EU Strategy on Active and Healthy Ageing

Two additional healthy life years, Where do we stand? Brussels 30/10/2015

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Outline of presentation

• Overview
• Research & Innovation
• Policy Initiatives
• Conclusions
Life and HLY at age 65, EU25, 2005-2012

Source EHLEIS project
Functional Capacity as we age

Source WHO
Transformation of Health/Care Systems

- Acute care → Long-term-care
- Single Diseases → Multiple chronic conditions
- Passive Patient → Active consumer
- Institutional care → Home care
- Generic Approach → Personalised Care
How to get there

Digital Single Market

1.9 Billion € 2014-2020

Smarter, innovation friendly Policies

Creating scale, partnerships and return of investments

Investing in Research and Innovation (H2020)

European Innovation Partnership on Active and Healthy Ageing

eHealth Action plan 2012-2020
mHealth Green paper and follow-up
Research and Innovation
Health and Ageing Well – the EU picture

EIP on Active and Healthy Ageing

New Knowledge
- Proven Ideas
- New solutions
- Evidence and innovation guidelines
- Deployment support

Horizon 2020, SC1
- Health
- eHealth
- ICT & Ageing
- AAL JP2
- SME Measures
- Public Health Programme
  - Structural Funds
  - EIB
  - ESF
  - EIT-KIC

Research
Innovation
Deployment

New Years Better Lives
Alzheimer’s
The SC1 Work Programme 2016-17 in brief

Call 'Personalised Medicine'

including 'coordination activities'

SME Instrument: 2 Topics
Other Actions: 12 items (incl. InnovFin ID & "Birth Day Prize")
Focus Area Digital Security: 1 Topic
Focus Area Internet of Things: 1 Topic

€ 935 million
Main research priorities for 2016-2017

- Personalised medicine
- Promoting healthy ageing
- Human biomonitoring
- Health ICT
- Infectious Diseases
- InnovFin
- Maternal and child health
H2020 WP 2016/2017 - ICT for Health - Principles, areas and strategy

- More strategic patient-centred approach and health promotion
- Creating a body of evidence for IT technologies, support for SME's growth, IT skills for healthcare workforce
- New approaches in managing health, from well-being to personalisation
- Data and sharing data challenges
- Decrease of time to market, better adaptation to innovation and support to policy
- Contribution to WHO activities and US cooperation

The entire chain of innovation is needed, from research to support actions and specific instruments.
CSAs: EU mHealth Hub; Support for Health ICT SMEs; Digital Health literacy; Healthcare Workforce IT skills; EU/US Interoperability roadmap; EU eHealth Interoperability conformity;

SME Instrument: Accelerating market introduction of ICT solutions for SC1

RIA: Big Data; Digital Security; Simulation/modelling on wellbeing; In silico trials

Horizon Prize: Food scanner *)

*) Horizon Prize instrument (not under SC1)
• Exploring new opportunities
• Catalyse Silver Economy
• IoT for Smart Living Environments (with ICT-LEIT)
• Scale up Innovative Care Services
• Complementing previous calls
Policy Initiatives
A scalable EU Silver Economy

The Consumer Market

- 3000 B€ Wealth by people over 65
- 85 Million Consumers over 65 and growing
- <15% ICT use

The Public Market

- Care costs ~1000 B€ /year in Europe (8 % GDP)
- 10% for innovation
- ~100 B€ /year
European Innovation Partnership on Active & Healthy Ageing

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

+2 HLY by 2020

Triple win for Europe

specific actions

- 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
European Innovation Partnership on Active and Healthy Ageing

- 1,000 regions & municipalities
- > 500 commitments
- 3,000 partners
- 32 Reference Sites
- 1 billion euro mobilised
- 30 mio citizens, >2 mio patients
- Marketplace >100,000 visits
'Integrated Medicines Management
150,000 people currently receive the service with over 97,500 being 65 or over

Reduced length of stay (2 days - 20% decrease)
Return on Investment £5 for every £1 invested
Pharmaceutical Clinical Investing Programme Savings £140 million (25% of prescribing Budget)
Improved medicines appropriateness index(17.48 to 5.69)
Reduced medication errors at admission (4.2)
Reduced errors at discharge (20%<-1%)
Examples of CDM, Integrated Care

Puglia, Italy: Telecardiology programme to support patients affected by cardiovascular diseases both in case of acute events and management of chronic conditions.
  - Over 550,000 ECG performed,
  - significant reduction of avoidable death,
  - 60% underwent appropriate treatment and no hospitalization unless urgent (only 11%)

Basque country: Chronicity strategy
Risk stratification of patients
  - the entire population (2.2mio) included
    100% of health professionals know what care approach the patient need in relation to their risks
  - 11,000 hospital stay reduction & saving of €8.9mio (entire strategy)
1) Monitoring the EIP on AHA Process

- Involvement of stakeholders
- Creation of synergies
- Knowledge transfer & absorption of innovation by health systems
- Added-value for the participating organisations
- Funding

2) Monitoring the EIP on AHA Outcome

- Outcome(s) of interventions and activities of Action Groups
- Estimating the impact of interventions on overall EIP on AHA objectives, namely
  a) two additional Healthy Life Years (HLY) by 2020 and
  b) Triple Win (QoL, Sustainability of Health/Care Systems, Innovation & Growth).

http://is.jrc.ec.europa.eu/pages/TFS/MAFEIP.html
The MAFEIP steps

Step 1: Develop a conceptual framework for monitoring and assessing EIP on AHA outcomes

Step 2: Create a shortlist of indicators to quantify relevant outcomes on intervention level

Step 3: Build a generic model to link diverse outcomes on intervention level to indicators on Partnership level

Step 4: Implement the model in a way that allows remote data input and assessment throughout entire life cycle of a technology
Conceptual framework step 1

Economic evaluation in health-care

...is the comparative analysis of alternative courses of action in terms of both*

...their costs

\[ \text{Cost}_{\text{intervention}} - \text{Cost}_{\text{comparator}} = \Delta C \]

...and consequences

\[ \text{Effect}_{\text{intervention}} - \text{Effect}_{\text{comparator}} = \Delta E \]

\[ \text{ICER} = \frac{\Delta C}{\Delta E} \]

(Accept intervention if ICER < WTP for health gain (\(\Lambda\)))
Shortlist of indicators step 2

Headline Target
+2 HLYs

Triple Win
- Quality of Life
- Sustainability
- Innovation & Growth

Outcome indicators on intervention / commitment level

Indicators should be:
- Legitimate
- Credible
- Salient
Shortlist of indicators step 2

**Headline Target**

\[ +2 \text{ HLYs} \]

**Triple Win**

- Quality of Life
- Sustainability
- Innovation & Growth

**Outcome Indicators on intervention / commitment level**

- **HRQoL**
  - Risk factors
  - Adherence
  - Functional status
  - Nutrition
  - Cognitive decline

- **Mortality**
  - Physical Activity
  - Frailty
  - Falls
  - Mental health

- **Incremental change in resources used**
  - (Local) unit cost for resources

- **Nr. of implemented technologies**
- **Nr. of created jobs**
- **Nr. of new SMEs**

**Secondary Indicators**

- Hospital (re-) admissions
- Length of hospital stay
- Emergency visits
- Primary care visits
- Specialist visits
- Institutionalisation
The model essentially consists of:

- **Health states** a target patient is currently in or may experience in the future
- **Probabilities** to move from one health state to another, and for each health state
- **Costs** (resource use valued in monetary units), and
- **Values** or utilities for health outcomes
Implementation of three-state Markov model

- As web-based tool
- Openly accessible with user-friendly interface
- Allowing remote data entry

in order to enable stakeholders to

- Capture health & care systems outcomes and
- Extrapolate them towards the EIP on AHA objectives

Users will benefit from

- Background data to populate (some) parameters with baseline estimates
- Available options for sensitivity and scenario analyses, and with that
- The opportunity to assess their policies and interventions, for instance to inform further development or to support a business case
Using the tool across the entire life cycle

- Due to the early stages of EIP on AHA data is generally scarce and scattered.

- This does not mean, however, that monitoring and assessment of the technologies developed and carried out within the EIP on AHA is not possible.

- The MAFEIP-tool allows synthesizing the best information currently available from multiple sources for a particular health technology.

- This, in turn, allows performing an early assessment of a technology even before it has been clinically tested.

- The resulting evidence may help to inform decisions about the future design of the technology, and to estimate its overall market potential at an early stage during the product life cycle.
Next Steps for the EIP-AHA

- Scaling up implementation
- Impact assessment metrics & tools
- Providing a critical mass of impact evidence
Next Steps for the EIP-AHA

Expansion
- New call for commitments
- New call for reference sites

Operational focus
- Revised action plans
- Focus of near term outputs

Conference of Partners
- December 9-10th 2015
- Reinforced Political support
- Launch of proven practice repository
Conclusions

• Increasing HLY a long-term process

• Keep older people active and well functioning with good QoL a priority

• EIP-AHA developing metrics, tools and evidence of innovation impact

• EU strongly committed to support
Recent DG CNECT innovation policy documents related to Active and Healthy Ageing

- European Scaling-up Strategy in Active and Healthy Ageing [https://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/scaling_up_strategy.pdf](https://ec.europa.eu/research/innovation-union/pdf/active-healthy-ageing/scaling_up_strategy.pdf)
- EIT KIC on Healthy Living and Active Ageing [https://eithealth.eu/](https://eithealth.eu/)