



Innovation in Horizon 2020: From eHealth Policy Strategy to funding instrument

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SALUD INVESTIGA

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**‘La innovación en
Salud en
Horizonte 2020:
Desde la
estrategia política
de la salud
electrónica a la
financiación’**

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Overview

- Social challenges and Europe 2020. Sustainability of Health System
- Policy framework: **eHealth Action Plan**
 - **Digital Agenda for Europe**
 - **EIP on AHA,**
 - **Dir Cross-borders**
- Funding instrument: Horizon 2020





What do we cover in ICT for Health (eHealth) ?

1. Clinical information systems

- a) Electronic health records for primary and specialised care*
- b) Specialised tools for health professionals*
- c) Training and medical education for supporting self-control*

2. Telemedicine systems and services

3. Regional/national health information networks

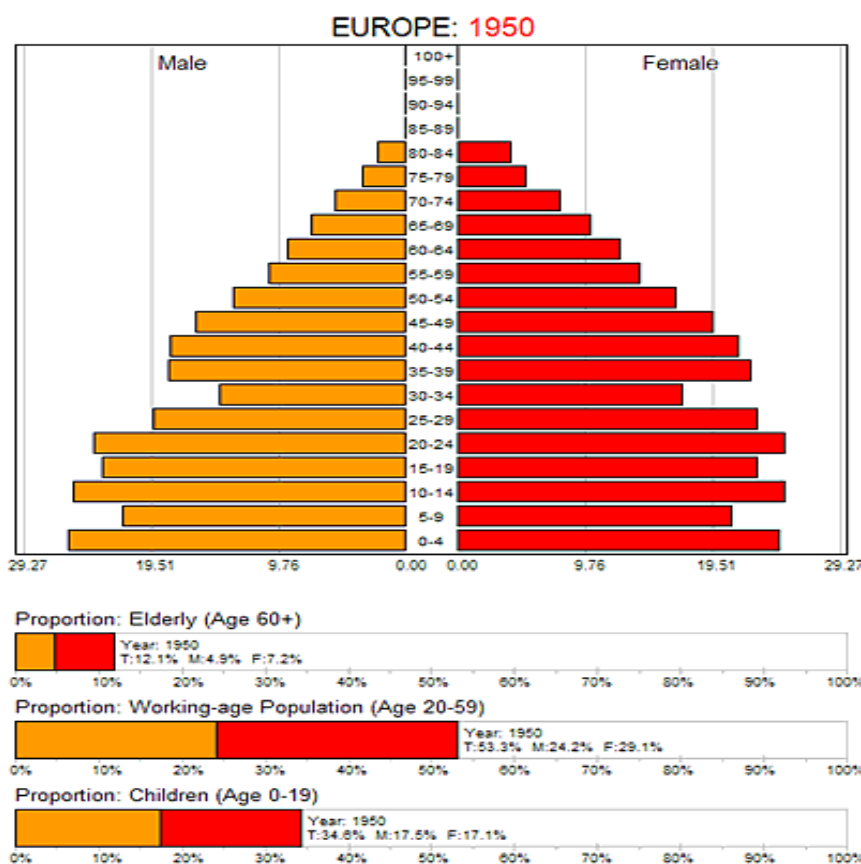
including electronic health record systems and associated services

4. Not clinical use

- a) Systems for medical education and health promotion*
- b) Research, public health*
- c) Administrative and management system*



The Challenge of an Ageing society



Chronic Conditions

Healthy Life Years vs Life Expectancy



Health Inequalities



Financial sustainability



Lack of Health Professionals

New paradigm of ageing

From social needs
societal challenge
burden
passive care
curing diseases

to major opportunity
major opportunity
asset
pro-active care
improved functioning



Dependency Ratio

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



Empowerment

- Active Ageing
- Health literacy



Cost of Care

- Up by 4-8 % of GDP by 2025



New Care Models

- Integrated care
- Large efficiency gains



Human Resources

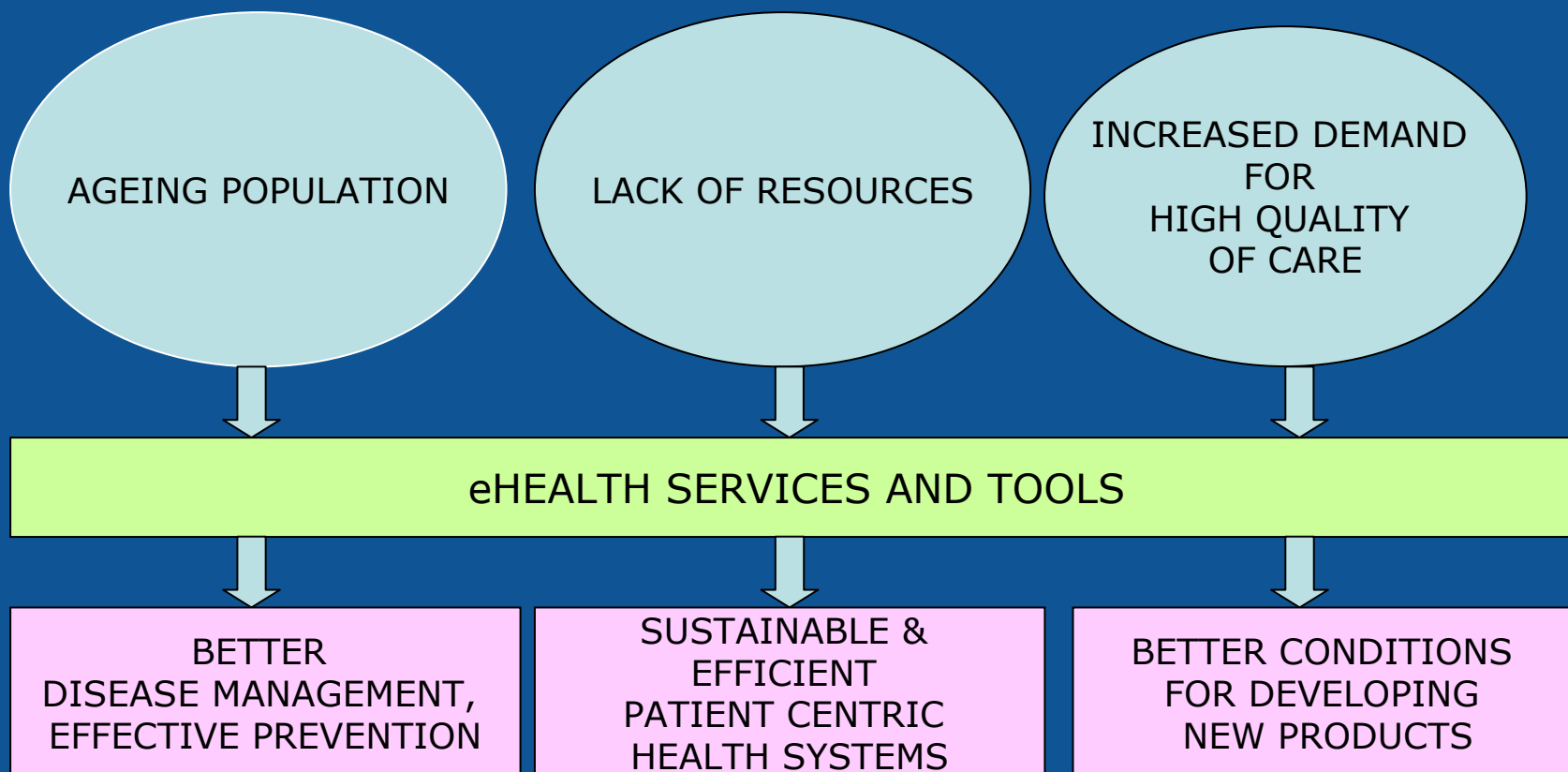
- Shrinking work force
- Lacking 20 mio carers by 2020



Growth and Markets

- 3000 B€ Wealth
- 85 Million Consumers

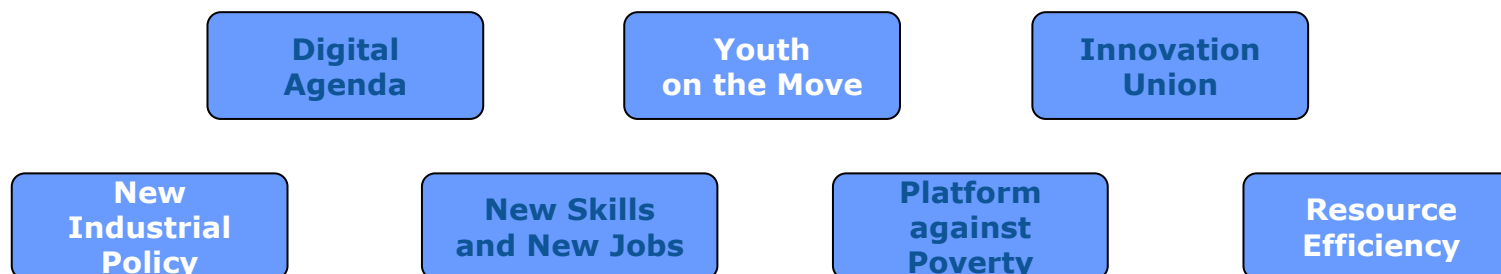
NEED FOR CHANGES IN HEALTHCARE





Health in Europe 2020

Europe 2020 flagships for smart, sustainable and inclusive growth



Innovation Union

- innovation for tackling societal challenges, e.g. ageing and health
- innovation for addressing the weaknesses & removing obstacles in the European innovation system

Digital Agenda for Europe

- ICTs for tackling societal issues - ageing, health care delivery
- sustainable healthcare & ICT-based support for dignified & independent living

HORIZON 2020

European Innovation Partnership on Active and Healthy Ageing

INNOVATION UNION



DIGITAL AGENDA
FOR EUROPE

*Sustainable healthcare
and ICT-based support
for dignified and
independent living*

Action 75: - Give Europeans secure online access to their medical health data:
EMPOWERMENT

- Achieve widespread telemedicine deployment

Action 76: Propose a recommendation to define a minimum common set of patient data

Action 77: Foster EU-wide standards, interoperability testing and certification of eHealth

Action 78: Reinforce the Ambient Assisted Living (AAL) Joint Programme



European Innovation Partnership on Active & Healthy Ageing

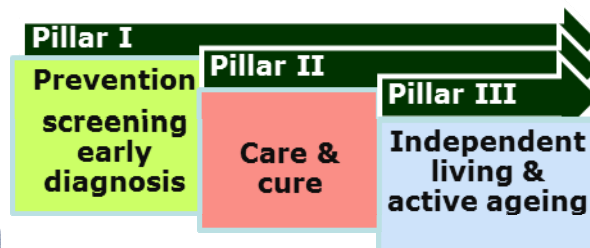
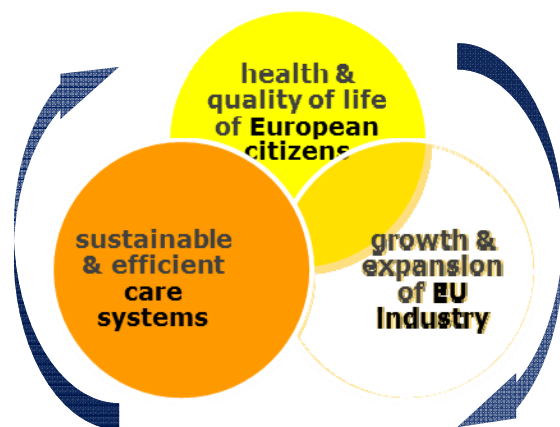
Collaboration Innovation



crosscutting, connecting & engaging stakeholders across sectors, from private & public sector

Specific Action Groups & reference Sites

+2 HLY by 2020
Triple win for Europe



-  Improving prescriptions and adherence to treatment
-  Better management of health: preventing falls
-  Preventing functional decline & frailty
-  Integrated care for chronic conditions, inc. telecare
-  ICT solutions for independent living & active ageing
-  Age-friendly cities and environments



Directive on the application of patients' rights in cross-border healthcare (2011)

- Art 14 : eHealth network
 - **Common measures on eIdentification and Authentication for eHealth**
 - **Addressing semantic and technical barriers to interoperability**
 - **Guidelines on patients summary set of data for cross border electronic exchange**
 - **Connecting European Facility**
 - **EC proposal on the data protection regulation**
- Art 12: Reference network. Telemedicine





INNOVATION UNION

DIGITAL AGENDA
FOR EUROPE

EUROPEAN INNOVATION
PARTNERSHIP AHA

Directive
Cross-borders
care

eHAP 2012-2020 Innovative healthcare for the 21st century

TO SCALE UP EHEALTH
FOR EMPOWERMENT,
EFFICIENCY AND
INNOVATION IN HEALTHCARE

TO CONTRIBUTE TO MORE
JOBS AND GROWTH

TO ENSURE MORE COHERENCE
BETWEEN HEALTH POLICY
DEVELOPMENTS
AND EHEALTH DEPLOYMENT



EHEALTH ACTION PLAN: VISION

TACKLE eHEALTH CHALLENGES RELATED TO:



HEALTH SYSTEMS (UNLOCKING INNOVATION, ENHANCING PATIENT-CENTRIC CARE, ENCOURAGING ORGANISATIONAL CHANGES, CROSS-BORDER CARE, UNIVERSALITY, EQUITY...)



PERSONAL HEALTH (CHRONIC DISEASE MANAGEMENT, PREVENTION AND HEALTH PROMOTION)



LEGAL / MARKET ASPECTS (IMPROVING LEGAL AND MARKET CONDITIONS)





Evidence informed eHAP 2012-2020 (SWD)

Current evidence informed policy methodology recommendations (HTA approach): systematic review of:

- systematic reviews,
- meta-analysis,
- HTA reports
- other evidence based policy reports

In response to specific research questions:

- What are the **main barriers and/or facilitators** to deploy eHealth solutions?
- What is the **current status of eHealth** in the EU and how to ensure a successful and sustainable deployment of eHealth?
- What is the **evidence on the effectiveness and efficiency of telemedicine** and what research areas still need to build large scale evidence to support wide deployment of telemedicine by 2020?

(76 were analysed)



Outcome	Strength of evidence
Main barriers to deployment <ul style="list-style-type: none"> - Users' acceptance • Utility and friendly • Awareness of benefit - Interoperability 	<p>+++ +++ +++ +++</p>
eHealth, health and social context in EU <ul style="list-style-type: none"> - Unequal ICT penetration across EU - Unequal health outcomes - Different economic-social-cultural determinant of health - Different health systems across EU - Unequal health/innovation policies across EU (potential different priorities) 	<p>+++ +++ +++ +++ ++</p>

Outcome of telemedicine

-Heterogeneous indicators and weak methodologies	+++
- Effectiveness of telemedicine and EHR	+++
•Chronic diseases management	+++
•Mental disorder management	+++
•Health promotion and citizen/patient engagement/empowerment	++
-Efficiency of telemedicine	+
- Risk management and safety studies	-



EHEALTH ACTION PLAN 2012 - 2020

- ▶ SETTING UP AN eHEALTH INTEROPERABILITY FRAMEWORK
- ▶ FACILITATING UPTAKE
- ▶ ENSURING WIDER DEPLOYMENT
- ▶ SUPPORTING RESEARCH, DEVELOPMENT AND INNOVATION
- ▶ PROMOTING INTERNATIONAL COOPERATION





Achieving wider interoperability of eHealth services

eHealth Interoperability Framework to be proposed by 2015: based on results of research projects and studies

Supporting this:

- *Standards, interoperability testing and certification (to be endorsed by eH network)*
- *Maintenance of assets under CEF*





Ensuring Wider Deployment and Facilitating Uptake: breaking barriers

- *Connecting Europe Facility (CEF) from 2014*
- *Cohesion policy: broadband access and supporting ICT applications and services*
- *EIP on Active and Healthy Ageing*
- *Focus on Digital Health Literacy for professionals and citizens*
- *Clinical Practice Guidelines for telemedicine services: emphasis on nurses, social care workers*





Legal Clarity

- *Staff Working Paper on legal issues in telemedicine*
- *Guidance on how to apply EU **data protection law** in the area of health data (following adoption of DP regulation)*
- *Green Paper on Legal Framework applicable to Health & Wellbeing Apps*





SUPPORTING RESEARCH, DEVELOPMENT AND INNOVATION: **Horizon 2020**

Focus on competitiveness

- **Research:**
- *Health & Wellbeing solutions (user-centric focus)*
- *Longer-term focus: VPH...*

- **Innovation: Integrated care, empowerment...**
- *User-driven innovation*
- *Law incubators*
- *PCP / PPI*





Funding Instruments

- Competitiveness Innovation Programme, ICT Programme to Support Policy (CIP ICT PSP):
 - **Interoperability:**
 - Large Scale Pilot: EPSOS I and II
 - Thematic Networks: CALIOPE, SEGOVIA
 - **Telemedicine:**
 - Large Scale Pilot on Telemedicine:
 - Chronic conditions: Clear, Nexes, Renewing health,
 - Cos-effectiveness of chronic conditions: United for Health
 - Empowerment and access to eHR: Palante, Sustain,
 - Cost-effectiveness of mental health: Mastermind
 - Thematic Networks: Momentum, eHealth Innovation



What is Horizon 2020



European
Commission



**The EU's 2014-20 programme
for research & innovation**

**A core part of Europe 2020,
Innovation Union &
European Research Area**

- Responding to the economic crisis to invest in future jobs and growth*
- Addressing people's concerns about their livelihoods, safety and environment*
- Strengthening the EU's global position in research, innovation and technology*

<http://ec.europa.eu/research/horizon2020>

Horizon 2020 - what's new?



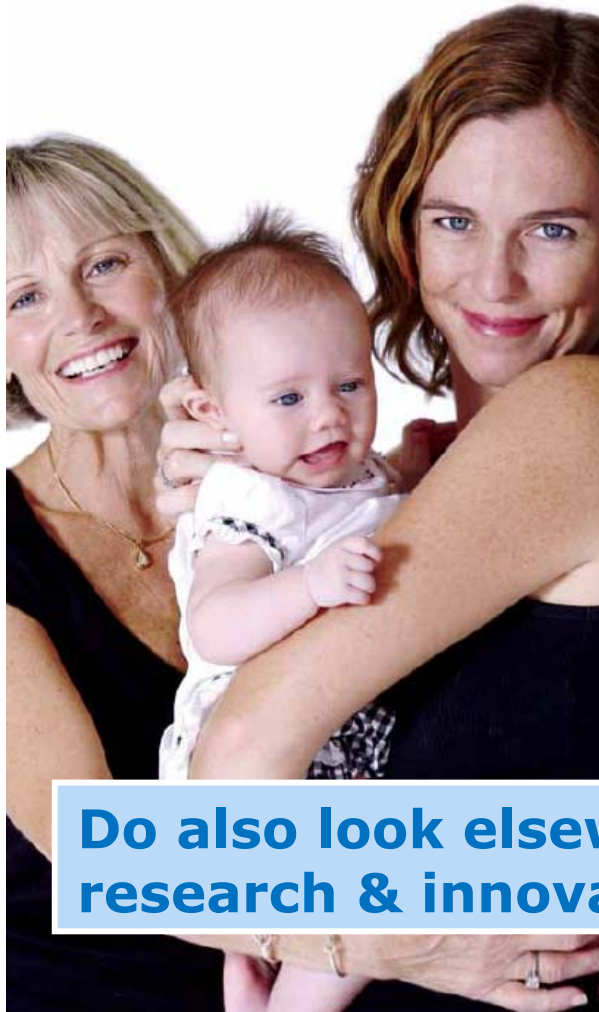
- **A single programme** bringing together three separate programmes/initiatives*
- **Coupling research to innovation** – from research to retail, all forms of innovation
- **Focus on societal challenges** facing European society e.g. health and ageing, clean energy and transport
- **Simplified access**, for all companies, universities, institutes in all EU countries and beyond

* The 7th Research Framework Programme (FP7), innovation aspects of Competitiveness and Innovation Framework Programme (CIP), EU contribution to the European Institute of Innovation and Technology (EIT)





Horizon 2020 - Societal Challenge 1



- *Translating science to benefit citizens*
- *Improve health outcomes*
- *Support a competitive health & care sector*
- *Test and demonstrate new health & care models, approaches and tools*
- *Promote healthy and active ageing*

Do also look elsewhere! EU support of health related research & innovation is not limited to Societal Challenge 1





Horizon 2020: 2014

PHC 19 - 2014) Service robotics within assisted living environments

PHC 20 - 2014) ICT solutions for independent living with cognitive impairment

PHC 26 -2014) Self-management of health and disease: citizen engagement and mHealth

PHC 34 - 2014) eHealth interoperability

HCO 1 – 2014) Support for the European Innovation Partnership on Active and Healthy Ageing

HCO 1 – 2014) Support for the European Innovation Partnership on Active and Healthy Ageing





2nd call (2015)

PHC 21 Advancing active and healthy ageing with ICT: Early risk detection and intervention

PHC 25 Advanced ICT systems and services for Integrated Care

PHC 27 Self-management of health and disease and patient empowerment supported by ICT, for PCPs only

PHC 28 Self-management of health and computer modelling

PHC 29 Public procurement of innovative eHealth services, for PPIs only

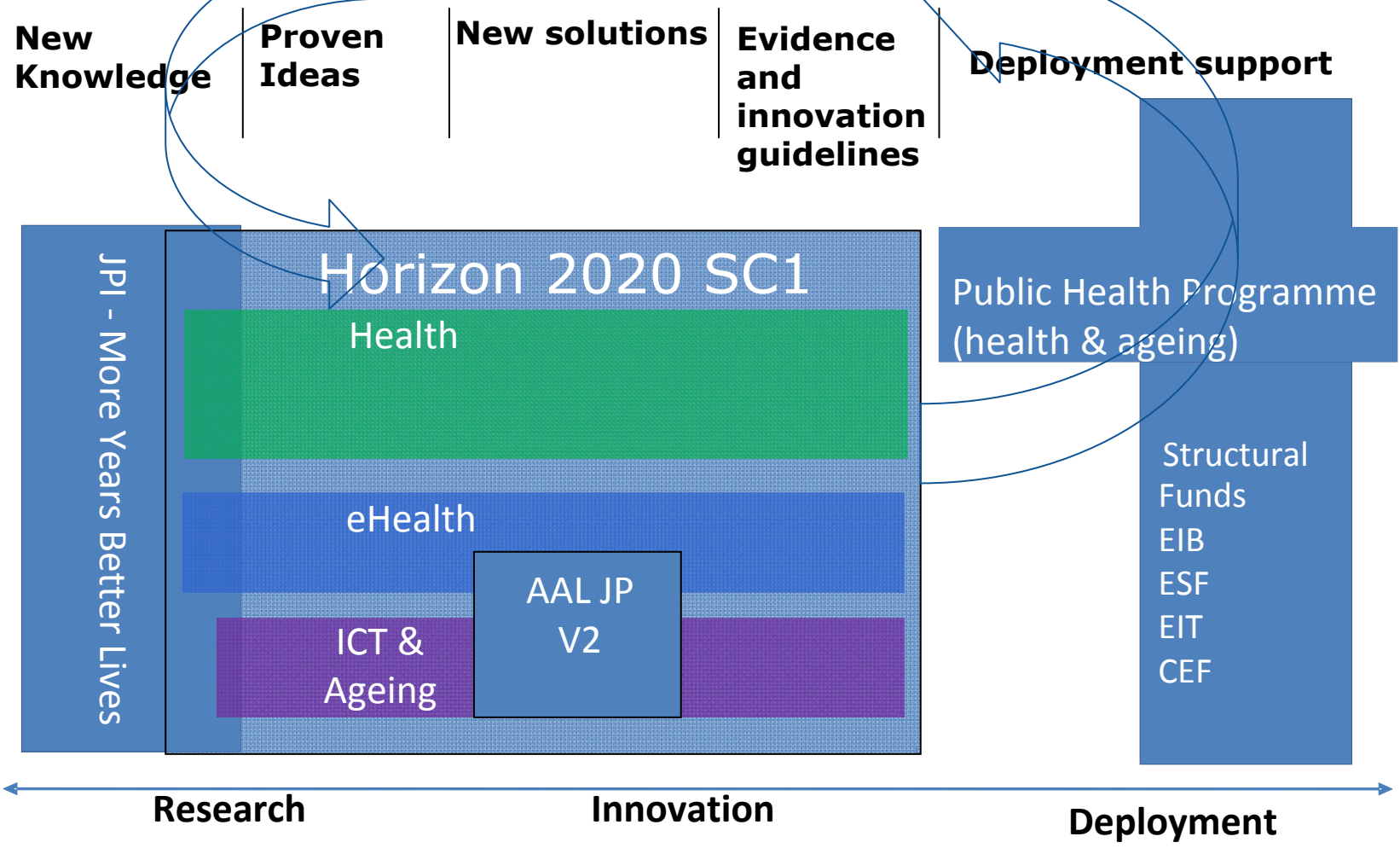
PHC 30 Digital representation of health data to improve disease' diagnosis and treatment

HOA 8 eHealth Sectoral Inducement Prize

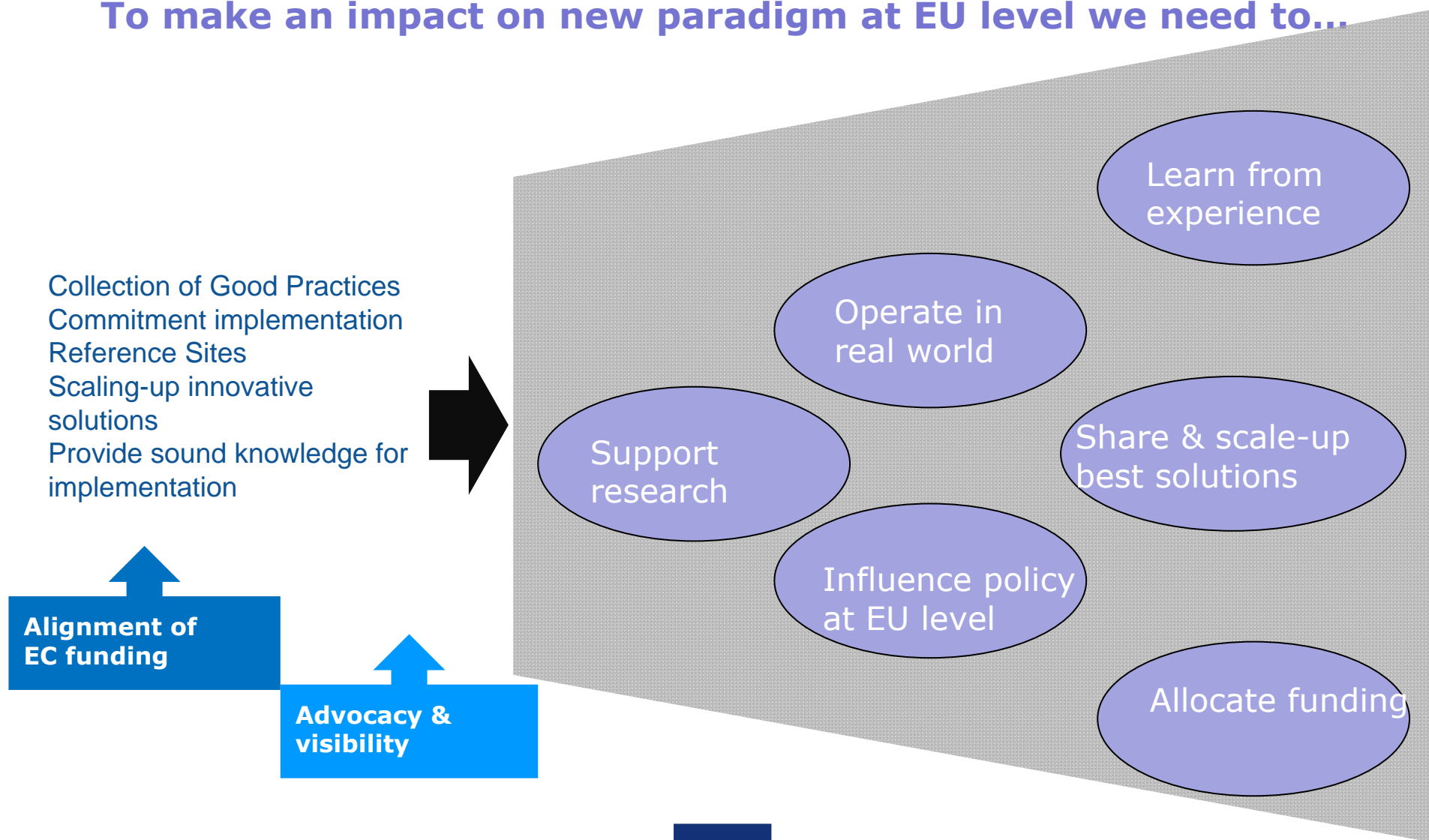




eHealth//EIP Active and Healthy Ageing



To make an impact on new paradigm at EU level we need to...





Conclusion

- *Action Plan responds to climate of budgetary constraints of health systems; ageing population; citizens' expectations*
- *eHealth Strategy promotes innovation for European Health System to improve: equity, better health and care; transparency and empowerment; more skilled workforce; more efficient and sustainable health and care systems; new business opportunities in Europe and beyond*





Conclusions

Engage stakeholders and involve citizens

Single funding programme: Horizon 2020 to coupling research to innovation.

Deployment and scaling up of best and efficient practice, other funding/policy mechanism





THANK YOU

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