the areas where intergenerational co-creation is expected to be effective, the Programme proposes mechanisms to promote, put into practice and improve it. A particular attention, then, is paid to to implement these mechanisms in society while building a network for exchanging experiences and know-how. Almost all the projects in this research area have regional fields, providing a venue for first verifying their research hypotheses. In addition, each activity should demonstrate sustainability and the potential to become ingrained into society beyond the RISTEX research period. By “**co-creation**”, the Programme means a cooperative activity to create something together, rather than simply allowing one generation to take care of the other. ***What it is expected to be created are not necessarily physical products, but could well include***

³⁰ The Science and Technology Basic Plan, based on the Science and Technology Basic Law enacted in November 1995, aims to comprehensively and systematically advance Japan's science and technology policy. The government formulates the basic plan based on forecasts for the next decade, putting into effect science and technology policies over a 5-year period. See: <https://www.jst.go.jp/EN>

³¹ To explore JST Funding Programs: <https://www.jst.go.jp/EN/programs/funding.html>

values such as improvement in health or well-being, and reduction in fiscal deficit or environmental burden.

- **Create a Safe and Secure Living Environment in the Changing Public and Private Spheres** - supports R&D to contribute, through public/personal cooperation, to the discovery of harms and accidents in spaces/relationships which are difficult to discover or intervene in, and to the creation of mechanisms and associated activities which enable reduction and prevention of such problems by prediction, intervention and aftercare. As part of this strategy, among the social issues addressed, also the *Elder abuse*.
- ➔ **POLICY PRIORITIES FOR THE NEXT FUTURE** | The above mentioned framework is confirmed in the mid-term period by JST. Beyond this, the Council for Science, Technology and Innovation (CSTI)³² determined the **Moonshot Goals** on January 23rd, 2020. "**Moonshot Research and Development**"³³ is a bold new R&D program from JST that aims to create disruptive innovation in Japan. To solve issues facing future society, JST is driving R&D in ambitious projects that are more than just extensions of conventional technology. JST is currently holding a call for research proposals on the below Moonshot Goals with Program Directors (PDs) responsible for the whole R&D regarding their respective Moonshot Goals. This follows the Ministry of Education, Culture, Sports, Science and Technology (MEXT) creating challenging R&D concepts.
- **Moonshot Goal 1** - Realization of a society in which human beings can be free from limitations of body, brain, space, and time by 2050 [PD: Prof. HAGITA Norihiro].
 - **Moonshot Goal 2** - Realization of ultra-early disease prediction and intervention by 2050 [PD: Prof. SOBUE Gen].
 - **Moonshot Goal 3** - Realization of AI robots that autonomously learn, adapt to their environment, evolve in intelligence and act alongside human beings, by 2050 [PD: Prof. FUKUDA Toshio].
 - **Moonshot Goal 6** - Realization of a fault-tolerant universal quantum computer that will revolutionize economy, industry, and security by 2050 [PD: Prof. KITAGAWA Masahiro]

INDEPENDENT ADMINISTRATIVE INSTITUTION | AMED Japan Agency for Medical Research and Development



In 2013, after the establishment of the Office of Healthcare Police, the Japanese Cabinet approved the establishment of 'control tower' function for medical R&D, in line with "Japan Revitalization Strategy -- Japan is Back" policy strategy. Then, in 2014 the Cabinet approved the bills for *Act on Promotion of Healthcare Policy and Act on the Independent Administrative Agency of Japan Agency for Medical Research and Development* that led to the definitive establishment in 2015 of AMED.

Working beneath the Prime Minister's Cabinet and national ministries, AMED provides a single window for researchers and institutions seeking funding for medical research and development. Prior to our establishment, researchers were required to request funding from several ministries, depending on the phase of their studies. Now, AMED addresses R&D community at three main levels:

³² <https://www8.cao.go.jp/cstp/siryo/haihui048/haihu-048.html>

³³ See the presentation of the Program at: https://www.jst.go.jp/moonshot/en/application/pdf/presentation_e.pdf

- **Support:** it provides streamlined, consistent support from initial investigations to practical application of new medicines and treatments in the real world.
- **Connect:** AMED also works to connect the most qualified practitioners, medical institutions and private-sector organizations, at home and abroad, to give clinical studies the best possible chance of succeeding.
- **Promote:** once studies are completed, AMED focuses resources on promoting new medicines and treatments to ensure they get to the people who need them most. When it comes to medical innovation, we are with you every step of the way.

AMED promotes leading-edge medical innovation from discovery and development to clinical application. Focused on *nine key fields*, Funding Programmes are in line with the Japanese government's Plan for Promotion of Medical Research and Development³⁴.

Among these, the following Programmes are considered as relevant in the framework of IDIH:

- **MEDICAL DEVICE DEVELOPMENT** - Developing novel medical devices driven by clinical needs and supporting platforms for developers to contribute to the promotion of Japan's medical device industry.
- **TRANSLATIONAL & CLINICAL RESEARCH CORE CENTERS** - Strengthening core center functions to achieve seamless implementation from basic research to clinical application and promoting use of innovative technology.
- **PSYCHIATRIC & NEUROLOGICAL DISORDERS** - Promoting research and development for dementia and other psychiatric disorders.

Moreover, under the Category **OTHER PROGRAMS**, several interesting funding opportunities are also promoted by AMED.

- **POLICY PRIORITIES FOR THE NEXT FUTURE |** Particularly relevant in the framework of IDIH, it's the partnership of AMED with the U.S. National Academy of Medicine (NAM) and seven other global organizations, named **Healthy Longevity Global Grand Challenge**, a multiyear international challenge seeking breakthrough innovations to extend human health and function later in life. The NAM conceptualizes, funds, and coordinates internationally the Healthy Longevity Global Grand Challenge. It calls on teams and individuals of any background - including biomedical sciences, technology and engineering, social sciences, financing, and beyond - to submit bold, innovative ideas, with the goal of extending the human healthspan. *It seeks to amass a diverse portfolio of ideas, focusing on areas such as disease prevention, molecular pathways, mobility, functionality, social connectedness, and more.*

Healthy Longevity Global Grand Challenge will consist of three phases internationally:

1. **Catalyst Phase** - Approximately 450 awards will be issued globally as seed to advance new, innovative ideas (starting in 2020). Awardees will be invited to attend an annual Innovators Summit - the first of which is set for summer 2021 -- to share their work with policymakers, researchers, potential investors, and fellow innovators from around the world.
2. **Accelerator Phase** - Awards worth \$500,000 to \$1 million USD or more will be issued to those meritorious Catalyst awardees who have demonstrated significant progress, in order to support the further advancement of their bold ideas (starting in 2021).

³⁴ To explore AMED Funding Programs, see: <https://www.amed.go.jp/en/program/index.html>

3. **Grand Prize** - One or more grand prize(s) of up to \$5 million USD will be awarded for achievement of a breakthrough innovation that extends the human health span (starting in 2023).

In Japan, the AMED will issue up to 60 Catalyst Awards to Japan-based projects under support of AMED between 2020 and 2022.

Notes: Other organizations issuing Catalyst Awards include Academia Sinica of Taiwan, Japan Agency for Medical Research and Development, Chinese Academy of Medical Sciences, EIT Health (supported by EIT, a body of the European Union), Ministry of Health and National Research Foundation of Singapore, United Kingdom Research and Innovation, U.S. National Academy of Medicine (supported by Johnson & Johnson Innovation), and U.S. National Institute on Aging.

MINISTRY | Ministry of Health, Labour and Welfare



As part of the Health, Labour and Welfare policies, Japan has set a Long-Term Care, Health and Welfare System for the Elderly, whose operation has been revised to strengthen the Community-based Integrated Care System in 2017-18³⁵. In this framework, the system is focusing on helping the elderly to avoid the need for long-term care by cooperating with the rehabilitation sector. Since the first introduction of the System in 2000, the action of the Ministry has been oriented to three main areas of intervention:

- **Support for independence:** The idea of Long-Term Care Insurance System is to support the independence of elderly people, rather than simply providing personal care.
- **User oriented:** A system in which users can receive integrated services of health, medicine, and welfare from diverse agents based on their own choice.
- **Social insurance system:** Adoption of a social insurance system where the relation between benefits and burdens is clear.

Under the Ministry of Health, Labour and Welfare, several public Institutes and organizations have been set addressing AHA, among these:

- **Japan Organization for Employment of the Elderly and Persons with Disabilities (JEED)** - with a view toward stabilizing the employment of the elderly, Grants for the Stable Employment of the Elderly are provided to employers who take measures to improve their employment environment for further utilizing the elderly and those who transfer elderly workers' employment from fixed-term to non-fixed term. JEED seeks to realize a "society with lifelong employment" by providing counseling and other forms of support on technical issues concerning employment of the elderly for employers and employers' organizations as well as conducting research/surveys such as the development of practical methods and publicity activities.
- **National Institute of Population and Social Security Research** - committed in: (i) Social Security research for promoting welfare of people; (ii), Integration between social security and population research; (iii) *Population Research on low fertility and ageing society*. Through [Research Projects](#), surveys, projections and [International Cooperation](#), the Institute inspires policies in these fields.
- **National Center for Geriatrics and Gerontology (NCGG)**³⁶ – composed of the National Hospital for Geriatric Medicine and the Research Institute, it is one of the six national centers for advanced and

³⁵ https://www.mhlw.go.jp/english/policy/care-welfare/care-welfare-elderly/dl/ltcis_2017_e.pdf

³⁶ Pamphlet on NCGG: <https://www.ncgg.go.jp/ncgg-overview/pamphlet/documents/ncgg-pamphlet-2019-E.pdf>



specialized medicine in Japan. Its mission is to promote the physical and mental health of the elderly, so that they can achieve a life-long independence, and the improvement of the health and welfare for the people and the society. With the close cooperation and interaction between the hospital and the research institute, NCGG as a whole keeps on making efforts toward the realization of healthy and longevity society. As part of NCGG, also:

- ✓ **The Center for Development of Advanced Medicine for Dementia (CAMD)** was established in 2010 to accelerate basic and applied researches for dementia, especially focusing on Alzheimer's disease.
- ✓ **The Center for Gerontology and Social Science (CGSS)** founded in 2012 to promote empirical research in the field of gerontology and social sciences, focusing on the independence of older people's mind and body, and contributing to the development of a vigorous society and longevity. The research key words in CGSS are social participation, independence support, social support, social welfare, home care, and regional comprehensive care.

➤ **POLICY PRIORITIES FOR THE NEXT FUTURE |** The Community-based Integrated CareSystem Model developed by Japan has defined the scenario that the country is expected to face in the mid-term. By 2025 when the baby boomers will become age 75 and above, a structure called “the Community-based Integrated Care System” will be established that comprehensively ensures the provision of health care, nursing care, prevention, housing, and livelihood support. According to that, the elderly could live the rest of their lives in their own ways in environments familiar to them, even if they become heavily in need for long-term care. ***As the number of elderly people with dementia is estimated to increase, establishment of the Community-based Integrated Care System is important to support community life of the elderly with dementia.***

INDEPENDENT ADMINISTRATIVE INSTITUTION | Japan Society for the Promotion of Science (JSPS)



JSPS was founded in 1932 as a non-profit foundation through an endowment granted by Emperor Showa. Since 2001 has been operating under the Ministry of Education, Culture, Sports, Science and Technology (Monbukagakusho). Over this 70-year period, JSPS has worked continuously to develop and implement a far-reaching array of domestic and international scientific programs. On October 1, 2003, JSPS entered a new phase with its conversion to an independent administrative institution, as which it will strive to optimize the effectiveness and efficiency of its management in order to improve the quality of the services it offers to individual researchers, universities, and research institutes.

Established by way of a national law, **JSPS works within the broad framework of government policies established to promote scientific progress in all fields of the natural and social sciences and the humanities, playing a pivotal role in the administration of a wide spectrum of Japan's scientific and academic programs.**

As part its initiatives supporting Research, JSPS foresees **Grants-in-Aid for Scientific Research (KAKENHI)** - competitive funds that are intended to significantly develop all scientific research (research based on the free ideas of the researcher), from basic to applied research in all fields, ranging from the humanities and the social sciences to the natural sciences. The grants provide financial support for **creative and pioneering research projects that will become the foundation of social development.** The research projects are selected using a peer-review screening process (screening by multiple researchers whose field of specialization is close to that of the applicant).

Moreover, based on a report by Subdivision on Science, Council for Science and Technology, titled "[Promotion of the Humanities and Social Sciences Addressing Risk Society and Matured Intellectual Society](#)," issued in July 2012, **Topic-Setting Program to Advance Cutting-Edge Humanities and Social Sciences Research** has been established to contribute to advancing the Humanities and Social Sciences in three areas:

1. Joint research that will yield breakthroughs through close linkages with other fields of science
2. Joint research aimed at making societal contributions
3. International joint research that contributes to advancing the Humanities and Social Sciences

As part of this Program, the strand **Responding to Real Society** is particularly relevant in the framework of IDIH³⁷.

➤ **PRIORITIES FOR THE NEXT FUTURE** | *"While inviting and listening to the voices of researchers on the ground, JSPS is working to further **improve and strengthen the KAKENHI program.** (..) It will also accrue to **strengthening international research networks** that generate excellent knowledge. Creating this kind of good research and knowledge circulation will be critical to Japan's future. Therefore, JSPS is working to advance this mission through a variety of programs that operate in cooperation with the funding agencies and researcher communities of countries around the world"*³⁸.

³⁷ To search for projects selected for funding under the strand: <https://www.jsp.go.jp/english/e-kadai/jissyakai/index.html>

³⁸ Statement by Susumu Satomi, JSPS President (April 2018).

3.5 Policy priorities and topics in China

Here follows an overview of the most relevant China Funding Agencies and current Programs in the framework of IDIH (Figure 9). A brief description of these Agencies and their current and future policy priorities in the field of Digital Health for AHA are included in the following boxes.

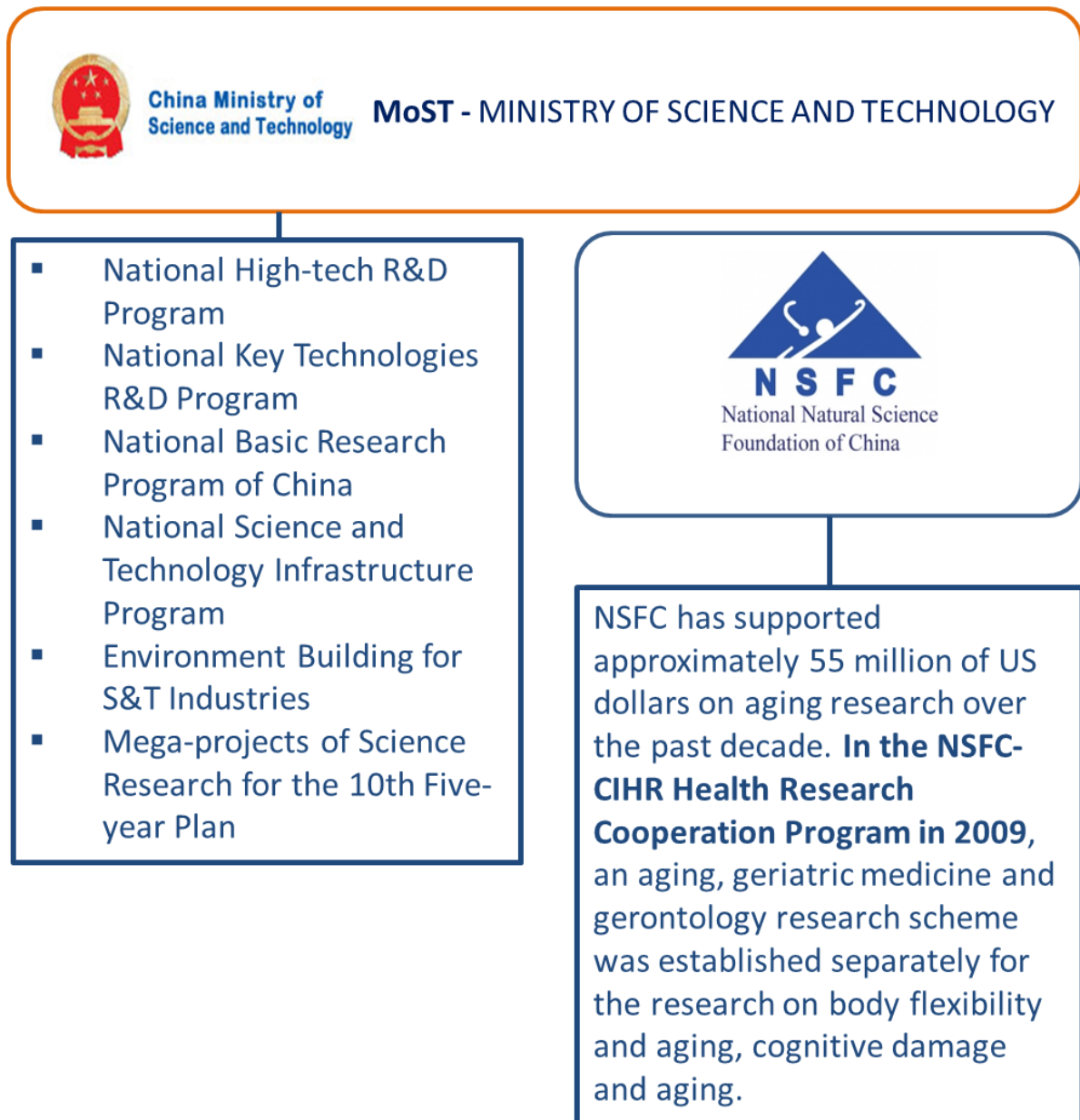


Figure 9: Funding Agencies and Programs supporting Digital Health and AHA in China

CHINA | Funding Agencies dealing with Digital Health and AHA**MINISTRY | MoST - Ministry of Science and Technology****China Ministry of Science and Technology**

MoST is a ministry of the Chinese government, which coordinates science and technology activities in the country. MoST is the major funding agency of the central government that supports several national level science and technology

programmes. MoST plans for major national S&T projects and oversee their implementation, coordinates the R&D and innovation of key generic technologies and cutting-edge technologies. Several Programmes are under the MoST:

- National High-tech R&D Program (863 Program)
- National Key Technologies R&D Program
- National Basic Research Program of China
- National Science and Technology Infrastructure Program
- Environment Building for S&T Industries
- Mega-projects of Science Research for the 10th Five-year Plan

Research on aging and related diseases in China has received significant support from the **National Natural Science Foundation of China (NSFC)**, directly by the Ministry of Science and Technology of China (MoST), the National Health and Family Planning Commission of China (NHFPC), and local departments over the last decades.

NSFC has supported approximately 55 million of US dollars on aging research over the past decade.³⁹ The supporting mechanisms vary, including general program, key program, and international joint-program, etc. **In the NSFC-CIHR Health Research Cooperation Program in 2009**, an aging, geriatric medicine and gerontology research scheme was established separately for the research on body flexibility and aging, cognitive damage and aging.

In 2013, the NHFPC and the **National Working Commission on Aging** jointly issued the China's Elderly Health Guide aimed at promoting healthy lifestyles, strengthening disease prevention, and improving the life quality and health of the elderly ones. A number of aging-related research laboratories, centers, and research institutions have been established in different cities, sharing research tasks of universities, local governments and the central government. Certain achievements have been made in the aging and age-related disease research, and further development and more breakthroughs on human anti-aging research may be on the way. In 2018, MoST launched a programme known as Active Health and Technology Against Aging.

➤ **POLICY PRIORITIES FOR THE NEXT FUTURE |** To achieve the great goal of becoming the world's leading science and technology power, the National Natural Science Foundation of China has conducted in-depth analysis of the new situation, new tasks and new requirements facing China's basic research and science funds, and developed the overall goal and **Roadmap of NSFC's reform** in the new era based on repeated research and extensive consultation⁴⁰. The Roadmap has identified four major funding categories in line with scientific natures of research. In particular, the Roadmap has established an artificial intelligence-assisted category-specific peer review

³⁹ See: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4417678/>

⁴⁰ See the NSFC Guide to Programs 2019 at: http://www.nsf.gov.cn/english/site_1/pdf/NationalNaturalScienceFundGuidetoPrograms2019.pdf



mechanism featuring “Responsibility, Credit and Contribution”. In this sense, the Roadmap intends to build a science funding system for the new era that is guided by “advanced concept, equipped by well-established mechanism and operated in a fair and efficient manner in the next 5 to 10 years, and making fundamental contribution in strengthening original innovation capacity to become world's leading science and technology power”⁴¹.

⁴¹ Ibidem.

3.6 Policy priorities and topics in Canada

Here follows an overview of the most relevant Canada Funding Agencies and current Programs in the framework of IDIH (Figure 10). A brief description of these Agencies and their current and future policy priorities in the field of Digital Health for AHA are included in the following boxes.

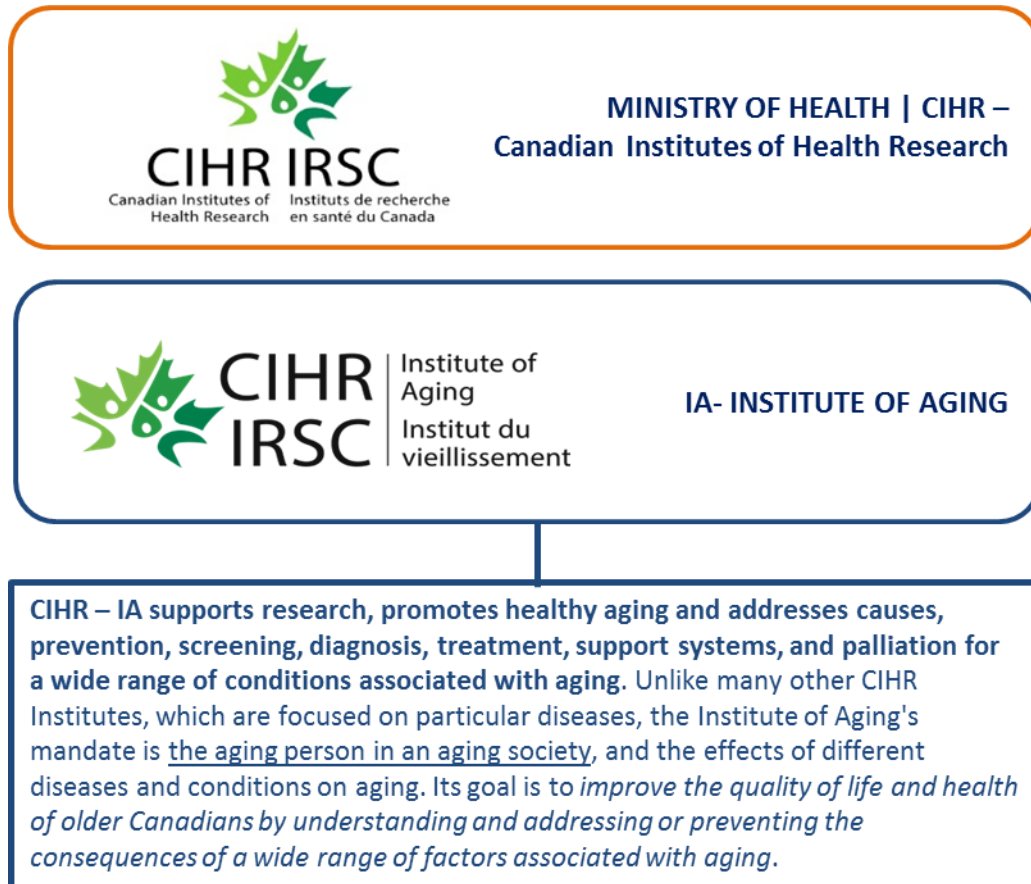


Figure 10: Funding Agencies and Programs supporting Digital Health and AHA in Canada

MINISTRY OF HEALTH | CIHR - Canadian Institutes of Health Research



The Canadian Institutes of Health Research (CIHR) is Canada's federal funding agency for health research. Composed of 13 “virtual” Institutes, it collaborates with partners and researchers to support the discoveries and innovations that improve health and strengthen the health care system.

Its mission is **to create new scientific knowledge and to enable its translation into improved health, more effective health services and products, and a strengthened Canadian health care system.**

Each of these 13 Institutes is dedicated to a specific focus area, linking and supporting researchers pursuing common goals. Each Institute embraces a range of research from fundamental bio-medical and clinical research, to research on health systems, health services, the health of populations, societal and cultural dimensions of health and environmental influences on health. This integrated approach brings together researchers, health professionals and policy-makers from voluntary health organizations, provincial government agencies, international research organizations and industry and patient groups from across the country, under each Institute's virtual "roof."

CIHR established the [Institute of Aging \(IA\)](#) **"to support research, to promote healthy aging and to address causes, prevention, screening, diagnosis, treatment, support systems, and palliation for a wide range of conditions associated with aging."** Unlike many other CIHR Institutes, which are focused on particular diseases, the Institute of Aging's mandate is the aging person in an aging society, and the effects of different diseases and conditions on aging. Its goal is to *improve the quality of life and health of older Canadians by understanding and addressing or preventing the consequences of a wide range of factors associated with aging.*

- **POLICY PRIORITIES FOR THE NEXT FUTURE** | For the 2020-2030 period, The Canadian Institutes of Health Research (CIHR) is developing a [new strategic plan to guide their operations and investments from 2020 to 2030](#). With this plan, they also seek to lay the foundation for a shared vision for how Canada's health research ecosystem could look in the next 30 years. The new strategic plan will build on lessons learned since the last strategic planning exercise in 2014. Principally, this means better aligning with others in the health research ecosystem. To that end, they began with a robust environmental scan of provincial and territorial health priorities. They are now actively engaging with a number of stakeholders as they develop the plan, including citizens, patients, charities, provincial funders, Indigenous communities, government departments, researchers, health professionals, trainees, and research administrators. As part of the Canadian Institutes of Health Research (CIHR), the **Institute of Aging** identifies and addresses through research and other actions, the knowledge gaps and opportunities related to Canada's aging population. The Institute focuses on health and wellness across the entire trajectory of life while specifically addressing the health challenges of older individuals. The [CIHR Institute of Aging Strategic Plan 2019-2021: Living Longer, Living Better](#) is based on two main strategic directions:
- the **determinants of health and wellness along the life-long trajectory of aging**, and
 - the **complex health challenges of the older individual and their caregivers**.
- Additionally, some cross-cutting strategic directions focus on specific aspects that need to be considered throughout the planning and implementation of first two directions.

4 Relevant Funding Programmes and projects in the EU and in Strategic Partner Countries

Here follows a collection of the Funding Programmes that are relevant in the framework of IDIH, with a selection of projects funded under these Programmes by the aforementioned Agencies in the EU and in Strategic Partner Countries. Programmes and projects are presented *per area*, reflecting the specialization of Experts Groups (EGs) within the Digital Health Transformation Forum and the IDIH strategic topics. Areas are identified by a colour, as in Figure 11.

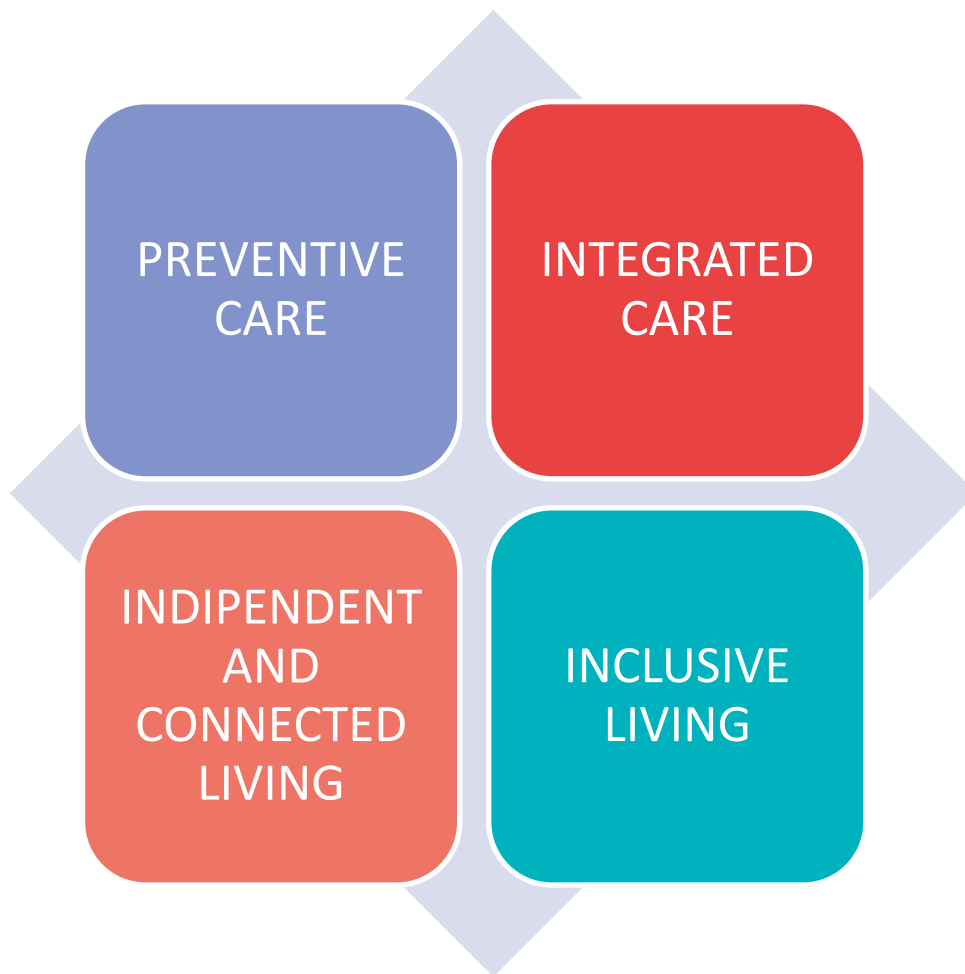


Figure 11: IDIH strategic topics

4.1 Preventive Care: relevant funding programmes and projects

Area: PREVENTIVE CARE

PREVENTIVE CARE

DIRECTORATE-GENERAL | RTD



PROGRAMME | Horizon 2020-SC1: Health, demographic change and wellbeing



Relevant topics:

1. [PHC-21-2015](#) - Advancing active and healthy ageing with ICT: Early risk detection and intervention
2. [SC1-PM-15-2017](#) - Personalised coaching for well-being and care of people as they age

RELEVANT FUNDED PROJECT | 1. Responsive Engagement of the Elderly promoting Activity and Customized Healthcare

Coordinated by: TECHNISCHE UNIVERSITAET MUENCHEN, DE

End date: January 2020

Specific Objective: To provide a personalized prevention and intervention system that promotes the activity of the elderly by monitoring and evaluating their daily habits, considering both personal medical history as well as real-time gathered data from a series of wearable and embedded sensors, in order to mitigate loss of function and to arrest associated and/or consequential morbidities via a number of physical and virtual activity intervention modules.

Expected Result: A solution that seeks to prevent elderly citizens from loss of function and a decline of being able to perform Activities of Daily Living (ADLs) independently leading ultimately to entering LTC (Long Term Care).

Source: <https://cordis.europa.eu/project/id/690425>

RELEVANT FUNDED PROJECT | 2. Virtual Coaching Activities for Rehabilitation in Elderly

Coordinated by: Technische Universitaet Dresden, DE

End date: August 2022

Specific Objective: To help patients to proceed with a personalized rehabilitation that complies to age-related conditions, and use the key technology for empowering patients through the enhancement of the adherence to the care plan and the risk prevention.

Expected Result: A system that integrates a semantic layer (universAAL) including a reasoning engine that merges all patient-related and context information together. The results shall stimulate the European Healthcare & ICT sector for innovations in the field of integrated care. In sum, vCare will contribute to the EU goal to increase healthy life years of Europeans by two until 2020.

Source: <https://cordis.europa.eu/project/id/769807>

DIRECTORATE-GENERAL | SANTE**PROGRAMME | Third Health Programme 2014 – 2020**

The EU's Third Health Program was established in 2014 with a total budget of € 449.4 million, with the aim of supporting and adding value to the health policies of EU countries, improving



the health of Union citizens and reducing health inequality.

The program represents the continuation of the European health action implemented through: eight public health programs between 1998 and 2003, the First Health Program (2003-2008), and the Second EU Program (2008- 2013) which partly shares thematic areas and priorities of program in the closing phase.

Relevant topics:

Thematic priority 3 "Contribute to innovative, efficient and sustainable health systems⁴²". Actions under this priority include: (i) the use of e-Health and Big Data in Healthcare Policy and Research (2015); (ii) Health innovation and e-Health (2016/2017).

RELEVANT FUNDED PROJECTS | Market study on telemedicine

Coordinated by: PriceWaterhouseCooper, UK

End date: October 2018

Specific Objective: To examine the telemedicine market in Europe and to understand the factors that determine its development.

Expected Results: its analysis maps telemedicine applications and solutions, and applicable technical standards and guidelines; it also describes market dynamics and potential barriers limiting wider deployment and uptake of telemedicine solutions. Finally, the study assesses the cost-effectiveness of larger-scale deployment of telemedicine under current and future market conditions, to provide policy makers with advice and considerations for wider deployment of telemedicine.

Source: A "Success Stories" booklet: [Health for the EU](#) collects a selection of actions funded under the third EU Health Program.

DIRECTORATE-GENERAL | REGIO**PROGRAMME | European Regional Development Fund (ERDF) – Interreg V**

It aims to strengthen regional economic and social cohesion by investing in growth- enhancing sectors to improve competitiveness and

create jobs. The ERDF also finances cross-border co-operation projects. One of the most important funding instruments under the ERDF umbrella, indeed, is Interreg.

Interreg is one of the key instruments of the European Union (EU) supporting cooperation across borders through project funding. Its aim is to jointly tackle common challenges and find shared solutions in fields such as health, environment, research, education, transport, sustainable energy and more. It has a budget of EUR 10.1 billion invested in the several cooperation programmes. The period 2014 - 2020 is the fifth period of Interreg and, therefore, the programme is called *Interreg V*.

⁴² Annual Work Programmes since 2003 are available here:

https://ec.europa.eu/chafea/health/bookshelf/legal-documents/index_en.htm;

https://ec.europa.eu/health/sites/health/files/funding/docs/wp2020_annex_en.pdf

“**Interreg**” instrument is divided in four main initiatives (families):

- 1. Cross border cooperation:** Interreg cross-border cooperation, known as *Interreg A*, supports cooperation between NUTS III regions from at least two different Member States lying directly on the borders or adjacent to them.
- 2. Interregional cooperation:** Interreg has four interregional cooperation programmes, known as *Interreg C*: Interreg Europe, Interact, Urbact and Espon. The interregional programmes are geographically “pan-European” covering vast areas.
- 3. Transnational cooperation:** Interreg transnational cooperation, known as *Interreg B*, involves regions from several countries of the EU forming bigger areas where it aims to promote better cooperation and regional development within the Union by a joint approach to tackle common issues.
- 4. IPA (Instrument for Pre-Accession Assistance) cross border cooperation:** supports cross-border cooperation between candidate countries, potential candidate countries and EU Member States, to contribute in their accession preparations with a territorial and cross-border focus.

Relevant topics:

Thematic Objective 1: Strengthening research, technological development and innovation by promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies.

Thematic Objective 2: Enhancing access to and the use and quality of information and communication technologies by strengthening ICT applications for e-government, e-learning, e-inclusion, e-culture and e-health.

Thematic Objective 9: Promoting social inclusion, combating poverty and any discrimination, by investing in health and social infrastructure, which contributes to national, regional and local development, reducing inequalities in terms of health status, promoting social inclusion through improved access to social, cultural and recreational services and the transition from institutional to community-based services

RELEVANT FUNDED PROJECTS | BaltCityPrevention

Coordinated by: Flensburg University of Applied Sciences, DE

End date: 2020

Specific Objectives: 1) Develop and test a new approach, which helps Public Health Authorities (PHA) in prevention intervention planning. 2) Involve eHealth technologies in the planning and implementation of the intervention. 3) Initiate cooperation between PHAs and small and medium-sized enterprises (SMEs) through networking and matchmaking events.

Expected Results: Current prevention measures are often ineffective, since the methods are not tailored to specific user needs. In BaltCityPrevention 14 partners from 7 countries will test a more participatory and user-oriented approach to develop and implement prevention and health promotion interventions.

Source: <https://baltcityprevention.eu/index.html>

COST | European Cooperation in Science and Technology



PROGRAMME | COST - European Cooperation in Science and Technology



COST Actions are **science and technology networks** open to researchers and innovators from universities,

research centres, companies, in particular SMEs, as well as other stakeholders and relevant legal entities.

COST Actions are set up to achieve identified objectives described in the Action Memorandum of Understanding (MoU) within their **four-year** duration, centred on the sharing, creation, dissemination and application of knowledge.

RELEVANT FUNDED PROJECTS | MouseAGE - Development of a European network for preclinical testing of interventions in mouse models of age and age-related diseases (BM1402)

Coordinated by: University of Sheffield, UK

End date: November 2018

Specific Objectives: To consolidate current best practice across leading European institutions and researchers, maximise resource efficiency, and provide a platform to help train the next generation of scientists.

Expected Results: A highly interactive and flexible European network, which will create a critical mass of cross-disciplinary scientists, clinicians and industrial partners to reach consensus on ways to test preclinical interventions in ageing mice.

Source: <https://www.cost.eu/actions/BM1402/#tabs|Name:overview>

NIH | NIA – National Institute on Aging



PROGRAMME | Program Project Applications (P01)



Program project awards represent synergistic research programs that are designed to achieve results that cannot be attained by

investigators working independently. They consist of at least three projects and an administrative core all of which are active through all years of the program project.

Relevant topics: The National Institute on Aging (NIA) invites applications for Program Project Grant (P01) awards in areas relevant to its mission. In particular, the Funding Opportunity Announcement (FOA) related to PAR-13-258 invites Program Project applications (P01) that address several issues. These include **genetic, biological, neuroscientific, clinical, behavioral, social, and economic research related to the aging process, diseases and conditions associated with aging, and other special problems and needs of older Americans.**

RELEVANT FUNDED PROJECTS | EAS - Einstein Aging Study

Coordinated by: Albert Einstein College of Medicine (Montefiore Medical Center), USA

End date: 2018

Specific Objective: EAS is one of the most consistently funding projects in NIA spanning three decades as its research on aging covers multiple domains: **memory, gait and mobility, risk factors/neuroimaging, and the effect of changes in brain tissue.** In recent years, the EAS researchers have been exploring the effect of smartphone applications for migraine management, machine

learning's potential in predicting cognitive impairment, and mobile technology to assess cognitive function, behavior, and psychological states in real-time.

The *overall goal* of this study is to use ambulatory methods to improve the detection and definition of the cognitive states associated with preclinical AD and to better characterize the role of novel and remediable risk factors on the preclinical onset of AD. The EAS will address these problems by leveraging recent innovations in the use of ambulatory methods. The EAS team has developed ambulatory methods that use mobile technology (e.g., smartphones) to assess both objective and subjective cognitive function, behavior, and psychological states in real-time and in people's naturalistic settings. The EAS has long been a community-based study; **with this new proposal, it moves from bringing the community into its clinic to bringing its clinic-developed measures directly to the community.**

Expected Results: Clinical studies that elucidate the biological, behavioral and psychological processes that impact daily cognitive function and long-term cognitive decline.

Source: <https://www.einstein.yu.edu/departments/neurology/clinical-research-program/EAS/>

MINISTRY | Ministry of Health and Welfare



PROGRAMME | Centre for Disease Control and Prevention (KCDC)



The Centre for Disease Control and Prevention (KCDC)

managed the Chronic Disease Management Research & Development, commenced to develop disease prevention and management technologies in preparation for an aging population.

Relevant topics: Investigation and analysis on the risk factors of chronic diseases.

RELEVANT FUNDED PROJECTS | Chronic Disease Management Research & Development

Coordinated by: Centre for Disease Control and Prevention (KCDC)

End date: ongoing

Specific Objective: The purpose of the research & development activities is to manage dementia, respiratory allergic diseases, and chronic diseases such as cardio-cerebrovascular diseases, diabetes, and chronic obstructive pulmonary diseases.

Expected Results:

1. **Research on cardiovascular diseases:** a follow-up study on the population of the elderly in urban and rural areas and producing evidential data for prevention and management of diseases from which many aged people are suffering including cardiovascular diseases. In addition, a forward-looking follow-up study on patients with heart failure and acute heart failure in order to product evidential data for secondary prevention and management of cardiovascular diseases.
2. **Research on diabetes and obesity:** to prevent diseases in the early stages, using early diagnosis factors of obesity, diabetes, and complications; a foundation for translational and clinical researches and production of scientific data for the prevention of metabolic diseases by developing target substances preventing such diseases and using clinical and genetic information.
3. **Research on respiratory and allergic diseases:** developing biomarkers, and conducting research on preventive and interventional technology.

Source: <http://www.cdc.go.kr/contents.es?mid=a30301030000>

POLICY IMPLEMENTATION AGENCY | JST - Japan Science and Technology Agency



PROGRAMME | RISTEX > Redesigning Communities for Aged Society

RISTEX 社会技術研究開発センター
Research Institute of Science and Technology for Society

RISTEX – Research Institute of Science and

Technology for Society, as part of the JST Strategic Basic Research Programmes,

conducts R&D programmes with the aim to produce and promote innovative solutions to directly address human society. Facing with the aging society, the RISTEX has been focusing until 2012 on a specific Programme dedicated to *Redesigning Communities for Aged Society*. This Programme called for a multi-disciplinary perspective, taking into consideration the psychological, physical and social status of the senior citizens, thus, exploring the problem from various perspectives, including the humanities and the social sciences, to design more effective models for the aging society. The R&D projects funded under the Programme in its last implementation phase are well summarized [here](#).

Relevant topics:

1. **Category I:** Projects whose goal is to provide options for resolving social problems (the approach to R&D, organization of indicators, etc. for scientific evaluation)
2. **Category II:** Projects whose goal is to go all the way to experimental proof of specific technologies, methods etc. to help resolve social problems

RELEVANT FUNDED PROJECTS| 1. Housing and Healthy Aging

Coordinated by: Keio University (Professor Toshiharu IKAGA), Tokio

End date: 2015

Specific Objective: the project has demonstrated some models for community and housing to achieve health and longevity, taking the town of Yusuhara in Kochi Prefecture as a model, since its elderly population rate is typical of that expected across Japan 40 years (2050). The project aimed to construct a form of *pre-primary prevention* by improving local living conditions and communities. Through undertaking private sector/public sector/academic collaborative field surveys and promoting lifelong learning activities and health protection activities, we aim to achieve this goal by promoting awareness about ways of living and living environments that contribute to health and longevity. The knowledge gained is applicable not only to mountainous regions similar to Yusuhara, but also nationwide across Japan, including urban areas where greater demographic aging is expected.

Expected Results:

1. To explore living environment that promotes the health of older adults and longevity
2. To offer the opportunity for community dwellers to learn about health-enhancing lifestyle
3. To **develop an efficient communication system through which older residents report** their condition on the regular basis

Source: https://www.jst.go.jp/ristex//korei/en/02project/prj_h24_12.html

RELEVANT FUNDED PROJECTS| 2. Aging in Place with ICT

Coordinated by: Iwate Prefectural University (Professor Toshiharu IKAGA), Tokio

End date: 2013

Specific Objective: In addition to the watch centers that municipal social welfare councils have already started, sub-centers working in synergy with other local services, such as social welfare facilities,

student volunteer centers, and housing complex custodian's offices, will work to share safety check information from emergency calls, sensors, etc. in order to carefully watch over seniors and match them with necessary lifestyle resources. An interdisciplinary research system centered on Iwate Prefectural University and an interdisciplinary study system of governments and diverse other local participants have been constructed, and a demonstration experiment has been carried out in four fields in the prefecture with different regional characteristics. The effects on senior citizens and communities and the effects of ICT utilization have been evaluated scientifically⁴³.

Expected Results: Develop an information flow and a community support system that can respond to changes in the physical or mental conditions of senior citizens and provide lifestyle support.

Source : https://www.jst.go.jp/ristex//korei/en/02project/prj_h22_03.html

MINISTRY | MoST - Ministry of Science and Technology



PROGRAMME | Sci-tech countermeasures for population aging / Key special program for Aged Society 2018 - 2022



China Ministry of Science and Technology

The Programme aims to:

- study key basic biological mechanism and influencing factors of health;
- develop key technologies and products related to active health;
- study the prevention and control of aging diseases and related technologies;
- establish sci-tech demonstration system of active health and elder-service

Relevant topics:

1. **Category I:** develop key technologies and products related to active health;
2. **Category II:** prevention and control of aging diseases and related technologies;
3. **Category III:** establish sci-tech demonstration system of active health and elder-service

RELEVANT FUNDED PROJECTS | 1. Key basic study on biological mechanism and influencing factors of health

Coordinated by: MoST, China

End date: 2022

Specific Objective: 1) To develop key technologies and products related to active health, such as accurate determination, evaluation, database of sport. 2) To establish big data cloud platform of individual health monitoring system. 3) To develop servicing products of active health.

Expected Results: Key technologies and products related to active health can be successfully developed.

Source: https://service.most.gov.cn/kjih_tztg_all/20181116/2889.html

RELEVANT FUNDED PROJECTS | 2. Development of key technologies and products related to active health

Coordinated by: MOST, China

End date: 2022

⁴³ See the paper: https://www.jst.go.jp/ristex//korei/en/03event/report/pdf/20160305_8_A.OgawaPJ_E.pdf



Specific Objective: Basic study on biological mechanism and influencing factors of health; Basic study on the variation rule of health state in the process of age-increasing.

Expected Results: Get a significant breakthrough on the key basic study on biological mechanism and influencing factors of health

Source: https://service.most.gov.cn/kjih_tztg_all/20181116/2889.html

CIHR | Canadian Institutes of Health Research



PROGRAMME | Institute of Aging



Relevant topics:

1. Planning and Dissemination Grant - Institute Community Support
2. Project Grant - PA: MSK, Skin and Oral Health: Clinical Research - MSK Health

RELEVANT FUNDED PROJECT | 1. Aging and Brain Health: Prevention and Early Detection of Dementia

Coordinated by: Baycrest Centre for Geriatric Care, CA

End date: 2019

Specific Objective: The scientific conference will focus on medical and lifestyle avenues toward the prevention and early detection of dementia. An Innovation day will be free to conference registrants, and will provide the opportunity for trainees, researchers, and clinicians to "mingle" with innovators and entrepreneurs from across Canada and around the world; and for innovators and investors to gain insight into the Canadian healthcare system, innovation ecosystems, and investment opportunities.

Expected Result: The conference organizers will write a white paper following the conference, summarizing the state of the field and making recommendations for future steps that have the greatest impact on innovation and policy, and conference speakers will be invited to contribute to a special issue of a scientific journal on the prevention and early detection of dementia.

Source: http://webapps.cihr-irsc.gc.ca/decisions/p/project_details.html?applId=392074&lang=en

RELEVANT FUNDED PROJECT | 2. Evidence-Based Fall Risk Assessment and Prevention: Identifying the Optimal Predictive Test in Older Canadians

Coordinated by: McMaster University, CA

End date: September 2019

Specific Objective: To identify the best physical test for fall risk screening in older Canadians.

Expected Result: To identify accurately older adults who are most likely to fall and who need preventative treatment. The results will be important for informing both clinical care and health policy to prevent falls in older Canadians.

Source: http://webapps.cihr-irsc.gc.ca/decisions/p/project_details.html?applId=394859&lang=en

4.2 Integrated Care: relevant funding programmes and projects

Area: INTEGRATED CARE

INTEGRATED CARE

DIRECTORATE-GENERAL | RTD



PROGRAMME | Horizon 2020-SC1: Health, demographic change and wellbeing



Relevant topics:

1. [PHC-23-2014](#) - Developing and comparing new models for safe and efficient, prevention oriented health and care systems
2. [SC1-DTH-11-2019](#) - Large Scale pilots of personalised & outcome based integrated care

RELEVANT FUNDED PROJECT | 1. Sustainable tailored integrated care for older people in Europe

Coordinated by: STICHTING VUMC, NL

End date: March 2019

Specific Objective: To improve the way care services for older adults are organised and delivered across Europe, and especially for those who have multiple health and social care needs.

Expected Result: Patient-centred, prevention oriented, efficient, resilient to crises, safe and sustainable integrated care initiatives for older people living at home with multiple health and social care needs; ensuring that improvements to the integrated care initiatives are applicable and adaptable to other health systems and regions in Europe.

Source: <https://cordis.europa.eu/project/id/634144>

RELEVANT FUNDED PROJECT | 2. PeRsOnalized Integrated CARE Solution for Elderly facing several short or long term conditions and enabling a better quality of LIFE

Coordinated by: KINETIKOS-DRIVEN SOLUTIONS LDA, PT

End date: December 2022

Specific Objective: To find the best actions/measures from a medical and social point of view that can facilitate an improved quality of life, awareness and care management for senior users suffering of neurodegenerative and/or other chronic diseases.

Expected Result: An integrated scalable and interactive care ecosystem, which can be easily adapted to the reality of several chronic diseases, care institutions and end-user requirements, benefiting all the involved actors, from patients, to caregivers and health professionals.

Source: <https://cordis.europa.eu/project/id/875221>

DIRECTORATE-GENERAL | SANTE



PROGRAMME | Third Health Programme 2014 – 2020

The EU's Third Health Program was established in 2014 with a total budget of € 449.4 million, with the aim of supporting and adding value to the health policies of EU countries, improving



the health of Union citizens and reducing health inequality.

The program represents the continuation of the European health action implemented through: eight public health programs between 1998 and 2003, the First Health Program (2003-2008), and the Second EU Program (2008- 2013) which partly shares thematic areas and priorities of program in the closing phase.

Relevant topics:

Thematic priority 3 “Contribute to innovative, efficient and sustainable health systems⁴⁴”. Actions under this priority include: (i) Support in areas related to adherence, frailty, integrated care and multi-chronic conditions (2014); (ii) Support for the implementation and scaling up of good practices in the areas of integrated care, frailty prevention, adherence to medical plans and age-friendly communities (2015); (iii) Joint Action on implementation of digitally enabled integrated person-centred care (2019).

RELEVANT FUNDED PROJECTS | Scaling Integrated Care in Context (SCIROCCO) – ID: 710033

Coordinated by: NHS 24 Scotland, UK-SCT

Start date: 01.04.2016

End date: 30.11.2018

Specific Objective: SCIROCCO aimed to develop the Maturity Model into a validated and tested self-assessment tool that will facilitate the successful scaling up and transfer of good practices in integrated care across European regions. The project explored how matching the complementary strengths and weaknesses of regions can deliver two major benefits.

Expected Results: To create a participatory tool which helps regions to:

1. Understand the strengths and weaknesses of their regional context and inform national, regional and local policy-makers about potential areas of improvement.
2. Adopt and transfer integrated care good practices by identifying their maturity requirements, thus facilitating knowledge transfer.
3. Facilitate multi-stakeholder dialogues focused on progress towards the implementation and delivery of integrated care.
4. Facilitate twinning and coaching activities between regions by helping them to understand the local conditions that enable the successful deployment of integrated care.

Through the activities of the EU Health Programme funded project SCIROCCO, the Model has been further refined and is supported by a validated online self-assessment tool for integrated care that is part of the on-going project [SCIROCCO Exchange](#). The ambition of this new project is to maximise the value and impact of the Model and Tool. The purpose of this hub is to facilitate the process of “matching” the needs of the regions with existing evidence on integrated care, good practices, tools and guidelines and thus facilitate the learning and exchange of good practices.

Source: A "Success Stories" booklet: [Health for the EU](#) collects a selection of actions funded under the third EU Health Program.

⁴⁴ Annual Work Programmes since 2003 are available here:
https://ec.europa.eu/chafea/health/bookshelf/legal-documents/index_en.htm;
https://ec.europa.eu/health/sites/health/files/funding/docs/wp2020_annex_en.pdf

DIRECTORATE-GENERAL | REGIO

**PROGRAMME | European Regional Development Fund (ERDF) – Interreg V**

It aims to strengthen regional economic and social

cohesion by investing in growth-enhancing sectors to improve competitiveness and

create jobs. The ERDF also finances cross-border co-operation projects. One of the most important funding instruments under the ERDF umbrella, indeed, is *Interreg*.

Interreg is one of the key instruments of the European Union (EU) supporting cooperation across borders through project funding. Its aim is to jointly tackle common challenges and find shared solutions in fields such as health, environment, research, education, transport, sustainable energy and more. It has a budget of EUR 10.1 billion invested in the several cooperation programmes. The period 2014 - 2020 is the fifth period of Interreg and, therefore, the programme is called *Interreg V*.

“**Interreg**” instrument is divided in four main initiatives (*families*):

1. Cross border cooperation: Interreg cross-border cooperation, known as Interreg A, supports cooperation between NUTS III regions from at least two different Member States lying directly on the borders or adjacent to them.

2. Interregional cooperation: Interreg has 4 interregional cooperation programmes, known as Interreg C: Interreg Europe, Interact, Urbact and Espon. The interregional programmes are geographically “pan-European” covering vast areas.

3. Transnational cooperation: Interreg transnational cooperation, known as Interreg B, involves regions from several countries of the EU forming bigger areas where it aims to promote better cooperation and regional development within the Union by a joint approach to tackle common issues.

4. IPA cross border cooperation: Interreg IPA CBC supports cross-border co-operation between candidate countries, potential candidate countries and EU Member States, to contribute in their accession preparations with a territorial and cross-border focus.

Relevant topics:

Thematic Objective 1: Strengthening research, technological development and innovation by promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies;

Thematic Objective 2: Enhancing access to and the use and quality of information and communication technologies by strengthening ICT applications for e-government, e-learning, e-inclusion, e-culture and e-health.

Thematic Objective 9: Promoting social inclusion, combating poverty and any discrimination, by investing in health and social infrastructure, which contributes to national, regional and local development, reducing inequalities in terms of health status, promoting social inclusion through improved access to social, cultural and recreational services and the transition from institutional to community-based services

RELEVANT FUNDED PROJECTS | 1. INTENT - Bringing patient-centred cancer care to Central Europe

Coordinated by: Masaryk Memorial Cancer Institute, CZ

End date: June 2020

Specific Objective: The INTENT project aims to find solutions for innovative patient-centered cancer care. It targets and involves various types of actors: cancer care providers, patients and policy makers. The aim is to work with these groups to create a better understanding of how to interpret the patient-centered approach and identify ways for improving cancer care in central Europe. Beyond the activities leading to an innovative cancer care model, the project will issue policy recommendations, provide an online benchmarking tool, identify priorities for improving existing systems on local level and create a virtual know-how centre.

Expected Results:

1. *Cross-cultural, patient-centred cancer care model:* a consensus-based model of patient-centred cancer care and related implementation guidelines that will guide the effective integration of services offered by the five pilot sites. It will use moderated local stakeholder panels to promote dialogue and coordination between oncology & primary care teams, patient groups and policy makers encompassing continuity of care from prevention and early diagnosis to treatment, rehabilitation & survivorship. Policy recommendations are also included for adopting the patient-centred model and guidelines.
2. *Online benchmarking tool:* the project will allow adapting a benchmarking tool & building competencies to improve patient-centered care through benchmarking, organisational change and social entrepreneurial solutions.

Source: <https://www.interreg-central.eu/Content.Node/INTENT.html>

RELEVANT FUNDED PROJECTS | 2. digitalLIFE4CE - Fostering innovation in integrated healthcare systems solutions

Coordinated by: University of Applied Sciences Burgenland, AT

End date: October 2019

Specific Objective: The digitalLIFE4CE project is looking for novel solutions in the field of digital integrated healthcare systems. The Project established a new framework to provide *policy stakeholders* with a global picture on available health care solutions and their implications; *technology solution providers* with options for joint cooperation; and *beneficiaries* with new applications and technologies. Additionally, the project did research and promoted best practice cases in so called 'Healthcare Excellence Spots' and investigated ways to increase investment in digital health start-ups and to boost innovation in healthcare systems with a need for an integrated care coordination

Expected Results:

1. IT based Tool for mapping and visualization of integrated digital healthcare solutions in order to not only identify linkages and interdependencies among actors but also to match them and stimulate transfer cases.
2. New methods to boost the RTD & innovation performance of Digital Healthcare System Actors.
3. Design, development, implementation & evaluation of CE Digital Healthcare Excellence Spots through organisation of dedicated pilots in the target regions; and to produce a *joint transnational roadmap* centered in the Excellence Spots for aligning the regional joint research and innovation agenda in digital health with a quadruple helix approach, and enlarging it to additional CE regions & their stakeholders including funding bodies, national RTD centres, ETPs, EIT/KIC, DG-SANCO and innovation agencies among others.

Source: <https://www.interreg-central.eu/Content.Node/digitalLIFE4CE.html>

**PROGRAMME | COST - European Cooperation in Science and Technology**COST Actions are **science and technology networks**

open to researchers and innovators from universities,

research centres, companies, in particular SMEs, as well as other stakeholders and relevant legal entities.

COST Actions are set up to achieve identified objectives described in the Action Memorandum of Understanding (MoU) within their **four-year** duration, centred on the sharing, creation, dissemination and application of knowledge.

RELEVANT FUNDED PROJECTS | MemoCiS - Memristors - Devices, Models, Circuits, Systems and Applications (IC1401)**Coordinated by:** University of Cyprus, CY**End date:** 2018

Specific Objectives: This Action is aimed at bringing together researchers of different backgrounds to work in unison in order to overcome multidisciplinary barriers in the area of memristors. Bringing together device designers, device modelers, circuit theorists, analogue and digital designers, neuromorphic engineers and computation scientists will enable the defragmentation of current research efforts and is likely to bring the next technological revolution.

Expected Results: The creation of the hardware basis for future self-organizing/self-programming systems will really open up a wide range of application areas and new industries, e.g. humanoid robots to look after the **elderly**, self-driven vehicles, etc.

Source: <https://www.cost.eu/actions/IC1401/#tabs|Name:overview>

NIH | NIA – National Institute on Aging**PROGRAMME | R43/R44 Small Business Innovation Research (SBIR)****Grant**

The Small Business Innovation Research Awards (SBIR) (R43/R44)

program exists to stimulate technological innovation, strengthen the role of small businesses in meeting Federal Research/Research & Development (R/R&D) needs, increase private-sector commercialization of innovations developed through SBIR R&D, and increase small business participation in R/R&D.

The objective of Phase I (R43) is to establish the technical merit and feasibility of the proposed R/R&D efforts and to determine the quality of performance of the small business awardee organization prior to providing further federal support in Phase II (R44).

The National Institute on Aging issues Small Business Research Innovation (SBIR) grants for a plethora of topics with a priority towards innovations for Alzheimer's disease

Relevant topics: PAR-17-108: Development of Socially-Assistive Robots (SARs) to Engage Persons with Alzheimer's Disease (AD) and AD-Related Dementias (ADRD), and their Caregivers (R43/R44):

In this particular call, the NIA focused on the development of "Socially Assistive Robots" that can:

1. address social connection among people with dementia (PWD);
2. integrate the robotic system with care professionals' workflow;
3. help PWD age in their own homes

Under the SBIR grant, innovative companies such as the Advanced Medical Electronics Corporation are awarded funding to develop the prototype and may apply for renewal of the grant to study the effect of the SAR system they built.

RELEVANT FUNDED PROJECTS | Social Assistive Robot Interface for People with Alzheimer's and other Dementias to Aid in Care Management

Coordinated by: Advanced Medical Electronics Corporation, USA

End date: June 2021

Specific Objective: Develop a Socially-Assistive Robot (SAR) system for persons with dementia (PWD), (mild cognitive impairment, Alzheimer's disease, or other dementias), who are living in assisted living facilities. The proposed system uses Augmented Intelligence (AI) to communicate with the PWD in natural language. The system's goals are three-fold. First, the system helps PWD transition from living in their homes to ALFs by fostering relationships and conveying schedules. Second, the system enables PWD to age in place by addressing the challenges that often lead to an escalation of care (i.e., nursing homes). Third, the system engages PWD via activities such as storytelling and simple games. We will integrate the proposed SAR system with current assistive technology, which is based on the evidence from tested, personalized psychosocial approaches to deliver non-drug intervention to improve everyday behavior, function, and quality of life in PWD.

Expected Results: Socially-Assistive Robot (SAR) system for persons with dementia (PWD).

Source: <https://www.sbir.gov/sbirsearch/detail/1686695>

MINISTRY | Ministry of Science and ICT



PROGRAMME | Electronics and Telecommunications Research Institute (ETRI)



Funded in 1976, ETRI is committed in contributing to the nation's economic and

social development through research, development and distribution of industrial core technologies in the field of Information, Communications, Electronics, Broadcasting and Convergence technologies. Its action in the R&D panorama responds to four main management principles:

- *Prepare for future growth by vitalizing creative and challenging research.*
- *Generate excellent top-tier R&D performance.*
- *Resolve the living issues of the public and expand support for SMEs.*
- *Establish a research culture that is rooted in openness, sharing, and cooperation.*

Also thanks to its Global R&D Cooperation Network, ETRI promotes excellence in these fields at national and international level, boasting of considerable achievements, especially concerning *Patent Applications & Technology Transfer* and *Standardization & SCI Papers*⁴⁵

RELEVANT FUNDED PROJECTS | CyberDX

Coordinated by: Seoul Clinical Laboratories ([SCL](#))

End date: n.a.

Specific Objective: To test a big data-based medical artificial intelligence (AI) engine to analyze medical examination data for detecting patients' risks, as an appropriate mean for prevention

⁴⁵ For further details, see: https://www.etri.re.kr/engcon/sub1/sub1_06.etri

Expected Results: CyberDX focuses on disease prevention, providing tailored analytics by comparing a patient's examination data and thousands of samples. It showed an impressive outcome in analyzing how much a patient has the risk of getting Alzheimer's disease.

Source: <https://k-erc.eu/> ; <http://test.scllab.co.kr/>

INDEPENDENT ADMINISTRATIVE INSTITUTION | AMED Japan Agency for Medical Research and Development



PROGRAMME | Research and Development Grants for Dementia

As part of the initiatives of the Division of Neurological, Psychiatric and Brain Research of AMED, the Programme promoted a research program that embodies the following policies set forth in the "comprehensive strategy to



promote dementia management measures (new orange plan)":

- *Clarification of the respective pathological conditions of diseases leading to dementia and the mechanism that causes behavioral and psychological symptoms of dementia (BPSD);*
- *Research and development into methods for preventing, diagnosing and treating dementia and dementia rehabilitation and nursing care models, and promotion of sharing of the results of such research and development;*
- *Enhancement of early-onset dementia management measures;*
- *Gathering and utilizing a large variety of information to produce big data and developing a scheme that enables residents and industrial sectors to make concerted efforts to promote initiatives as a region-wide program.*

RELEVANT FUNDED PROJECTS | Organized Registration for The Assessment of Dementia on Nationwide General Consortium Toward Effective Treatment In Japan (Orange Registry)⁴⁶

Coordinated by: National Center for Geriatrics and Gerontology, Aichi, Japan

End date: ongoing

Specific Objectives: Through the Orange Registry, AMED as a Funding Agency aims to be the first to develop new diagnosis methods, treatments, medication and care techniques to assist Japan's super-aging society. The project aimed to:

1. Establish a nationwide registry and coordination system for the clinical observation of dementia sufferers, focusing on each stage of dementia – from preclinical to mild cognitive impairment (MCI) and dementia care.
2. Develop new treatments, medications and care techniques by utilizing the accumulated data.

Among the partners of National Center of Neurology & Psychiatry: Tokyo Dementia Care Research and Training Center (care technology); Tokyo Metropolitan Geriatric Hospital and Institute of Gerontology (Itabashi cohort); National Center for Geriatrics and Gerontology, The Center for Comprehensive Care and Research on Memory Disorders (Obu cohort).

Expected results: In order to clarify therapeutic methods and care techniques, the project began to collect information from people with preclinical, mild cognitive impairment (MCI), slight, moderate and advanced dementia – as well as those without the disease. Here follows the main findings:

⁴⁶ Entitled as "Global Success" by AMED.



1. **Research showed that 21% of senior citizens, who at first appear healthy, are already at the MCI stage of dementia.** During the early stages of MCI, recovery is possible, so careful observation and access to drug trials is an essential part of the Orange Registry.
2. Registrants of **IROOP™ (Integrated Registry of Orange Plan) – an internet-based dementia study** – answer simple questionnaires and undergo cognitive functionality checkups. Data gathered at this stage is used toward the study of pre-emptive medicine and lifestyle interventions.
3. **A partner robot and an unmanned care robot** will be newly developed.
4. Other recent activities include a study into the causation of hearing loss and dementia, and the development of **an application for Behavioral and Psychological Symptoms** of Dementia in care facilities.

Data updated to 2016 confirmed 1,156 dementia sufferers and 32 dementia-related institutions have joined the Orange Registry.

Source: <https://www.amed.go.jp/en/seika/fy2018-07.html>

MINISTRY | MoST – Ministry of Science and Technology



PROGRAMME | Study on Precision Medicine / Key special program 2016-2020



China Ministry of
Science and Technology

The program focuses on the following five directions:

- Life-Omics technology development for clinical application;
- Study on large population-based cohorts;
- Platform establishment for Integration, storage, utilization, and sharing of big data for precision medicine;
- Study on precision approach of prevention, diagnosis and treatment of disease.

Based on the established of medical big data sharing platform, standardization systems of precision medicine, the population health level will be greatly improved and the rapid increase of medical expenses will be effectively controlled.

Relevant topics:

1. Life-Omics technology development
2. Precision approach of prevention, diagnosis and treatment of disease.

RELEVANT FUNDED PROJECTS| 1. Study on precision approach of prevention, diagnosis and treatment of disease

Coordinated by: MoST, China

End date: 2018

Specific Objectives: 1) To investigate the molecular classification of diseases based on various “omics”. 2) To study the approach for the precision diagnosis and treatment of diseases. 3) To evaluation of individual drug application.

Expected results: The achievement of the project can be applied in the clinic.

Source: https://service.most.gov.cn/kjih_tztg_all/20160307/894.html

RELEVANT FUNDED PROJECTS| 2. Platform establishment for Integration, storage, utilization, and sharing of big data for precision medicine

Coordinated by: MoST, China

End date: 2020

Specific Objectives: To establish the standardization systems and sharing platforms of medical big data; To establish the knowledge data of precision medicine

Expected results: In five years, the standardization systems and sharing platforms of medical big data are successfully established as well as for the knowledge data of precision medicine.

Source: https://service.most.gov.cn/kjih_tztg_all/20160307/894.htm

MINISTRY | MoST – Ministry of Science and Technology



PROGRAMME | R&D of digital equipment for diagnosis and treatment of diseases 2016-2018



China Ministry of
Science and Technology

The programme focuses on technical innovation of

image, quality control and standardization of detection (2016-2018) and the development of major equipments of detection and diagnosis (2016-2020)⁴⁷

Relevant topics:

1. **Component I:** Technical innovation of image, quality control and standardization of detection of diseases
2. **Component II:** Development of major equipments of detection and diagnosis of diseases

RELEVANT FUNDED PROJECTS | 1. Technical innovation of image, quality control and standardization of detection of diseases

Coordinated by: MoST, China

End date: 2018

Specific Objectives: To improve the technical innovation and competitive power of image, quality control and standardization of detection.

Expected results: Technical competitive power of image, quality control and standardization of detection will be greatly improved.

Source: https://service.most.gov.cn/kjih_tztg_all/20151116/730.html

RELEVANT FUNDED PROJECTS | 2. Development of major equipments of detection and diagnosis of diseases

Coordinated by: MOST, China

End date: 2020

Specific Objectives: To develop major equipments of detection and diagnosis of diseases.

Expected results: Major equipments of detection and diagnosis of diseases will be successfully developed and technical competitive power will be significantly improved.

Source: https://service.most.gov.cn/kjih_tztg_all/20151116/730.html

CIHR | Canadian Institutes of Health Research



PROGRAMME | Institute of Aging



CIHR
IRSC

Institute of
Aging
Institut du
vieillessement

Relevant topics:

1. Planning and Dissemination Grant - Institute Community Support

⁴⁷ See: https://service.most.gov.cn/kjih_tztg_all/20151116/730.html



2. Doctoral Award - Frederick Banting and Charles Best Canada Graduate Scholarships

RELEVANT FUNDED PROJECT | 1. Planning a new integrated approach to dementia care

Coordinated by: Ontario Shores Centre for Mental Health Sciences, CA

End date: August 2015

Specific Objective: To create a new integrated approach based on best practice from around the world and to bring together all stakeholder sectors including health, education, long-term care and the justice system.

Expected Result: Development of a research program to investigate how the new model could be implemented across sectors and the impact evaluated within one example region.

Source: http://webapps.cihr-irsc.gc.ca/decisions/p/project_details.html?applId=314907&lang=en

RELEVANT FUNDED PROJECT | 2. A Critical Comparative Analysis of Integrated Care Systems and Policies for Older Adults in BC and Beyond

Coordinated by: Simon Fraser University, CA

End date: October 2019

Specific Objective: To examine the current state of the home and community care system in B.C. and proposed reforms to this system, and contrast this with other regions (e.g., Denmark, Australia, other Canadian provinces) which have more integrated home and community care systems.

Expected Result: This research will help to identify successful models of integrated care systems and lessons for reforms in B.C.

Source: http://webapps.cihr-irsc.gc.ca/decisions/p/project_details.html?applId=365534&lang=en

4.3 Independent and connected living: relevant funding programmes and projects

Area: **INDEPENDENT AND CONNECTED LIVING**

INDEPENDENT
AND
CONNECTED
LIVING

DIRECTORATE-GENERAL | RTD



PROGRAMME | Horizon 2020 Framework Programme



Relevant topics:

1. [PHC-20-2014](#) - Advancing active and healthy ageing with ICT: ICT solutions for independent living with cognitive impairment
2. PHC-20-2014 - Advancing active and healthy ageing with ICT: ICT solutions for independent living with cognitive impairment

RELEVANT FUNDED PROJECT | 1. INdependent Living support Functions for the Elderly

Coordinated by: Universidad Politecnica de Madrid, ES

End date: January 2018

Specific Objective: To prolong and support independent living for elderly with cognitive impairments, through interoperable, open, personalised and seamless ICT services that support home activities, communication, health maintenance, travel, mobility and socialization, with novel, scalable and viable business models, based on feedback from large-scale, multi-country pilots.

Expected Result: An extensively test new business models for a new taxonomy of elderly with cognitive impairments, encompassing those that are clustered as “dependent”, “at risk”, “assisted” or “active” and formulating and accessing new business scenarios, such as the “user-centric”, “service provider-centric” and “data exploitation-centric” ones.

Source: <https://cordis.europa.eu/project/id/643442>

RELEVANT FUNDED PROJECT | 2. Ubiquitous iNteroperable Care for Ageing People

Coordinated by: TRILOGIS SRL, IT

End date: December 2017

Specific Objective: Improve effectiveness of the health care processes through more effective evaluation processes during the hospital-hospice recovery.

Enhance home care treatment and prevention, in order to delay cognitive impairment of elderly and possibly postpone the recovery.

Support more independent living and improve quality of life of cognitively impaired aging users

Expected Result: An open source, scalable and privacy-savvy ecosystem compatible with existing Personal Health Record systems, that can deliver novel services that can help aging people (incl. those with cognitive impairments) live independently and with dignity.

Source: <https://cordis.europa.eu/project/id/643555>



DIRECTORATE-GENERAL | REGIO



PROGRAMME | European Regional Development Fund (ERDF)



It aims to strengthen regional economic and social cohesion by investing in growth-enhancing sectors to improve competitiveness and create jobs. The ERDF also finances cross-border co-operation projects.

Relevant topics:

Thematic Objective 1: Strengthening research, technological development and innovation by promoting business investment in R&I, developing links and synergies between enterprises, research and development centres and the higher education sector, in particular promoting investment in product and service development, technology transfer, social innovation, eco-innovation, public service applications, demand stimulation, networking, clusters and open innovation through smart specialisation, and supporting technological and applied research, pilot lines, early product validation actions, advanced manufacturing capabilities and first production, in particular in key enabling technologies and diffusion of general purpose technologies;

Thematic Objective 2: Enhancing access to and the use and quality of information and communication technologies by strengthening ICT applications for e-government, e-learning, e-inclusion, e-culture and e-health.

Thematic Objective 9: Promoting social inclusion, combating poverty and any discrimination, by investing in health and social infrastructure, which contributes to national, regional and local development, reducing inequalities in terms of health status, promoting social inclusion through improved access to social, cultural and recreational services and the transition from institutional to community-based services

RELEVANT FUNDED PROJECTS | Smart Service Power (RegioStars 2017 Winner)

Coordinated by: VIVAI Software AG, DE

End date: September 2019

Specific Objective: An urban development project for promoting good practices to improve the quality of life for the elderly and people with disabilities.

Expected Results: IT solution to improve the quality of life for the elderly and people with disabilities. Smart Service Power project has developed an Internet of Things (IoT) platform – mainly accessible via natural language assistance software – for use with internet-connected sensor technologies to help the elderly live independently at home for as long as possible.

The platform can remotely monitor a person's condition in real time, predict any deterioration in their health and detect a medical emergency, and alert healthcare emergency services if help is needed. The technology assures users that medical help will be provided when they need it. The system can also predict when it might be better for a person to move into a senior care home.

Source: https://ec.europa.eu/regional_policy/en/projects/germany/smart-technology-tested-in-germany-allows-older-people-to-live-independently

DIRECTORATE-GENERAL | CONNECT

**PROGRAMME | ACTIVE AND ASSISTED LIVING (AAL)
PROGRAMME**

Funded by Horizon 2020 and national funding agencies (www.aal-europe.eu). Since 2008 to date, the specific aims of the AAL Programme

have been to: (i) Foster the emergence of innovative ICT-based products, services and systems for ageing well at home, in the community, and at work; (ii) Create a critical mass of research, development and innovation at EU level in technologies and services for ageing well, including the establishment of a favourable environment for participation of SMEs; (iii) Help create the market conditions for the industrial exploitation of healthy ageing products by providing a European framework that supports the development of standardised solutions and facilitates their adaptation to local, regional and national levels to account for varying social preferences and regulatory requirements.

RELEVANT FUNDED PROJECTS | 1. Personalizable assistive Ambient monitoring and Lighting

Coordinated by: CNR - Consiglio Nazionale delle Ricerche, IT

End date: October 2020

Specific Objective: The aim of this Project is to extend the time older people can live in their home environment by increasing their autonomy and assisting them in carrying out activities of daily living.

Expected Results: The project will provide caregivers with tools to fine-tune the behaviour of the home and its connected services in guiding the elderly in their activities:

1. Adaptively reacting to the older adults' behaviour changing the environment and available device characteristics
2. Flexibly driving attention and behaviour in reaching the older adults goals. The users can set the functionalities of the technical support to control lights and other digital devices when relevant events occur. In order to be effective for the wide diversity of users, applications should have flexible and highly personalized context-dependent behaviour.

Source: www.aal-petal.eu

RELEVANT FUNDED PROJECTS | 2. ActiveAdvice

Coordinated by: SYNNO GmbH, AT

End date: July 2018

Specific Objective: The ActiveAdvice project aims to deliver a fully functional ICT environment with specific web and mobile services for older adults and their relatives, for professionals in inclusive design and construction engineering across Europe, as well as for governments and municipalities involved in Active and Assisted Living (AAL). The ICT environment offers a holistic market overview, presenting regional, national and international AAL products and services in accordance with the needs of the end users, and combines it with a strong and integrated focus on the target market.

Expected Results: ActiveAdvice creates a novel ICT environment compromised from digital and human advisors, enhancing the information exchange and expert dialogue, as well as the technology and service uptake in the field of AAL. Through the creation of three service models tailored to the specific needs of the three target groups AAL2C, AAL2B and AAL2G, combined with the creation of an international network of Authorized Active Advisors from various business sectors related to AAL, an increased rate of awareness for and implementation of AAL solutions is reached across Europe.

Source: <https://project.activeadvice.eu/>

COST | European Cooperation in Science and Technology



PROGRAMME | COST - European Cooperation in Science and Technology



COST Actions are **science and technology networks** open to researchers and innovators from universities,

research centres, companies, in particular SMEs, as well as other stakeholders and relevant legal entities.

COST Actions are set up to achieve identified objectives described in the Action Memorandum of Understanding (MoU) within their **four-year** duration, centred on the sharing, creation, dissemination and application of knowledge.

RELEVANT FUNDED PROJECTS | SHELD-ON - Indoor living space improvement: Smart Habitat for the Elderly (CA16226)

Coordinated by: Asociacion Empresarial de Investigacion Centro Tecnologico del Muebley La Madera de La Region De Murcia, Spain

End date: October 2021

Specific Objectives: SHELD-ON aims to foster knowledge exchange and the development of a joint research agenda in terms of design and development of multifunctional indoor environments to meet the requirements of Europe's ageing population while promoting healthy and safe ageing.

Expected Results: A science and technology network where relevant actors from academic, research and industry sectors will utilise networking tools and activities to address the ageing population challenges facing Europe, helping to reduce redundancy in RDI efforts, ensure that solutions are developed with a broader set of expertise, and help refine the efforts of diverse group of researchers.

Source: <https://www.cost.eu/actions/CA16226/#tabs|Name:overview>

SECTOR/NO PROFIT | AARP Foundation



PROGRAMME | AARP Foundation



AARP is one of the most prominent organization in reimagining aging and have prioritized social inclusion for American seniors.

RELEVANT FUNDED PROJECTS | Reducing Social Isolation in Affordable Senior Housing using Voice Assistant Technology

Coordinated by: LeadingAge Center for Aging Services Technologies; AARP Foundation

End date: n.a.

Specific Objectives: to investigate the viability of using hands-free, voice-activated technology to maintain sustained social connectedness for low-income older adults, age 50+, living in independent housing or federally subsidized rental properties.

Expected Results: A Case study to assess the impact of voice activated technology on social interaction and loneliness. Partners studied 59 participants and found that voice-activated tech increased the participants' social interaction score and subjective social support score as well as decreased their loneliness score. The pilot study served as the foundation for the Connected Communities program, which seeks to expand this model to more senior living facilities.

Source: www.connectedcommunities.aarpfoundation.org

MINISTRY | Ministry of Science and ICT**PROGRAMME | NRF Programmes - National Research Foundation of Korea (NRF)**

The NRF intends to set the direction of the nation's basic and applied research across all academic disciplines, lead changes in future-oriented research ecosystems, and become a platform and facilitator of interaction among universities, research institutes and researchers. Several Funding Programmes are under the *Directorate for Basic Research in Science & Engineering* of NRF, that is committed to supporting researchers in S&E to create knowledge and original technology that contribute to general society and human progress based on their creative ideas and relentless pursuit of knowledge.

Among NRF [Funding Programmes](#), here follow some details about the strand **Medical Research Center (MRC)**, as part of the Group Research Programme:

- **Objective:** 1. Develop core research areas with global competitiveness and improve national basic research capacity by discovering and fostering outstanding research groups with creativity and excellence; 2. Produce next-generation creative and convergent researchers through group research and create quality jobs for young researchers.
- **Research areas:** Basic medical science
- **Eligibility:** University research groups with 10-15 researchers
- **Summary:** Identify human life phenomena and disease mechanisms and strengthen national bio and health research capacity by fostering research groups in basic medical science at medical, dental and oriental medicine schools
- **Projects duration:** Up to 7 years
- **Funding:** Annually up to 1,400 million KRW.

RELEVANT FUNDED PROJECTS | 1. Highly Sensitive and Wearable Liquid Metal-Based Pressure Sensor for Health Monitoring Applications

Coordinated by: Micro and Nano Transducers Lab (MINT) Group, Korea Advanced Institute of Science and Technology (KAIST)

End date: 2019

Specific Objective: To explore the potential of wearable soft pressure sensors for the real-time monitoring of health status and for the early diagnosis of disease.

Expected Results: Wearable pressure sensors capable of sensitive, precise, and continuous measurement of physiological and physical signals have great potential for the monitoring of health status and the early diagnosis of diseases. This work introduces a 3D-printed rigid microbump integrated liquid metal-based soft pressure sensor (3D-BLiPS) for wearable and health-monitoring applications.

Source: [http://mintlab1.kaist.ac.kr/paper/\(88\).pdf](http://mintlab1.kaist.ac.kr/paper/(88).pdf) ; <https://k-erc.eu/>

RELEVANT FUNDED PROJECTS | 2. Memowatch

Coordinated by: Huinno

End date: n.a.

Specific Objective: Memowatch was one of several items included in a regulatory sandbox approved by the Ministry of Science and ICT on Feb. 14 in the first meeting of a national committee on new technologies and services.

Expected Results: A wearable electrocardiogram-measuring device that sends a patient's data to his or her doctor who will be able to instruct the user to eventually come to the hospital for medical assistance.

Huinno had developed the Memowatch in 2015 but it could not release the product on the market because of regulatory issues. On this regards, the *regulatory sandbox* introduce a tool promoted by the government to address regulatory issues. "(...) The South Korean government has been promoting the concept of a regulatory sandbox as one of the key measures to encourage startups and to foster new growth engines. The idea is aimed at allowing companies to set their eyes on new industries to operate freely from excessive regulations. Under the plan, the government will first provide companies with information on whether their new businesses collide with regulations in 30 days when requested. (...) If the government does not respond within the deadline, the firms can assume there are no existing rules covering the enterprise. (...) The government allocated 2.89 billion won (\$2.58 million) and 2.81 billion won to the Ministry of Trade, Industry and Energy and Ministry of Science and ICT, respectively, to carry out related tests and help companies find new markets. The Financial Services Commission was also given 4 billion won".

Source: <https://k-erc.eu/>; <http://www.koreaherald.com/view.php?ud=20190110000327>

POLICY IMPLEMENTATION AGENCY | JST - Japan Science and Technology Agency



PROGRAMME | RISTEX > Designing a Sustainable Society through Intergenerational Co-creation

RISTEX 社会技術研究開発センター
Research Institute of Science and Technology for Society

The Programme is primarily oriented to clarify how intergenerational co-creation is effective in achieving sustainability in cities and regions. By "co-creation", the Programme means a cooperative activity to create something together, *rather than simply allowing one generation to take care of the other*. What it is expected to be created are not necessarily physical products, but could well include values such as improvement in health or well-being, and reduction in fiscal deficit or environmental burden⁴⁸.

RELEVANT FUNDED PROJECTS | Development of Mobility Assist System for the People with Visual Impairment by Collaborative Creation of Multiple Generations

Coordinated by: Department of Information Technology and Human Factors, National Institute of Advanced Industrial Science and Technology (AIST)

End date: November 2017

Specific Objective: This project aims at establishing a new type of mobility assist system that enables collaborative and mutual assistance between the visually impaired of multiple generations.

⁴⁸ 16 projects are in progress across the country in the R&D focus area "Designing a Sustainable Society through Intergenerational Co-Creation": Further details at: <https://www.jst.go.jp/ristex/i-gene/en/>

Expected Results: A navigation system that allows a general-purpose mobile terminal carried by the visually impaired to collect information automatically on possible barriers to walking and share information through a cloud service. Such information can replace what local volunteers have collected and generate big data in the cloud for sharing and distribution in real time. In addition, based on local experimental demonstrations, methods of designing local communities made distinct by mobility assistance for the visually impaired of multiple generations will be established, and institutionalization of such schemes through legislation and standardization will be promoted.

Source: https://www.jst.go.jp/ristex//i-gene/en/projects/h26/project_h26_2_en.html

MINISTRY | MoST – Ministry of Science and Technology



PROGRAMME | Sci-tech countermeasures for population aging / Key special program for Aged Society 2018 - 2022



China Ministry of Science and Technology

The Program aims to:

- study key basic biological mechanism and influencing factors of health;
- develop key technologies and products related to active health; study the prevention and control of aging diseases and related technologies;
- establish sci-tech demonstration system of active health and elder-service⁴⁹

RELEVANT FUNDED PROJECTS | 1. Cloud platforms of big data for individual health monitoring

Coordinated by: MoST, China

End date: 2022

Specific Objective: To develop and establish cloud platforms of big data for individual health monitoring including model standards, software development, and the application.

Expected Results: The cloud platforms can be successfully established and applied as demonstration application.

Source: https://service.most.gov.cn/kjih_tztg_all/20181116/2889.html

RELEVANT FUNDED PROJECTS | 2. Traditional Chinese Medicine based health service products and service packages for the elders

Coordinated by: MOST, China

End date: 2022

Specific Objective: To develop equipments for collecting TCM information, to develop TCM service products and packages for the elders.

Expected Results: At least 3 types of equipments for collecting TCM information will be successfully developed. At least 3 TCM service products and 6 packages for the elders will be developed.

Source: https://service.most.gov.cn/kjih_tztg_all/20181116/2889.html

CIHR | Canadian Institutes of Health Research

⁴⁹ See: https://service.most.gov.cn/kjih_tztg_all/20181116/2889.html



PROGRAMME | Institute of Aging

Relevant topic: Emerging Team Grant:
Alliances in Mobility in Aging



**CIHR
IRSC** | Institute of
Aging
Institut du
vieillessement

RELEVANT FUNDED PROJECT | CP2M: Continuous, Contextual, Proactive and Personalized Supporting Technology for Mobility in Aging

Coordinated by: Université de Sherbrooke, CA

End date: November 2010

Specific Objective: To provide the opportunity for older people, with and without cognitive deficits, to be more independent in their everyday life activities and to stimulate their mobility indoor and outdoor by offering them a complete technological package develop to meet their needs.

Expected Result: A novel and multidimensional assistive system (CP2M) that could continuously monitor all the behaviors in the elder s mobility, and provide different types of proactive services and interventions (cognitive stimulation, ...) tailored to the needs of the elderly, and also automatically detect and prompt the potential dangerous/critical situations, such as panic attacks, to ensure the elder s security and confidence of moving independently. The multi-disciplinary assistive solution will enhance the quality of life of elderly and their caregivers as well as relieving some of the escalating burden on the social and health services.

Source: http://webapps.cihr-irsc.gc.ca/decisions/p/project_details.html?applId=196726&lang=en

4.4 Inclusive living: relevant funding programmes and projects

Area: **INCLUSIVE LIVING**

INCLUSIVE
LIVING

DIRECTORATE-GENERAL | RTD



PROGRAMME | Horizon 2020-SC1: Health, demographic change and wellbeing



Relevant topics:

[SC1-PM-14-2016](#) - EU-Japan cooperation on Novel ICT Robotics based solutions for active and healthy ageing at home or in care facilities

RELEVANT FUNDED PROJECT | Culture Aware Robots and Environmental Sensor Systems for Elderly Support

Coordinated by: Università degli Studi di Genova, IT

End date: January 2020

Specific Objective: To design the first robots that can assist older people and adapt to the culture of the individual they are taking care of. The robots help the users in many ways including reminding them to take their medication, encouraging them to keep active, helping them keep in touch with family and friends. Each action is performed with attention to the older person's customs, cultural practices and individual preferences.

Expected Results: To provide culturally competent care robots, able to autonomously re-configure their way of acting and speaking, when offering a service, to match the culture, customs and etiquette of the person they are assisting. It offers elderly clients a safe, reliable and intuitive system to foster their independence and autonomy, with a greater impact on quality of life, a reduced caregiver burden, and an improved efficiency and efficacy.

Source: <https://cordis.europa.eu/project/id/737858>

DIRECTORATE-GENERAL | SANTE



PROGRAMME | Third Health Programme 2014 – 2020

The EU's Third Health Program was established in 2014 with a total budget of € 449.4 million, with the aim of supporting and adding value to the health policies of EU countries, improving



the health of Union citizens and reducing health inequality.

The program represents the continuation of the European health action implemented through: eight public health programs between 1998 and 2003, the First Health Program (2003-2008), and the Second EU Program (2008- 2013) which partly shares thematic areas and priorities of the program in the closing phase.

RELEVANT FUNDED PROJECTS | Healthy Ageing Supported by Internet and the Community (HASIC)

Coordinated by: Turku University of Applied Sciences, FI

End date: July 2016

Specific Objective: 1) To develop and pilot HASIC education and handbook for professionals and volunteers to support older people's healthy lifestyles. 2) To develop and pilot health and well-being promoting peer group activities and mentoring for 65+ target group. 3) To develop and pilot the online platform, through which older people will get virtual support for obtaining or maintaining healthy lifestyle. 4) To promote regional cooperation between services providers in order to enhance the quality and cost-effectiveness of the services

Expected Results: The main outcome of HASIC will be increased empowerment, self-management and adoption of healthier lifestyles among older people in Europe. The project promotes knowledge, skills and tools for older people to adopt and maintain healthy diet, physical activity, moderate alcohol consumption and social participation. In consequence of adopting healthy lifestyles, the quality of life will improve. In the long run targeting resources to preventive work will restrict the growth of the social and health care costs by reducing the need of expensive services and supporting later retirement.

In addition, several concrete tools will be developed for the preventative work in future. HASIC handbook will guide professionals how to use voluntary mentors and peer groups efficiently in older people's health promotion. Online platform will help older people to maintain healthier lifestyle even after the project. Policy recommendations produced in HASIC will direct regional services for the elderly.

Source: <http://www.hasicproject.eu/en>. A "Success Stories" booklet: [Health for the EU](#) collects a selection of actions funded under the third EU Health Program

DIRECTORATE-GENERAL | CONNECT



PROGRAMME | [IoT-Large Scale Programme \(LSPs\)](#)

LSPs are goal driven initiatives that will propose Internet of Things (IoT) approaches to specific real-life industrial/societal challenges addressed in the IoT Focus Area of the Horizon 2020



Work Program 2016-2017. The areas include smart living environments for ageing well, smart farming and food security, wearables for smart ecosystems, reference zones in EU cities and Autonomous vehicles in a connected environment.

Relevant topics: [2016 / 2020] - H2020; IoT-01-2016: Large Scale Pilots; IoT-02-2016: IoT Horizontal activities

RELEVANT FUNDED PROJECTS | 1. ACTIVAGE - ACTivating InnoVative IoT Smart Living Environments for AGEing well

Coordinated by: Medtronic Ibérica, ES

End date: May 2020

Specific Objective: ACTIVAGE IoT Ecosystem Suite (AIOTES), a set of Techniques, Tools and Methodologies for interoperability at different layers between heterogeneous IoT Platforms and an Open Framework for providing Semantic Interoperability of IoT Platforms for AHA, addressing trustworthiness, privacy, data protection and security.

Expected Results: ACTIVAGE has rolled out IoT infrastructures and AHA services and is currently integrating the AIOTES in 9 cities in Europe, where almost 3.000 users are currently receiving AHA services from local or regional providers and will continuously grow up to 7.000 in next 6 months.

Source: www.activageproject.eu

RELEVANT FUNDED PROJECTS | 2. U4IoT - User Engagement for Large Scale Pilots in the Internet of Things

Coordinated by: Lulea Tekniska Universitet, SE

End date: January 2020

Specific Objective: It will enable a citizen-driven process by combining multidisciplinary expertise and complementary mechanisms from the European state-of-the-art. It will also analyse societal, ethical and ecological issues related to the pilots in order to develop recommendations for tackling IoT adoption barriers, including educational needs and skill building.

Expected Results: The activities are supporting communication, knowledge sharing and dissemination with an online portal and interactive knowledge base gathering the lessons learned, FAQ, tools, solutions and end-user feedbacks.

Source: www.u4iot.eu

DIRECTORATE-GENERAL | REGIO



PROGRAMME | European Social Fund (ESF)



The European Social Fund (ESF) is part of the Cohesion Policy of the EU and it invests in people, with a focus on improving employment and education opportunities. It also aims to help disadvantaged people at risk of poverty or social exclusion. Thus, the programme will contribute to the Europe 2020 Strategy, primarily focusing on the inclusive growth dimension. Concerning IDIH areas of intervention, ESF supports active and healthy ageing through innovative forms of work, mainly by the implementation of training programmes and employee motivation programmes⁵⁰.

Relevant topics: Among the four thematic objectives (TO) of the Cohesion Policy upon which the ESF is built, 2 are particularly relevant in the framework of IDIH:

1. *TO 9: Promoting social inclusion, combating poverty and any discrimination*
2. *TO 10: Investing in education, training, and vocational training for skills and life-long learning*

RELEVANT FUNDED PROJECTS | 1. Motiv8

Coordinated by: Jigsaw Group - Manchester Athena (Athena), UK

End date: 2019

Specific Objective: The project especially targets people who are under-represented in the labour market: people who are lesbian, gay, bisexual or transgender; ex-offenders; ethnic minorities; migrant communities and people over 50. Motiv8 works with each individual to come up with a tailored support package that helps him or her to address his or her issues and access further support. Eventually, they can start thinking about employment, training or volunteering.

Expected Results: Identify a support package to improve access to services and help improve self-confidence, self-esteem, health and wellbeing, finances and employability skills to move people closer towards job search, training and employment

Source: <http://www.motiv8mcr.org/>

⁵⁰ See: <https://www.gov.uk/news/2019-10-01-contribution-of-the-european-social-fund-to-active-and-healthy-ageing/>

RELEVANT FUNDED PROJECTS | 2. CLDS 3G Bragança - Santos Mártires Parish Social Centre of Bragança

Coordinated by: Santos Mártires Parish Social Centre of Bragança, PT

End date: 2018

Specific Objective: The Local Social Development Contracts Program (CLDS) was developed to foster social inclusion and combat persistent poverty by supporting people from Bragança, a densely populated area in northern Portugal, in three areas: Employment, Training and Qualifications; Family and Parental Intervention to Prevent Child Poverty; and Empowering the Community and Institutions.

Expected Results: Among the other, the Seniors' Support Office, one of a number of CLDS activities which improve citizens' social inclusion.

Source: <https://www.brigantia.pt/noticia/clds-3g-de-braganca-ajudou-integrar-60-pessoas-em-postos-de-trabalho-e-criar-3-empresas>

COST | European Cooperation in Science and Technology



PROGRAMME | COST - European Cooperation in Science and Technology



COST Actions are **science and technology networks** open to researchers and innovators from universities,

research centres, companies, in particular SMEs, as well as other stakeholders and relevant legal entities.

COST Actions are set up to achieve identified objectives described in the Action Memorandum of Understanding (MoU) within their **four-year** duration, centred on the sharing, creation, dissemination and application of knowledge.

RELEVANT FUNDED PROJECTS | ROSEnet - CA15122 - Reducing Old-Age Social Exclusion: Collaborations in Research and Policy (ROSEnet)

Coordinated by: National University of Ireland Galway, IE

End date: April 2020

Specific Objectives: This Action aims to overcome fragmentation and critical gaps in conceptual innovation on old-age exclusion across the life course, in order to address the research-policy disconnect and tackle social exclusion amongst older people in Europe. The action will engage with researchers and policy stakeholders to develop shared understandings and to direct the development of new policy and practice interventions that can be practically and effectively implemented, for reducing exclusion in diverse European ageing societies

Expected Results: The Action will establish an innovative participatory, interdisciplinary and cross-European collaboration that will: (1) synthesise existing knowledge; (2) critically investigate the construction of life-course old-age exclusion (3) assess the implications of old-age exclusion across the life course; (4) Develop new conceptual frameworks on old-age exclusion; and (5) identify innovative, and implementable, policy and practice for reducing old-age exclusion

Link: <https://www.cost.eu/actions/CA15122/#tabs|Name:overview>

NIH | NIA – National Institute on Aging**PROGRAMME | Social Psychology, Personality and Interpersonal Processes Study Section (SPIP)**

The Social Psychology, Personality and Interpersonal Processes (SPIP)

Study Section reviews applications examining the social contextual factors in individual health outcomes, addressing social and psychological aspects of health and well-being across the lifespan. Emphasis is on conceptual frameworks that highlight the role of biopsychosocial processes, personality characteristics, and/or social mechanisms on individuals' health behavior, risk prevention, treatment adherence, and health outcomes. An illustrative set of disciplines that may be reviewed in this study section includes, but is not limited to social psychology, personality psychology, sociology, and social and affective neuroscience. Applications must focus on human behavior.

Relevant topics: Biobehavioral and Technological Interventions to Attenuate Cognitive Decline in Individuals with Cognitive Impairment or Dementia (R01), launched through the Funding Opportunity Announcement (FOA) n° PA-15-01. The applicants were invited to address:

1. The determinants and consequences of stigma, stereotyping, acculturation and discrimination on health behaviors at the individual level;
2. The influence of family, peers and/or health providers on health-related decision-making at the individual level;
3. The interaction of social, emotional, attitudinal, and physical changes regarding elder care and caregiving;
4. Interventions to improve subjective well-being, stress resilience, psychosocial functioning, intellectual functioning, and quality of life in individuals at-risk for health disparities (including racial, ethnic, and sexual minorities).
5. Interpersonal aspects of health, including family interventions, parenting, and marital functioning, in individuals at risk for physical, emotional, and psychosocial problems.

RELEVANT FUNDED PROJECTS | i-Conect: Internet-Based Conversational Engagement Clinical Trial

Coordinated by: Oregon Health & Science University, USA

End date: October 2020

Specific Objective: Faced with an aging population and a growing number of people with Alzheimer's disease (AD), delaying the onset of AD for a few years could result in a large reduction of the prevalence. After a successful completion of the i-CONect team's previous pilot project funded by the NIH R01 mechanism (a conversation-based social interaction cognitive stimulation protocol delivered by trained interviewers through personal computers, webcams, and a user-friendly interactive Internet interface with a touch screen), this proposed Phase I study **examines conversational engagement as a means to improve cognitive functions among subjects aged 75 and older with Mild Cognitive Impairment (MCI) and limited opportunities of social interactions.**

Expected Results: Clinical trial of 160 MCI subjects to evaluate the efficacy of the conversation-based social interaction cognitive stimulation protocol, whether the intervention could lead to changes in speech characteristics over time by analyzing recorded daily conversational sessions, and underlying mechanisms of efficacy by assessing pre- and post- trial changes in amygdala volume and other ROIs using MRI and unbiased whole brain assessment (voxel-based morphometry), and structural and functional connectivity between amygdala and superior temporal sulcus using diffusion tensor imaging (DTI) and resting state fMRI (R-fMRI).

The i-Conect clinical study (Phase I) is funded by the National Institute on Aging to determine whether increasing social interaction through face-to-face video chat conversations could improve cognitive function in seniors 75+ who are socially isolated. Prior to this study, the NIA had awarded a separate grant to Dr. Dodge to implement a 6 week randomized controlled trial (<https://doi.org/10.1016/j.trci.2015.01.001>) to study the effect of social interaction (via personal computers, webcams, and a user friendly interface) on cognitive function. The previous study found that daily conversations via user-friendly Internet communication programs demonstrated high adherence. Among cognitively intact, the intervention group showed greater improvement in tests of language-based executive functions. Increasing daily social contacts through communication technologies could offer cost-effective home-based preventions. Therefore, the NIA granted funding to continue this study with a longer duration of follow-up.

Source: www.i-conect.org

POLICY IMPLEMENTATION AGENCY | JST - Japan Science and Technology Agency



PROGRAMME | RISTEX > Designing a Sustainable Society through Intergenerational Co-creation

RISTEX 社会技術研究開発センター
Research Institute of Science and Technology for Society

The Programme is primarily oriented to clarify how intergenerational co-creation is effective in achieving sustainability in cities and regions. By “co-creation”, the Programme means a cooperative activity to create something together, rather than simply allowing one generation to take care of the other. What it is expected to be created are not necessarily physical products, but could well include values such as improvement in health or well-being, and reduction in fiscal deficit or environmental burden.

RELEVANT FUNDED PROJECTS | Development of an Intergenerationally Co-creative Community Model of Work-Life Integration

Coordinated by: Faculty of Regional Sciences, Tottori University

End date: March 2020

Specific Objective: To create a means of living in hilly and mountainous areas by combining self-sustaining and self-employed forestry which takes advantage of local forests, the most valuable resources, with a wide variety of other possible jobs engaging the community intergenerationally.

Expected Results: The project will create a mechanism in which there are mutual aids in community and support for young people returning or migrating, to establish a means to live with guidance from the elderly. In order to support these activities, the project will foster tacit knowledge in the community towards “social knowledge” and make it available to everyone using ICT. At the same time, the research team will train “support designers” who can create new values locally.

Source: https://www.jst.go.jp/ristex//i-gene/en/projects/h28/project_h28_5_en.html

MINISTRY | MoST - Ministry of Science and Technology**PROGRAMME | Sci-tech countermeasures for population aging / Key special program for Aged Society 2018 – 2022****China Ministry of Science and Technology**

The Programme aims to:

- study key basic biological mechanism and influencing factors of health;
- develop key technologies and products related to active health;
- study the prevention and control of aging diseases and related technologies;
- establish sci-tech demonstration system of active health and elder-service⁵¹

RELEVANT FUNDED PROJECTS | 1. Comprehensive technical systems for rehabilitation of the elders

Coordinated by: MoST, China

End date: 2022

Specific Objective: To establish the complete period rehabilitation service including clinical treatment, rehabilitation in organization, community and family, and monitoring; to develop the evaluation systems.

Expected Results: the complete period rehabilitation service including clinical treatment, rehabilitation in organization, community and family, and monitoring will be established and the evaluation systems will be successfully developed.

Source: https://service.most.gov.cn/kjih_tztg_all/20181116/2889.html

RELEVANT FUNDED PROJECTS | 2. Solutions to combination of medical and health care

Coordinated by: MoST, China

End date: 2022

Specific Objective: To investigate various models of combination of medical and health care and service specification.

Expected Results: At least 2 types of combination of medical and health care will be established. Service standards and procedure, and evaluation system can be established.

Source: https://service.most.gov.cn/kjih_tztg_all/20181116/2889.html

⁵¹ See: https://service.most.gov.cn/kjih_tztg_all/20181116/2889.html



CIHR | Canadian Institutes of Health Research



PROGRAMME | Institute of Aging



CIHR
IRSC | Institute of
Aging
Institut du
vieillessement

Relevant topic:
Operating Grant

RELEVANT FUNDED PROJECT | A Multi-Site Trial of the Impact of Assistive Technology with Individuals with Mobility Limitations and their Caregivers ⁵²

Coordinated by: CIUSSS du Centre-Sud-de-l'Île-de-Montréal - Gériatrie, CA

End date: September 2014

Specific Objective: To provide an assistive technology intervention aimed at the inclusive of assistance users and their caregivers. This intervention involves a detailed in-home assessment of the person's current assistive technology, the negotiation of a personal assistive technology plan with the person and his/her caregiver, and the timely provision of devices and training.

Expected Results: The experimental intervention will:

1. Increase the daily activity and social participation of assistance users
2. Reduce the amount of caregiver assistance required
3. Decrease the physical and psychological demands on caregivers.

The evidence produced by this study will enable service providers to offer assistive technology interventions that are more attuned to the needs of both individuals with mobility limitations and their caregivers and enable providers to lobby for better funding for equipment and follow-up intervention services.

Source: http://webapps.cihr-irsc.gc.ca/decisions/p/project_details.html?applId=212135&lang=en



IDIH

INTERNATIONAL COLLABORATION
DIGITAL TRANSFORMATION
HEALTHY AGEING

⁵² http://webapps.cihr-irsc.gc.ca/decisions/p/project_details.html?applId=212135&lang=en