



The EU support to the Silver Economy

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Health Directorate
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- ❖ **The EU: How does it work?**
- ❖ **Challenges in ageing and in the silver economy**
- ❖ **Research on ageing at EU level: How does it work?**
- ❖ **Horizon 2020 and the Health, Demographic change and wellbeing challenge**





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EU structure



<http://ec.europa.eu/>



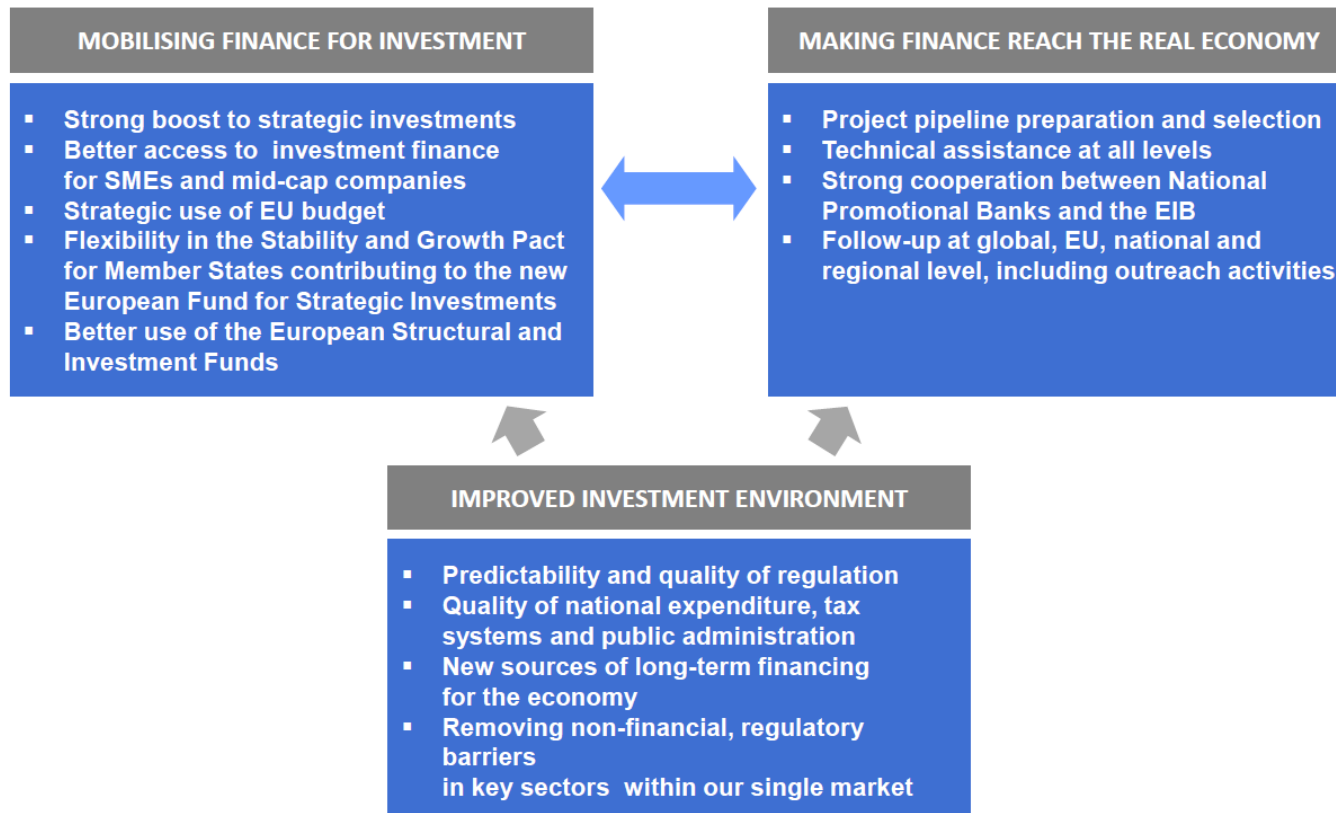
<http://consilium.europa.eu/>



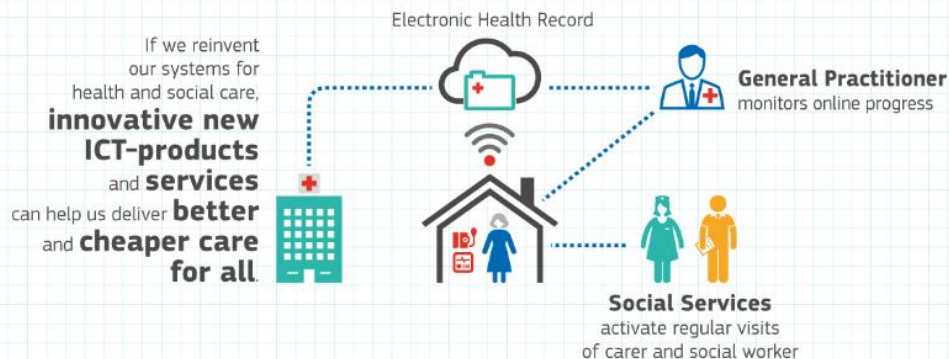
<http://europarl.europa.eu/>



European Fund for Strategic Investments: Unlock public and private investments with €315 billion (2015-2017)



Silver Economy: Economic potential linked to ageing



Active and healthy ageing offers also **great opportunities**.
If we are prepared to change our systems for health and social care, we can benefit from those.

Today **Europeans over 65** have a **spending capacity** of **over €3,000 billion**.

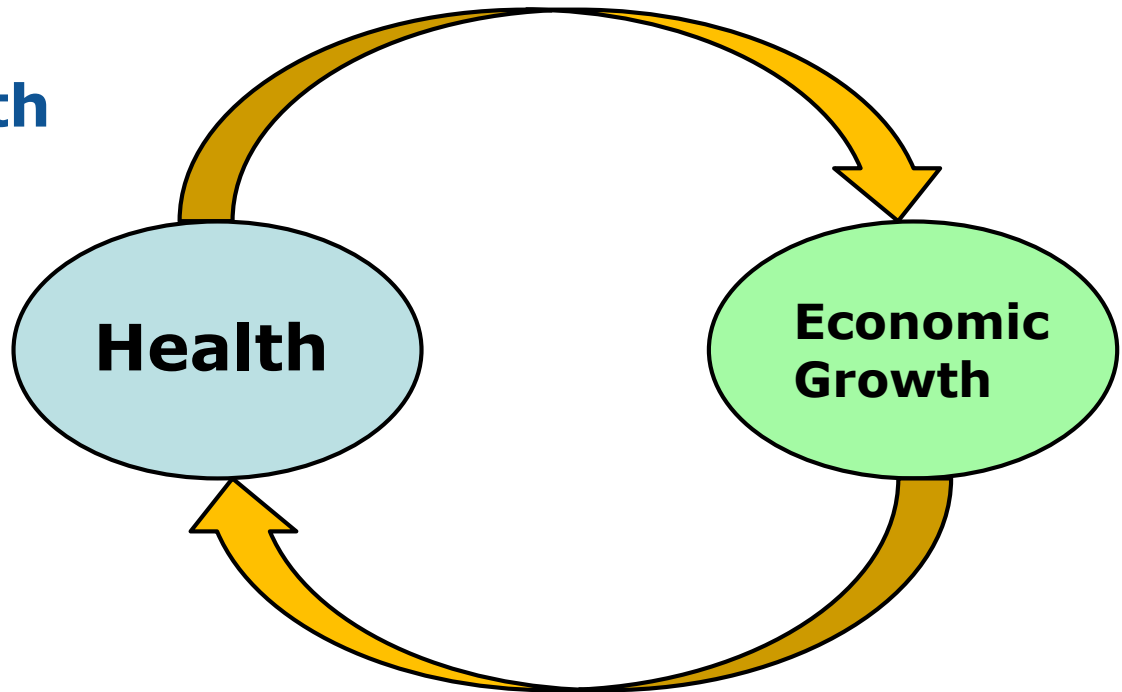


- **Opportunity to reform health and care systems to achieve more performing and less expensive services**
 - e.g. use of ICT for telemonitoring, exchange of data between care professionals
- **The ageing "Babyboomers" consume goods and services to maintain an active, autonomous and healthy lifestyle**
 - e.g. tourism, entertainment, health & well-being, lifelong learning, smart age-friendly homes

Health and Growth are linked

- **Need actions on both fronts:**
 - **Health &**
 - **Economic Growth**

- **Ageing population:**
 - ✓ **Challenge &**
 - ✓ **Opportunity**



Specificity

- Age as a risk factor for NCD
- Chronicity: life long lasting diseases
- Independent living/functions

Pressure

- Health care system
- Access to care, including within country
- Ageism: stereotyping based on age



Complexity

- Pathophysiology
- Environment
- Socio-economic
- Co-morbidity
- Diversity in older age

Expanding

- A global health issue
- Forcing global poverty



Making the silver economy a gold mine

- The "Silver Economy" can be defined as the economic opportunities arising from the public and consumer expenditure related to population ageing and the specific needs of the population over 50.
- The ageing population can be divided in 3 groups, each with their own need-patterns: active, fragile and dependent.
- The Silver Economy is driven both by the emergence of new consumer markets and by the need to improve the sustainability of public expenditure linked to ageing.

Demographic Change



From Societal challenge

To Major Opportunity



Dependency Ratio

From 1:4 to 1:2
80+ doubles by
2025



Empowerment
Active Ageing

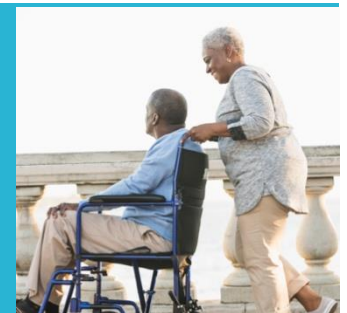
Cost of Health & Care

Up 3-4 % GDP
by 2025



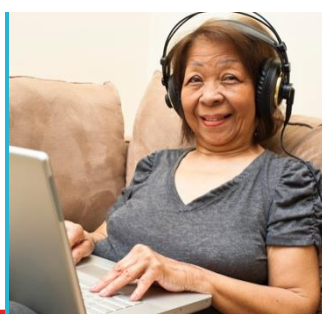
New Care Models

Home based
Integrated care
Large Efficiency gains



Human Resources

Shrinking work
force
Lacking 20 million
carers by 2025



Growth and Markets

3000 B€ wealth
85 Million Consumers
– and growing

Key messages

- Older people spend more on healthcare services, on recreation and culture, on furnishings and household items.
- 60% of all healthcare spending (public and private) will be from the Silver Economy in 2025.
- By 2020 the size of the global connected health market will be close to €58.7b.
- The global market for ICT solutions for healthcare monitoring in private homes is expected to grow from nearly €10.7b in 2016 to roughly €31.5 by 2021
- Baseline forecast is for total Silver Economy consumption to grow by approximately 5% per year up to 2025 to €5.7 trillion.



Silver Economy: A cross cutting issue

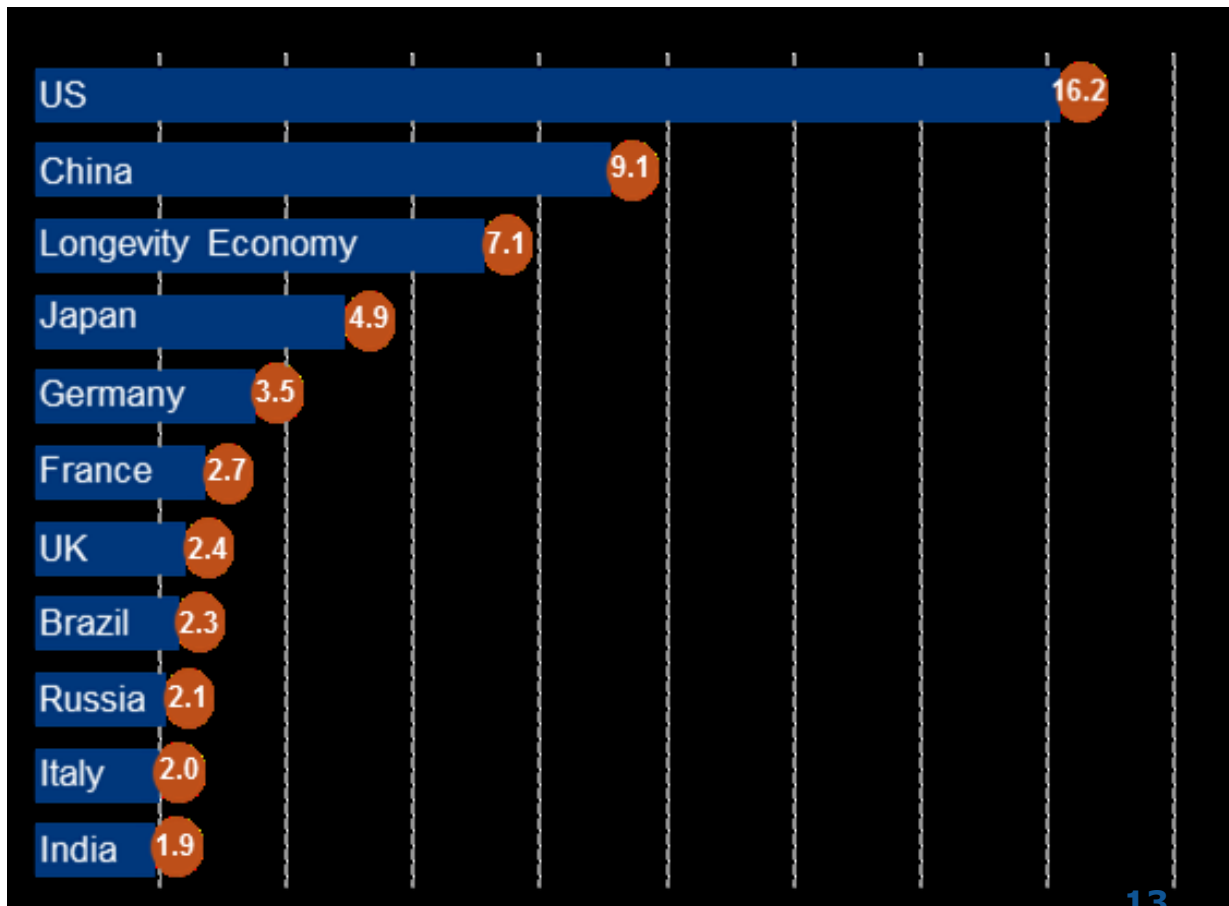


- **Age friendly homes & independent living**
- **Age friendly tourism**
- **Scaling up innovative care services in active and healthy ageing**
- **Digital skills for carers**
- **Upscaling skills and boosting employment in healthcare sector**
- **Integrated and personalised health and care for the elderly**



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Silver economy on a global scale (2012 GDP, US\$tn)

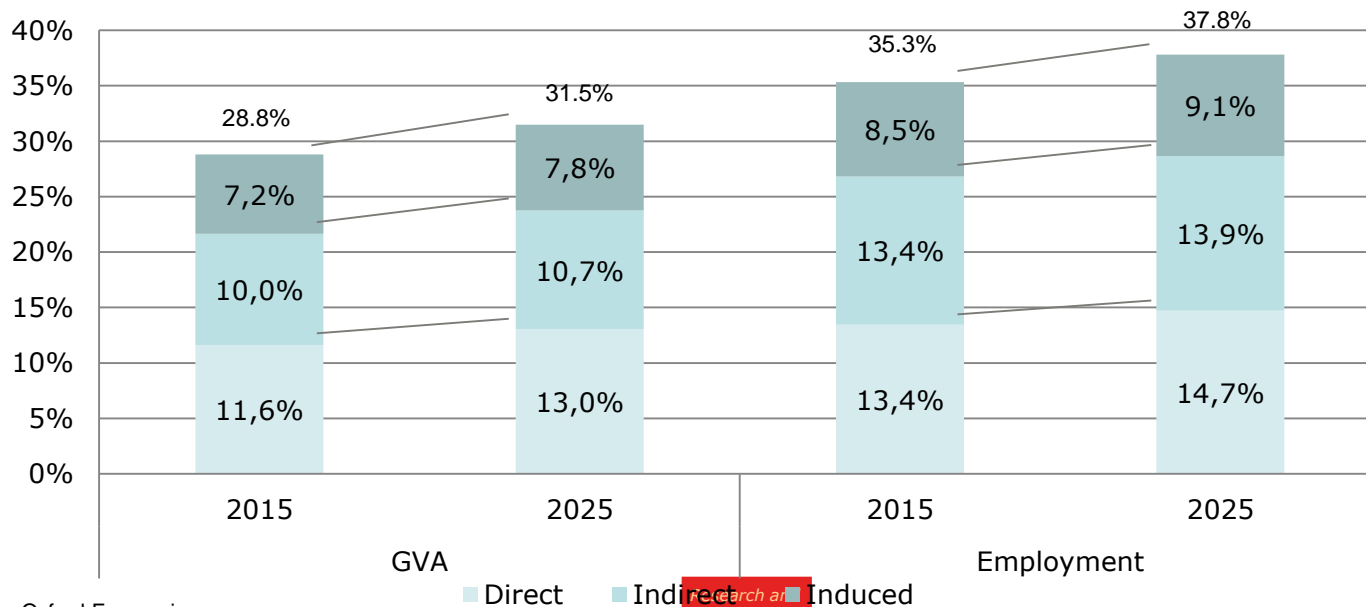


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Potential size of the EU Silver Economy 2015-2025

Economic contribution of the 50+ to the Silver Economy in the EU28 in 2015

- **Direct impact: €1.7 trillion**
- **Indirect impact: €1.5 trillion**
- **Induced impact: €1.0 trillion**
- **Total: €4.2 trillion & 78 million jobs**



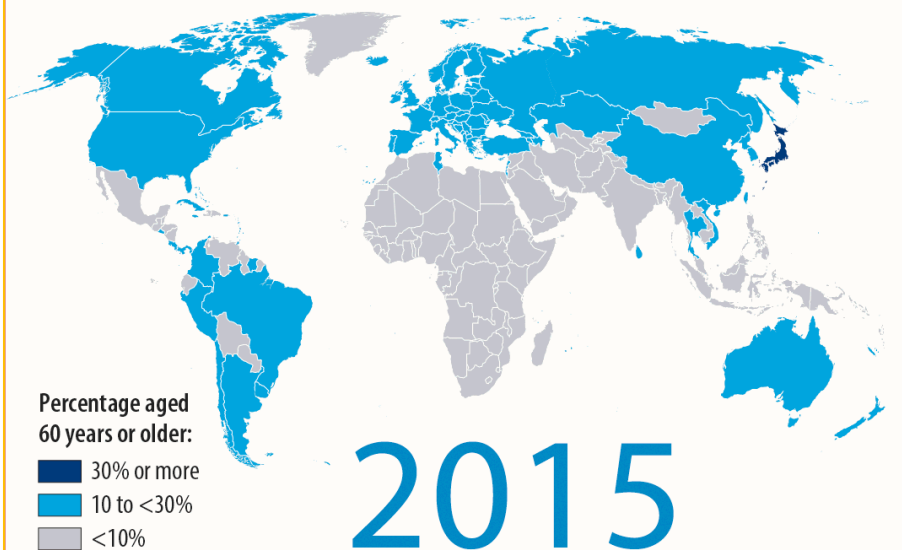
A global challenge



Ageing and Health

#yearsahead

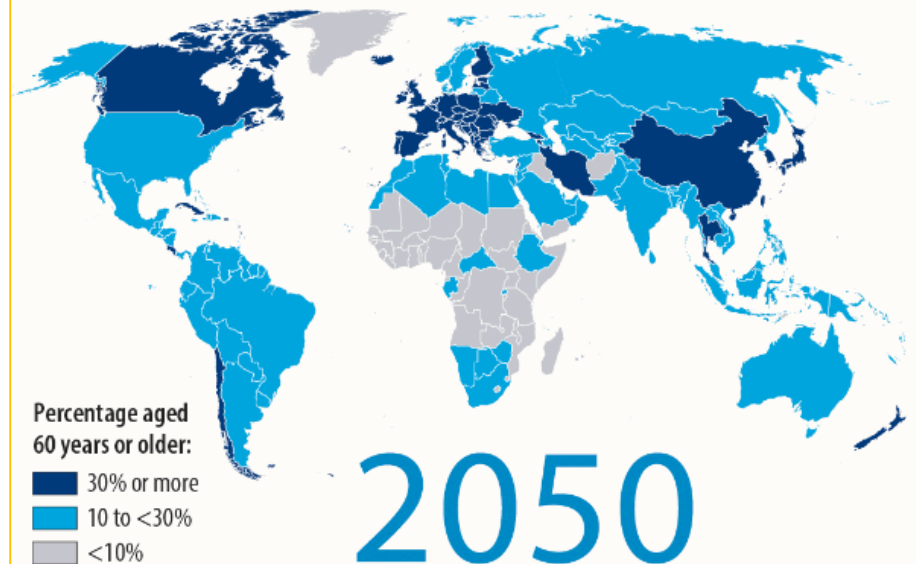
Populations are getting older



Ageing and Health

#yearsahead

Populations are getting older



The EU Silver Economy Strategy



2015-2016 Action Areas

Summary Of Conclusions

European Summit On Innovation For Active & Healthy Ageing, 9-10 March 2015

HOW?

Innovating...

Technology

Systems

Society

SCALING UP INNOVATION ACROSS EU

- Ec Co-Financing Of Public Procurement Of Innovation (Ppi)
- Rapid Transfer Of Innovation Across Regions
- Mobilising New Public Investments

ADVANCING THE SILVER ECONOMY STRATEGY

- EC to Launch Joint Initiatives on Age-Friendly Homes, Integrated / Connected Care at Home and Silver Tourism
- New EC Action on Accelerating Adoption of Standards & Promote Interoperability
- New EC Study on Potential of the Silver Economy

BOOSTING INVESTMENT & ACCESS TO CAPITAL

- Ease Access to "Growth Capital" by Innovative Start-Ups
- Develop Joint Public-Private Investment Strategies For Innovative Projects (H2020, AALJP)
- Optimize Ec Support Tools (PPI)

WHO?

Partnerships
Between...

EU

Member States

Public Authorities

Businesses

Financial
Institutions &
Investors

Civil Society

Organisations

BUILDING ON STAKEHOLDER PLATFORMS

- European Innovation Partnership on Active & Healthy Ageing (EIP-AHA)
- Active Assisted Living Joint Programme (AAL JP)
- European Institute Of Innovation & Technology – Knowledge And Innovation Community (KIC) -Health & Ageing
- Public-Private Partnerships (Internet of Things, Robotics, 5G, Big Data, IMI, others)

Study "Growing the Silver Economy"

To explore the needs and opportunities in the Silver Economy in Europe.

To help underpin and support the development of a Silver Economy Strategy for Europe.

<http://www.smartsilvereconomy.eu>

Technopolis Ltd., Oxford Economics Ltd, cbased

- Work started in March 2016
- First results validated at stakeholder workshop on 8 March in Brussels
- To be published May 2017



The European Commission...

... is Policy Maker

- ✓ **Launches policy debates** (e.g. green paper on Horizon 2020...)
- ✓ **Invite Member States to take action through recommendation, communication** (eg scientific information, cancer screening, European Research Area,...)
- ✓ **Proposes EU legislation through regulation, directive and decisions** (e.g. clinical trial, on cross-border healthcare, data protection..)

Example of policy maker



EU Clinical Trial Directive (CTD) Why changing?

- **Overcoming administrative hurdle due to:**
 - ✓ **divergent implementation of the current CT in different MS**
 - ✓ **European CT authorised separately by each MS**
- **Decline of 15% of clinical trials in Europe over the recent years.**
- **Cornerstone of the Innovation Agenda: To ensure that drugs and products reach patient and the market faster, without reducing the level of patient safety**



EU Clinical Trial Directive (CTD)

What's new?



- ***Regulation => Uniform provisions and direct implementation in MS***
- ***Reduce administrative burden:***
 - ***Single submission portal***
 - ***Joint assessment of applications by all member states involved in the CT***
- ***Tailor the regulatory requirements to the risk of the clinical trials***
- ***Possibility to carry out EC audits of the clinical trials system in third countries***



The European Commission...

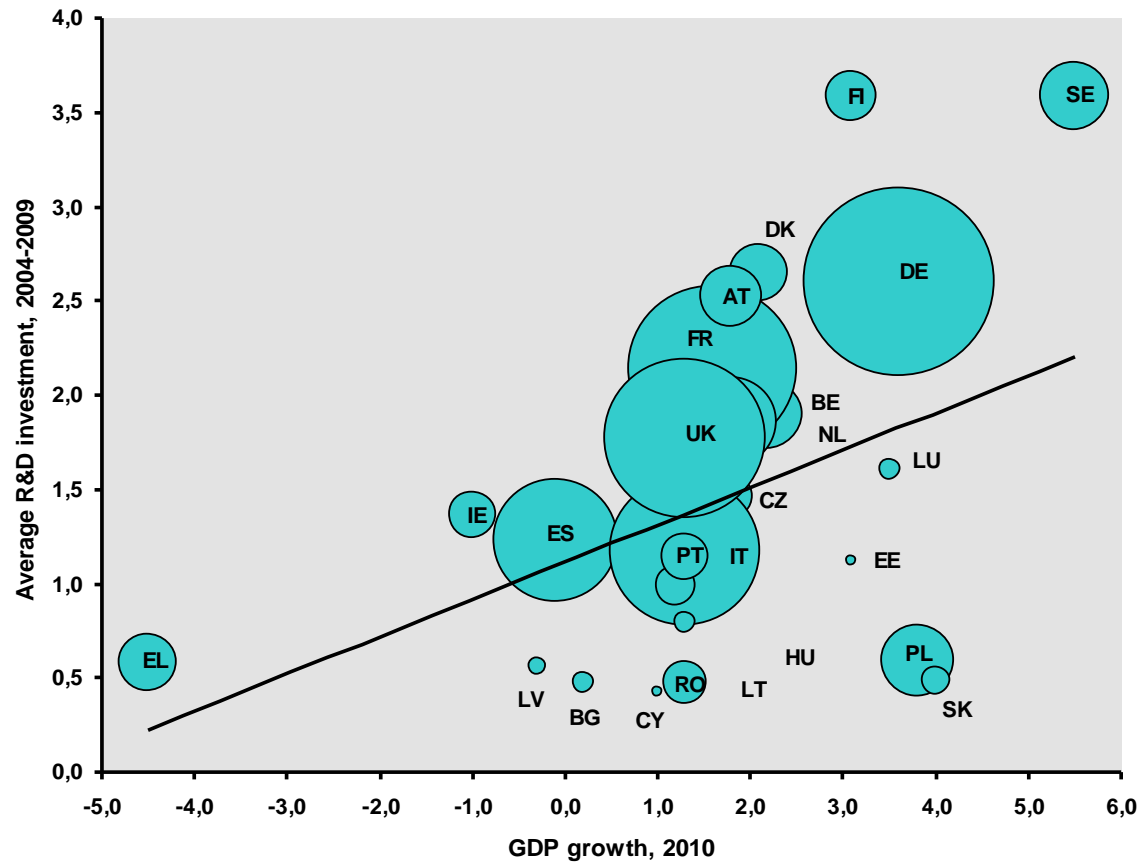
... is Funding Agency

- ✓ E.g. Research& Innovation (through Horizon 2020, FP7)
- ✓ Infrastructure (e.g. Biobank database)

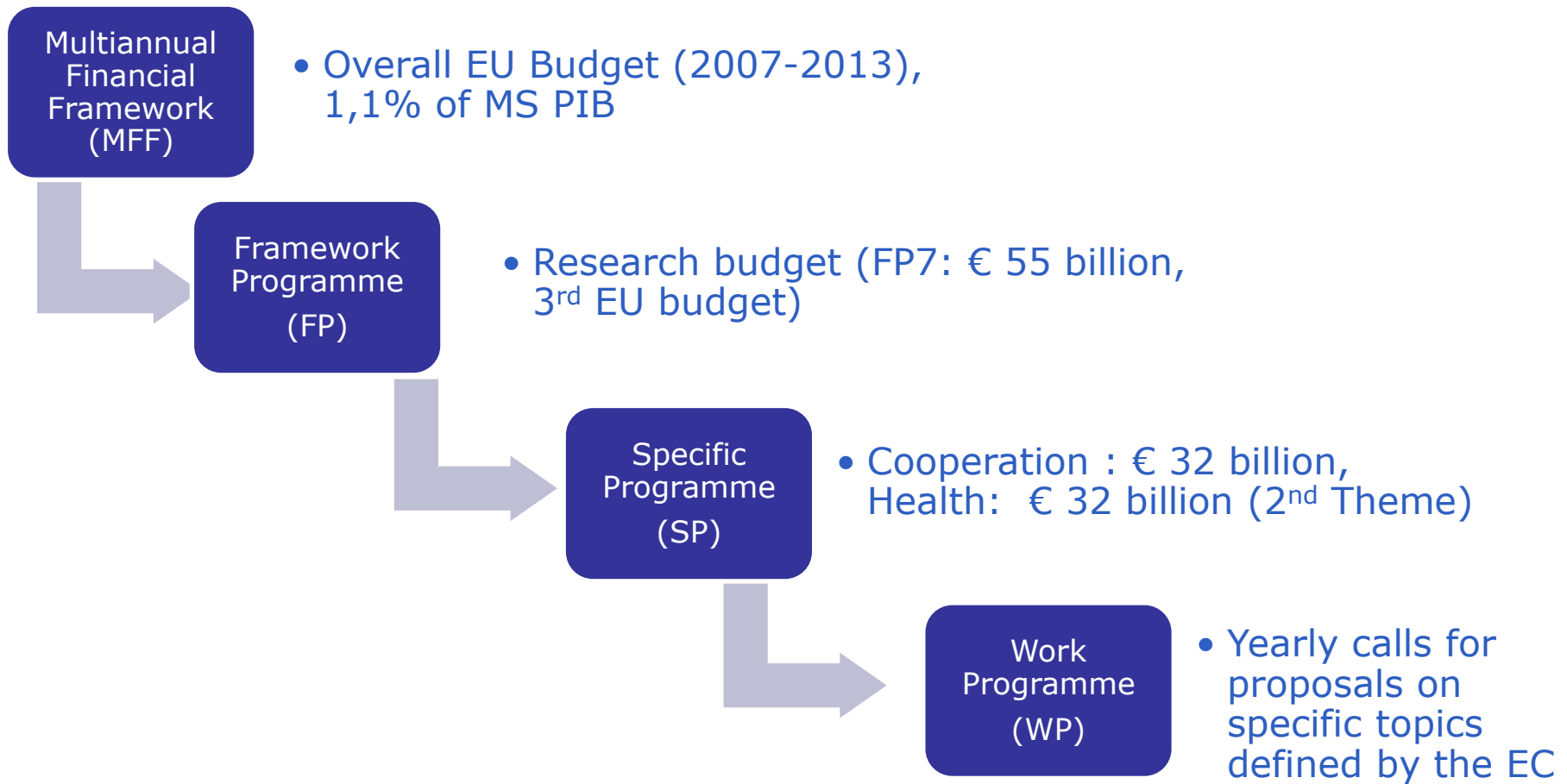
Why Research?



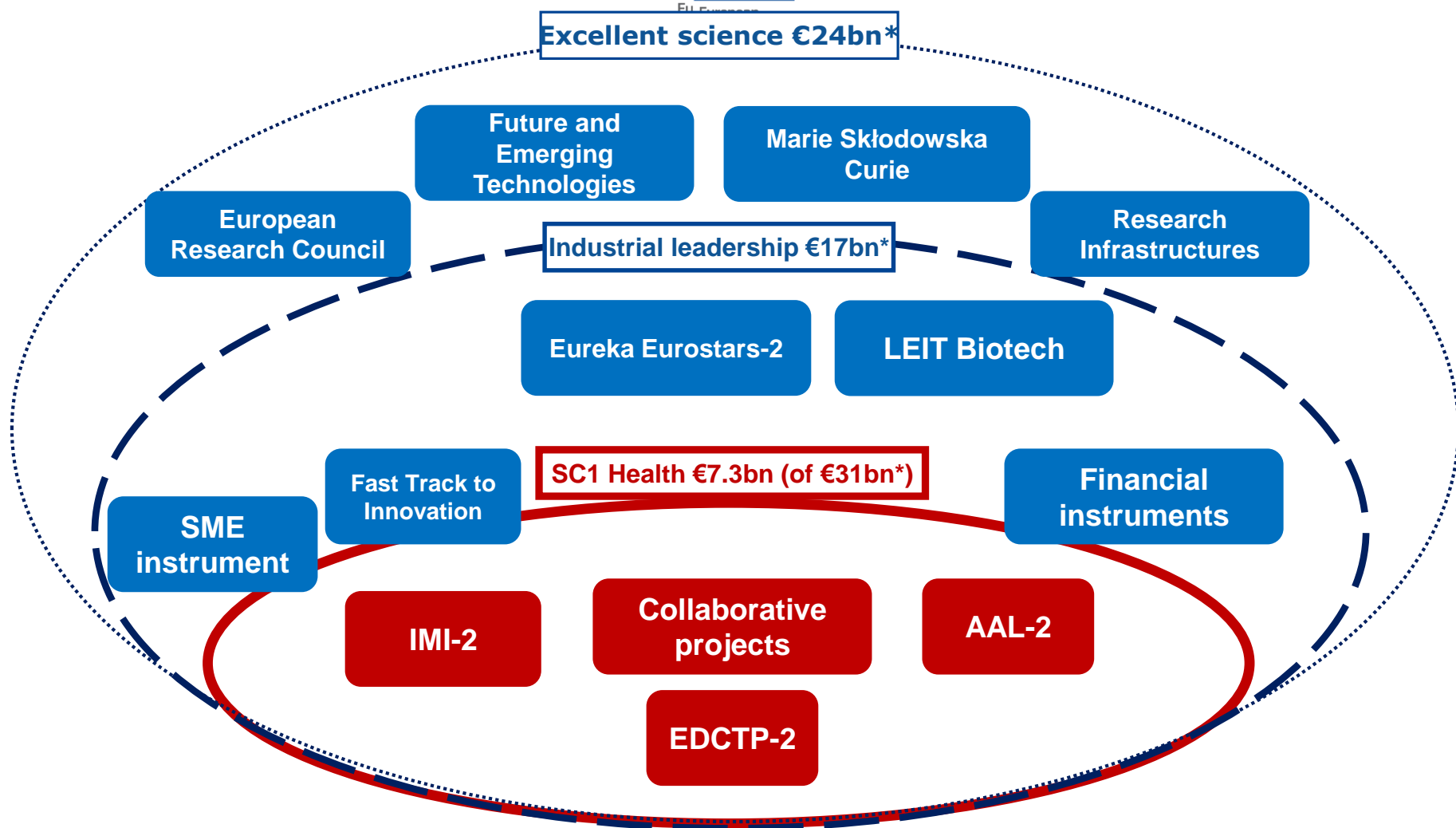
Impact of R&D on economic recovery



EU R&I Funding: How does it work?



Health Research in H2020



* Figure to be updated following EFSI investments in 2015



Horizon 2020 Health, demographic change and well-being challenge

OBJECTIVE



- **Better health for all**
- **A more competitive European health industry and care sector**
- **Maximising the digital potential**
- **Addressing health as a global challenge**
- **Evidence for informed healthcare policies**



Translate Personalised Medicine (PM)

- Patients Stratification for prevention, diagnosis, prognosis, treatment & QoL
- Access to innovative interventions: clinical trials
- Develop cost effective interventions to demonstrate the sustainability of PM
- Collaborate with health industries (IMI) to strengthen industrial capacities in PM



Anticipate the demographic changes

- Adapt health interventions to the growing ageing population
- Support independent living through digital solutions (the internet of things)
- Capitalising on the Regions' smart strategies to implement successful health interventions for the elderly (e.g. EIP on Active and Healthy Ageing)



Collaborate with global funders

- Identify, implement and scale-up successful health interventions in low and medium income countries (Global Alliance for Chronic Diseases)
- Find best practices in managing traumatic brain injuries (IntBIR)
- Dementia: address the plea from Member States (MS), G7 countries & WHO



Build the European dimension in MS research activities

- Define and implement convergent national strategies: Joint Programming on Neurodegenerative Diseases
- Common investments in research priorities: Cancer, Neurosciences & CVD
- Create better conditions of life for the older adults and to strengthen the international industrial opportunities



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Innovative Medicines Initiative 2
www.imi.europa.eu



**European Innovation Partnership
on Active and Healthy Ageing**
<https://webgate.ec.europa.eu/eipaha>

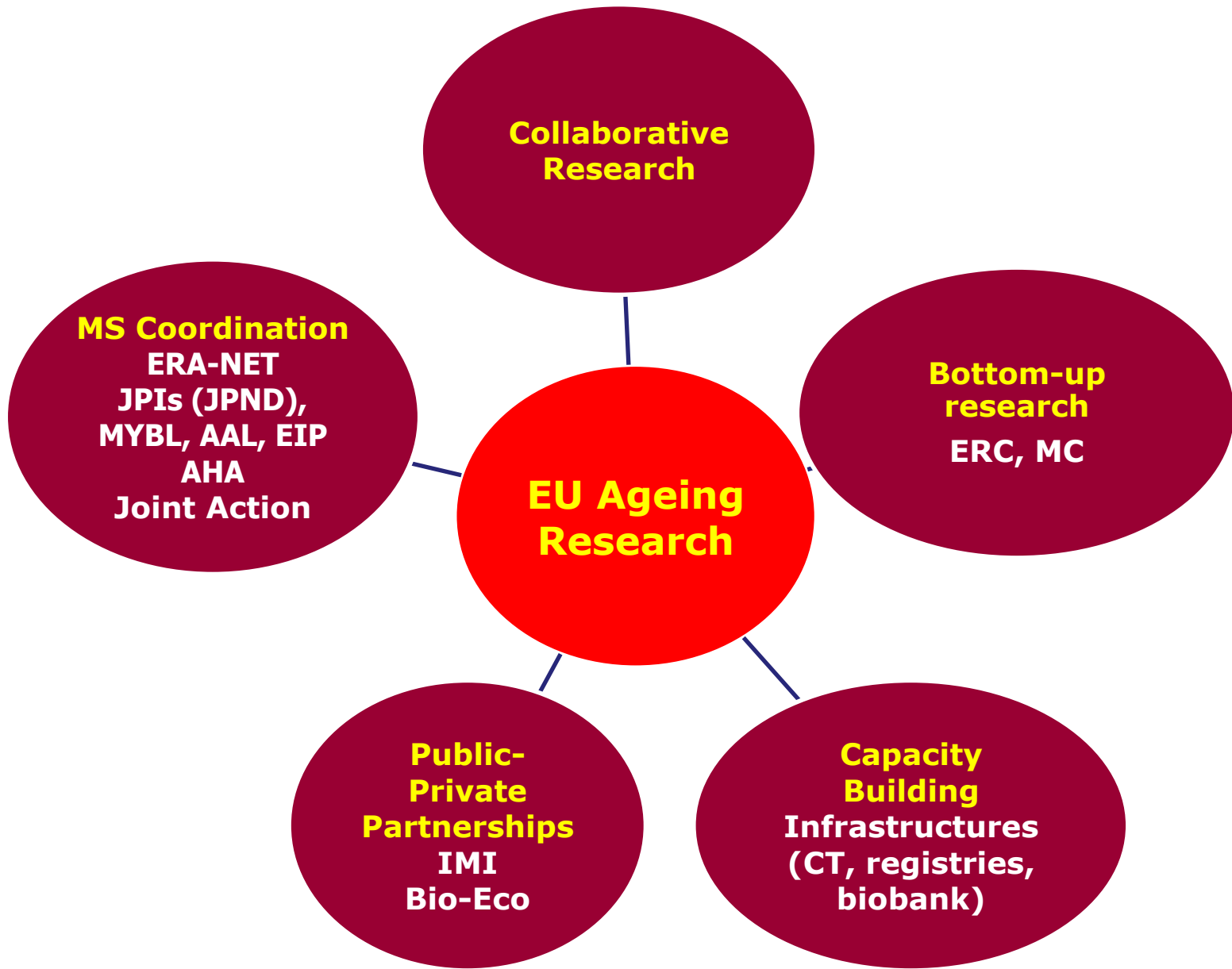


Active and Assisted Living 2
www.aal-europe.eu



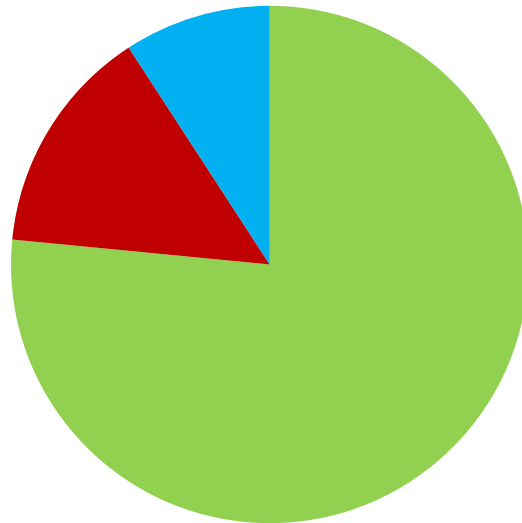
**European & Developing Countries
Clinical Trials Partnership (EDCTP2)**
www.edctp.org

The EU means



**Frontier
research;
129 M€**

**Training;
79 M€**



**Collaborative
research; 659 M€**

Translational research

- **multimorbidity**
- **poly-medication**
- **determinants**
- **technology / devices**
- **systems biology**
- **frailty**
- **falls**
- **cohort studies**
- **investigator-driven trials**
- **multimodality (physical activity, nutrition, environment)**

€ 861 Million on healthy ageing research (2007-2017)

343 projects

- Established a **shared vision for a holistic approach** to ageing research: FUTURAGE, WhyWeAge
- Established **new models and cohorts**:
 - ✓ addressing development, epigenetics and longevity determination: e.g. DORIAN, IDEAL, EPIHEALTH
 - ✓ increasing the exploitability of **comparable international research**: e.g. CHANCES (15 cohorts, EU & USA)
- Integrated therapeutic strategies adapted to **real-life co-morbid, elderly patients**: MID-FRAIL-STUDY, SENATOR, CHROMED, HATICE, PRIMA E-DS
- Addressed therapeutic approaches to **age-specific pathologies** (e.g. falls prevention, cognitive decline, vitamin D deficiency) through investigator-driven CT: NILVAD, V-TIME, DO-HEALTH, FOD-CC, TRUST, PREDICT

Some scientific Outcome in Ageing



Optimising Therapy to prevent avoidable hospital admissions in the multimorbid elderly

2020



The predict Charter: Inclusion & participation of the elderly in the clinical trials



New strategies for fall prevention & maintenance of a healthy lifestyle



Statistical and analytical methods to analyse co-morbidity factors affecting ageing
Identified specific factors and conditions affecting the morbidity rate of the elderly

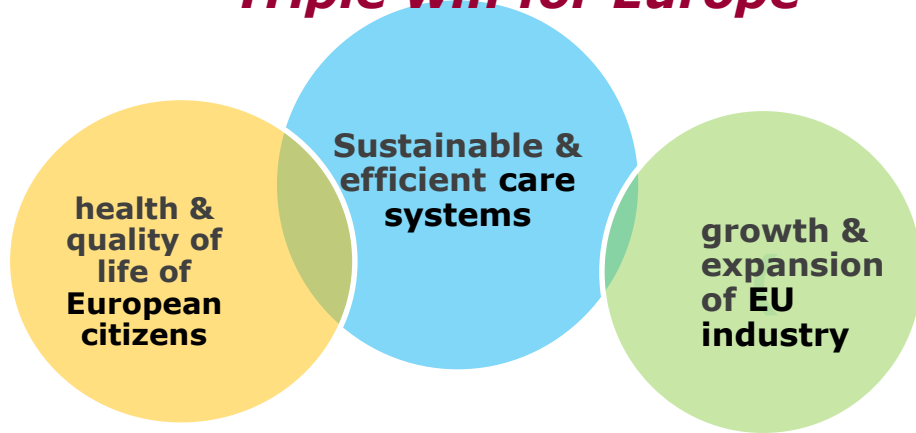
2007



Longitudinal studies of glucose metabolism to develop dynamic life course models for active and healthy ageing

The EIP on Active and Healthy Ageing approach

+2 Healthy Life Years by 2020
Triple win for Europe

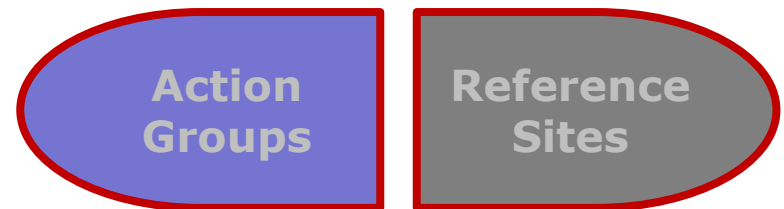


SIX AREAS OF INTERVENTION

- A1. Adherence to treatment
- A2. Preventing falls
- A3. Frailty & cognitive decline
- B3. Integrated care
- C2. Independent Living
- D4. Age-friendly environments

- A stakeholder-led, cross sectorial, collaboration initiative for research, innovation & intervention.
- Launched 2012 as part of Europe 2020 Strategy.
- Reach a critical mass for action by pooling EU resources/ expertise & recognising innovation/ excellence.

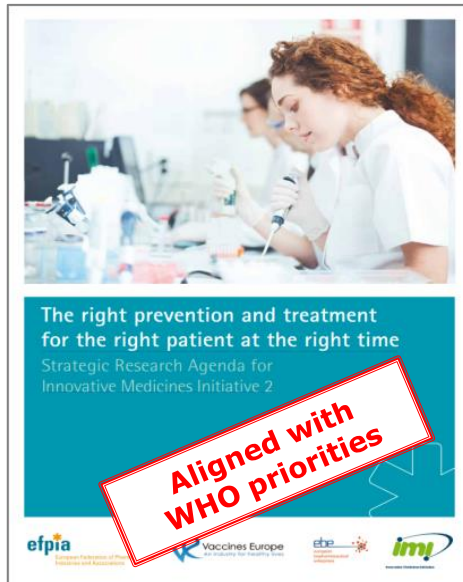
TWO STREAMS FOR ACTION



IMI2 – Europe's partnership for health



Partnership
2008 - 2024



- Focus on unmet needs
- Non-competitive collaborative research
- Competitive calls for proposals
- Open collaboration in public-private consortia
- Industry contribution is mainly in-kind



Innovative Medicines Initiative



Eu European
Co Commission

Projects funded by the Innovative Medicines Initiative (IMI)

Be The Cure FOR RHEUMATOID ARTHRITIS



38 partners
from 15 countries

Be The Cure' (BTCURE), is an IMI* funded research project which aims to develop new therapies against rheumatoid arthritis. With a total budget of EUR 35 million and 37 partners from all over Europe, it is hoped that by combining academic and industrial resources, basic understanding of disease processes and therapeutic development will be enhanced.



Facts & Figures

Start Date 01/04/2011
End Date 31/03/2017

Contributions €
IMI funding 17 362 872
EFPIA in-kind 15 616 595
Other 7 756 972
Total Cost 40 736 439

<http://btcure.eu/>



WWW.MYSPRINTT.EU



<http://www.mysprintt.eu/>

Home Project News Events Participants Sarcopenia and Frailty Multimedia Links Contacts

FAQ



News

THE SPRINT-T TRIAL IS RECRUITING!!!!!!

What are the main aims of the SPRINT trial? The SPRINT project is the largest European clinical...



THE SPRINT-T TRIAL IS RECRUITING!!!!!!

Video

ICFSR 2016 - Dr. Emanuele Marzetti: "SPRINT clinical trial deployment"



Sarcopenia in older people: a video for healthcare professionals



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Facts & Figures

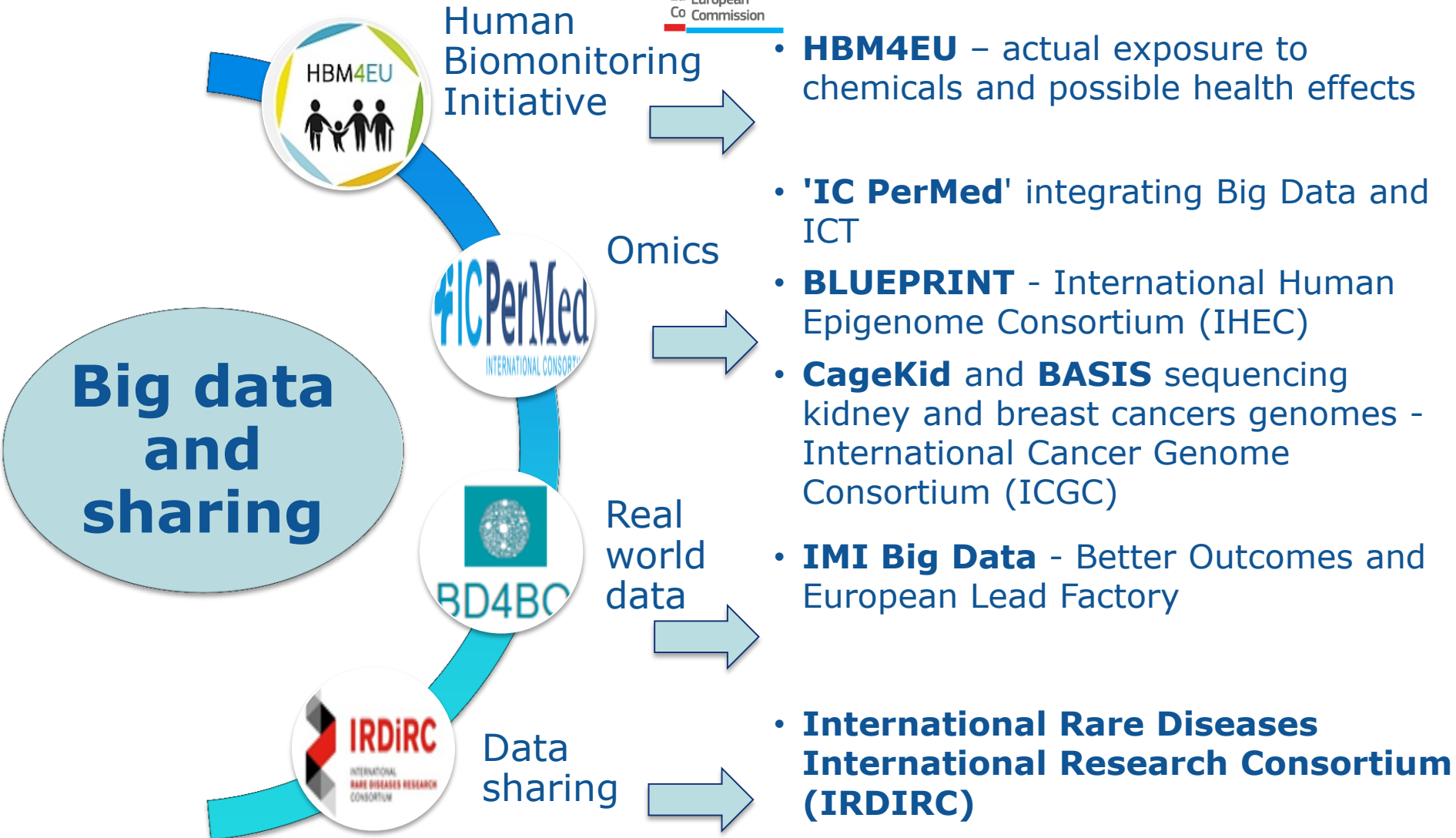
Start Date 07/01/2014
End Date 30/06/2019

Contributions €
IMI funding 23 999 439
EFPIA in kind 23 891 343
Other 6 477 883
Total cost 54 368 665

Events

International Conference on Frailty and Sarcopenia Research 2017 (ICFSR 2017), 27-28 April 2017,

Big data for health



International cooperation



Multi-lateral initiatives



www.irdirc.org/



http://ec.europa.eu/research/health/medical-research/brain-research/international-initiative_en.html



<http://ihec-epigenomes.org/>



www.gacd.org/



International Cancer Genome Consortium

<https://icgc.org/>



Global Genomic Medicine Collaborative

http://www.iom.edu/Activities/Research/GenomicBasedResearch/Innovation-Collaboratives/Global_Genomic_Medicine_Collaborative.aspx



**Global Research
Collaboration for
Infectious Disease
Preparedness**

Health, demographic change and wellbeing challenge

Headlines 2018-2020



Better health and care, economic growth and sustainable health systems



Personalised medicine – innovative healthcare industry – global health – sustainable and evidence – based health and care systems



Decoding the role of the overall environment for health and well-being

Human exposome – global changes and health



Digital transformation in Health and Care

eHealth and mHealth – ICT for Active and Healthy Ageing



Trusted Big Data solutions and Cybersecurity for Health and Care

Conclusions



- 1. Ageing population: the reason & opportunity for innovation**
- 2. Actions on both Health & Growth fronts**
- 3. Silver Economy: the opportunity for growth & job creation**
- 4. The means:**
 - **Research and innovation**
 - **Digital Single Market**
 - **Investment Plan**
 - **Specific Silver Economy actions**
 - **Synergies across sectors: health, social services, tourism, energy efficiency, construction, transport, etc.**
- 5. Key players:**
 - **Regions, Member States and private sector**