



# Contributions of SSH to Clusters: Health

**Impact of Social Sciences and Humanities for a  
European Research Agenda – Valuation of SSH  
in mission-oriented research  
Vienna, 28-29 November 2018**

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European Commission

## From FP7 to Horizon Europe

FP7 –  
Cooperation  
Programme:  
Theme 8  
'Socio-  
economic  
Sciences and  
Humanities'

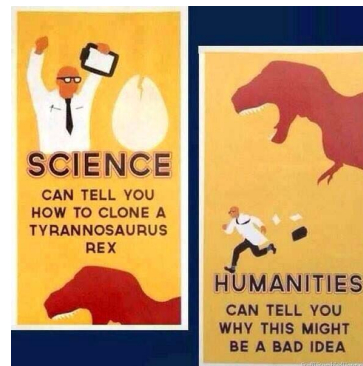
Horizon  
2020 - No  
self-standing  
SSH  
programme:  
SSH is  
embedded  
as a cross-  
cutting issue

Horizon  
Europe - SSH  
will be fully  
integrated  
across all  
clusters,  
including  
specific and  
dedicated  
activities.

# SSH disciplines in health R&I

sociology  
**psychology**  
anthropology  
**behavioural science**  
cultural studies  
demography  
**education**  
religion

history  
**economics**  
administration  
political science  
*regulatory*  
philosophy  
*ethics*  
law





## Some project examples in Societal challenge Health, demographic change and well-being



<https://www.lifepathproject.eu/>



**INHERIT**

<https://www.inherit.eu/>



<http://mypebs.eu/fr/>



<https://www.dynahealth.eu/>



<https://bluehealth2020.eu/>



<https://www.ebovac.org/ebodac/>



# Life-course biological pathways underlying social differences in healthy ageing

- Understand the determinants of diverging ageing pathways among individuals belonging to different socioeconomic groups;
  - Examine the impact of the '*recent*' economic downturn on health outcomes and biological markers of ageing in Italy, Portugal and Ireland – comparison with New York City
  - **Europe has been more resilient than US to the financial crisis, a study on mortality found**
  
- The poorer you are, the slower you walk, the worse you age!
  - Men aged 60 with lower economic status (e.g. working in manual occupations) had the same walking speed as men aged 66.6 with a higher economic status (e.g. working in non-manual occupations)





## **Randomized, Comparison Of Risk-Stratified versus Standard Breast Cancer Screening In European Women Aged 40-74**

- Quantification of the long-term benefits, harms and cost-effectiveness of risk-based screening scenario
- Sociological, ethical and psychological assessments
- Among the participants: Independent Cancer patient's voice





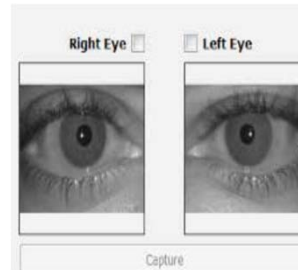
# Ebola vaccine deployment, acceptance and compliance



**During their first visit vaccinees are registered with biometric and phone number**



**Mobile phone messages are sent to remind of upcoming visits and to promote engagement**



**At each vaccination, recognition with biometric ensures the right person is vaccinated at the right time**

**M&E Missed Clinic Visits Report**

[Back to entity list](#) [Lookup](#) [Export Data](#)

Participant	Name	Household	Head of Hc	DOB
107000118	Gabriel	ALLEN	Osei	1995-01
106000038	Foday P	Thomas Mar	Sesai	1961-01
106000096	Foday P	olivette	Chahine	1992-01
106000154	ALUSINE	Gabriel	Yeboah	1996-05
106000164	Christiana	ishmael	Fall	1964-02

**Reporting allows for compliance tracking and follow-up with those who missed their vaccination**





## SC1 Projects in call 2017

Societal challenge 1 'Health, demographic change and well-being'

- Use of key words when drafting call topics that could 'attract' SSH elements;
- Use of expert evaluators with SSH competence;

→ **32** projects (call 2017) out of 45 (*SSH flagged*) have SSH components

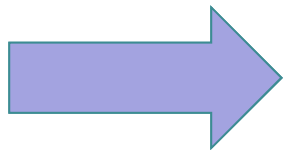




## Example 1, 2017 SSH flagged Call topic

### **SC1-PM-07-2017: Promoting mental health and well-being in the young**

“Proposals should develop population-oriented primary prevention<sup>15</sup> interventions to promote mental well-being of young people and assess them for their effectiveness. The interventions should build on but may go beyond existing state-of-the art knowledge on biological, psychological and social determinants of mental well-being such as societal, cultural, work life, lifestyle, epidemiological, economic and environmental perspectives”



**5 projects with tasks on psychosocial and behavioural science, evaluation of cultural differences, education, economics**

## Example 2, 2017 SSH flagged Call topic

### **SC1-PM-07-2017 - Personalised coaching for well-being and care of people as they age**

“Proposals should address relevant ethics and gender aspects and should also assess related legal and regulatory questions such as ownership of data, data protection/privacy, liability and consumer protection. It is crucial that users are involved and drive the innovation at all stages of design and development, including user acceptability, satisfaction and impact in realistic settings”



**8 projects with tasks on psychosocial and socio-economic factors that underpin effective behaviour changes, legal, ethics, gender, cultural aspects**





# H2020: ICT and Social Sciences/Humanities



## *ELSIfication*

- **Monitoring economic, legal, and social issues related to technological developments**
- **Mitigating risks and inconveniences and optimising benefits as well as the chance of success / uptake of technological developments**

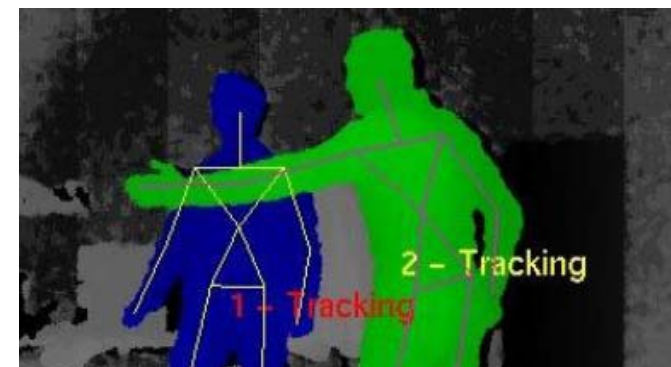
## *Reformulation*

- **Reframing concepts, meanings, and expectations arising from the deployment of ICTs pro-actively**
- **Exploring how society treats technology and what that means for innovation.**



## H2020: Societal Relevance in SC1

*"Interdisciplinary integration of knowledge, methodologies, data, concepts and perspectives from SSH and non-SSH disciplines"*



## Project example

- **IN LIFE: Personalised ICT services for home activities, communication, health maintenance, travel, mobility and socialization.**

**Special focus on multilingual and multicultural environments.  
Involvement of psychologists, social scientists, anthropologists (also economy, policy).**





## **Societal challenge Health, demographic change and well-being: some take-out**

- Some areas are 'naturally' targeted to include SSH (e.g. public health, mental health, migration, digital transformation of health and care, assistive technology)
- The contribution of expert evaluators with SSH knowledge is essential
- Despite the broadness of topics description, some key words may help to better integrate SSH expertise



# Where do we stand with Horizon Europe?

BLOG POST | By Carlos Moedas | 2 May 2018

## From Horizon 2020 to Horizon Europe



### €100-billion budget proposed for Europe's next big research programme

Initial funding plans for the seven-year Horizon Europe science initiative get a lukewarm reception.



Energy | Environment | Agriculture | Big Data | Public Health | Research | Features

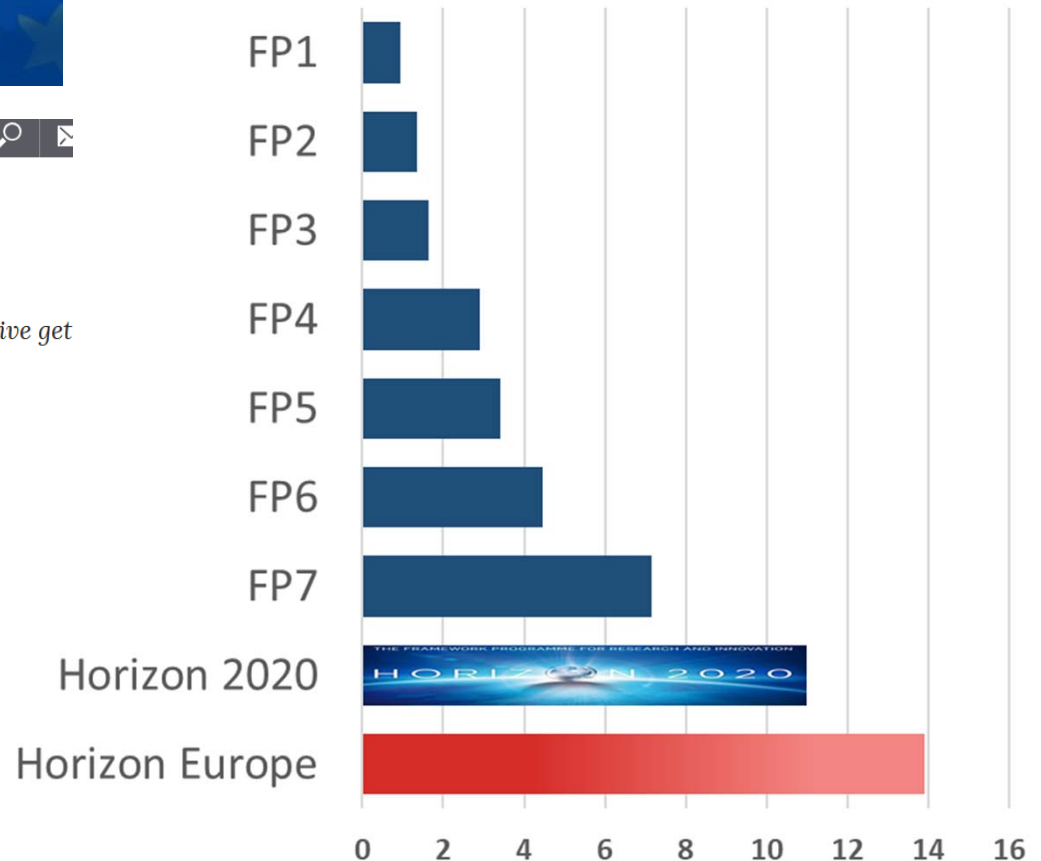
Home » Research » EU proposes €100 billion budget for Horizon Europe

### EU proposes €100 billion budget for Horizon Europe

By Rebecca Ochs - 05.05.2018



Annual R&I budget (bn €) 1983 - 2027

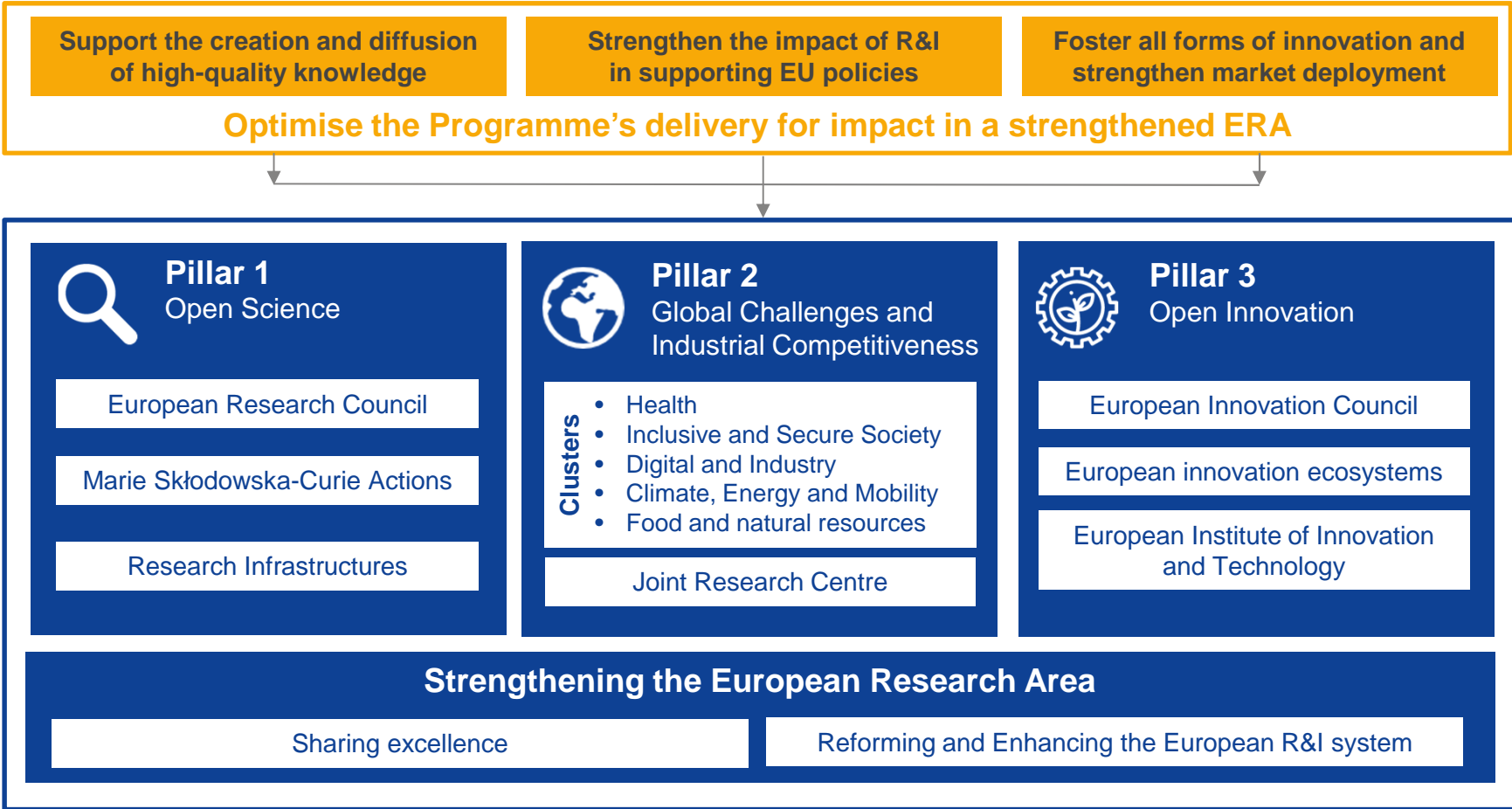


# Horizon Europe

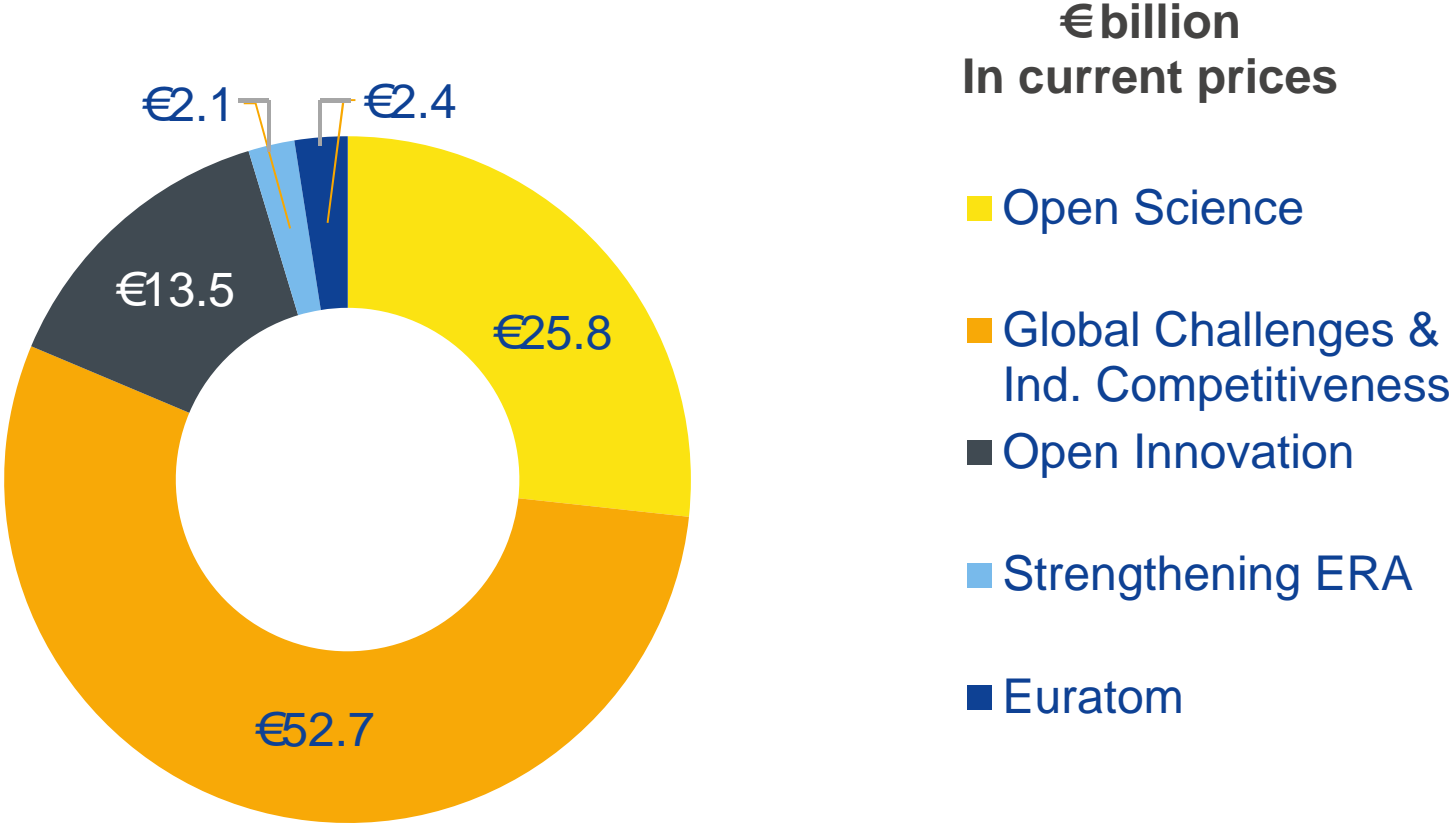


# Horizon Europe: evolution not revolution

## Specific objectives of the Programme



# Budget: €100 billion\* (2021-2027)



\* This envelope includes EUR 3.5 billion allocated under the InvestEU Fund.

## Pillar 2

# Global Challenges & Industrial Competitiveness:

boosting key technologies and solutions underpinning EU policies & Sustainable Development Goals

<b>Clusters</b> implemented through usual calls, <b>missions &amp; partnerships</b>	Budget (€ billion)
Health	€ 7.7
Inclusive and Secure Societies	€ 2.8
Digital and Industry	€ 15
Climate, Energy and Mobility	€ 15
Food and Natural Resources	€ 10
<b>Joint Research Centre</b> supports European policies with independent scientific evidence & technical support throughout the policy cycle	€ 2.2

# Lessons Learned

## from Horizon 2020 Interim Evaluation



Support breakthrough innovation



Create more impact through mission-orientation and citizens' involvement



Strengthen international cooperation



Reinforce openness



Rationalise the funding landscape



# Key Novelties

## in Horizon Europe

European Innovation Council

R&I Missions

Extended association possibilities

Open science policy

New approach to Partnerships



# R&I Missions: what do we want to achieve?

- Prioritise investments on global **challenges** where the EU adds most value
- Focus on areas with **transformative potential** for science, technology, industry or society
- Induce **collaboration** cross-sector and cross-discipline, including SSH
- Stimulate **demand** for innovative solutions by involving civil society
- Highlight the **contribution** of R&I to solving challenges
- **Inspire** and mobilise **citizens** around clear time-bound goals
- **Set the direction** for public and private R&I in Europe, leverage further investments, improve societal uptake of results



# Stakeholders support a mission-oriented approach

Impact Assessment annex 8-2

- Stakeholders support missions:
  - with potential **societal relevance**
  - to improve the **impact and visibility** of EU R&I
- Missions should be **limited in number**, easy to communicate, with a concrete budget and timeline, offering breakthrough potential and a clear EU added value
- **Cross-disciplinary**, non-prescriptive calls, citizen involvement

# Six main areas of intervention



Health throughout the Life Course



Environmental and Social Health Determinants



Non-communicable and Rare Diseases



Infectious diseases



Tools, Technologies and Digital Solutions for Health and Care

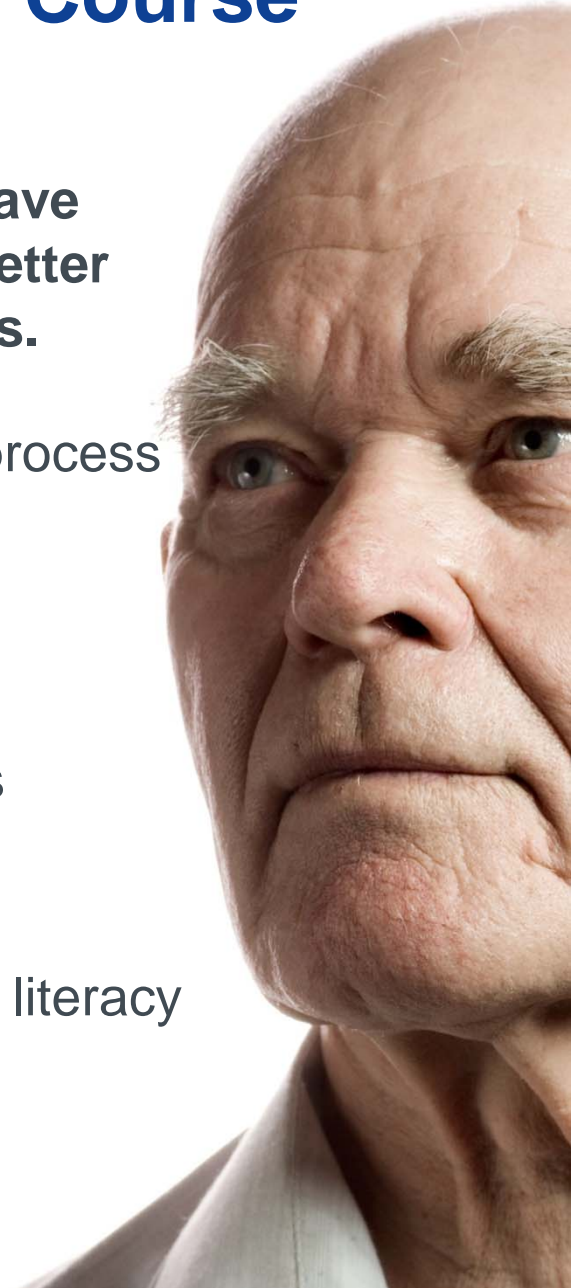


Health Care Systems

# #1 Health throughout the Life Course

**People in vulnerable stages of life have specific health needs, that require better understanding and tailored solutions.**

- Early development and the aging process
- Maternal and child health
- Health needs of adolescents
- People with disabilities and injuries
- Active life for the elderly
- Health education and digital health literacy





## #2 Environmental and Social Health Determinants

We need to better understand how the social, economic and physical environment impacts our health and mitigate health risks and threats.

- Health hazards of chemicals, pollutants and environmental stressors
- Capacity and infrastructure to collect, share and combine exposure data with health and diseases
- Environmental, occupational, social and behavioural factors impacting physical and mental health
- Risk assessment, management and communication
- Health promotion and prevention



## #3 Non-Communicable and Rare Diseases

**Non-communicable diseases remain a major health and societal challenge requiring personalized approaches.**

- Earlier and more accurate diagnoses
- Prevention and screening programmes
- Treatments and cures
- Palliative care
- Comparative effectiveness of interventions
- Scale up of health interventions
- Integrated solutions for self-monitoring, health promotion, disease prevention and management'

## #4 Infectious Diseases

**We must protect people in the world from the threats of infectious diseases and AMR.**

- Drivers for the emergence and re-emergence of infectious diseases and their spread
- Prediction, early detection and surveillance of infectious diseases and AMR pathogens
- Vaccines, diagnostics, treatments and cures
- Emergency preparedness, response and recovery measures
- Uptake of medical interventions in clinical practice, health systems
- Specific challenges in low- and middle-income countries (LMICs)





## #5 Tools, Technologies and Digital Solutions for Health and Care

New technologies are vital for public health and the competitiveness of European Health related industries.

- Tools and technologies for medical indications
- Integrated solutions for health incl. mobile and telehealth
- Piloting and large-scale deployment of healthcare technologies and tools in real-life settings
- Innovative processes for development, manufacturing and rapid delivery
- Safety, efficacy, quality and ethical and social impact
- Regulatory science



## #6 Health Care Systems

**Health systems are a key asset of the EU social system. We shall keep them accessible, resilient and sustainable and harness the potential of data-driven and digital innovation.**

- Reforms in public health systems and policies
- New models for health and care and future workforce
- Improving health technology assessment
- Use of health data respecting security, privacy and interoperability
- Health systems resilience – crises and disruptive innovation
- Patient empowerment, self-monitoring, user-centered integrated care



# High Level Group initiative

## *Action Plan on Childhood Obesity 2014-2020*

**Aim:** contribute to halting the rise in childhood obesity by 2020 through voluntary actions at national level

### **AREAS FOR ACTION**

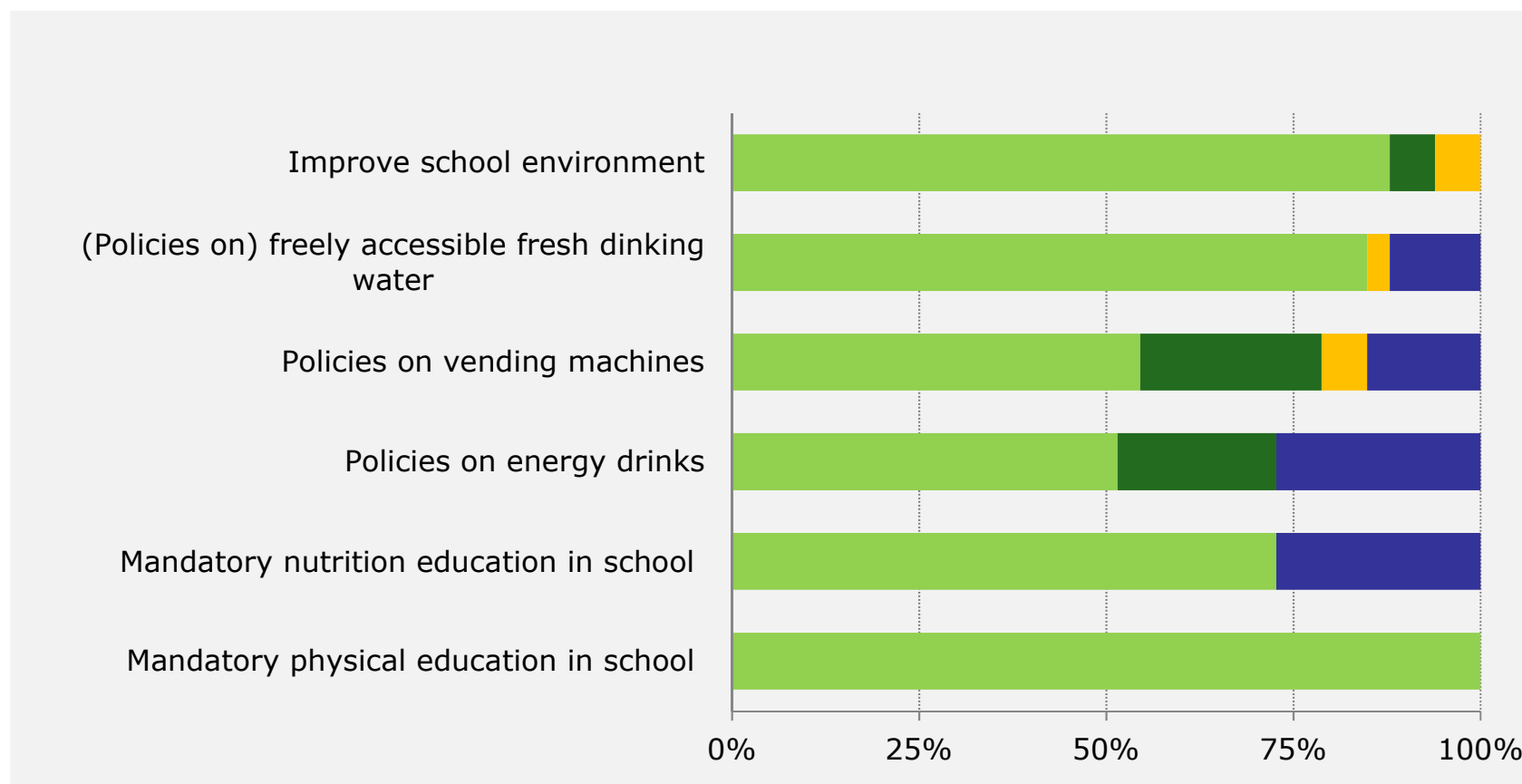
- 1. Support a healthy start in life*
- 2. Promote healthier environments, especially in schools and pre-schools*
- 3. Make the healthy option the easier option*
- 4. Restrict marketing and advertising to children*
- 5. Inform and empower families*
- 6. Encourage physical activity*
- 7. Monitor and evaluate*
- 8. Increase research*



European  
Commission

## Midterm evaluation – an example

# Promote healthier environments, especially in schools



# Vaccination

<http://ec.europa.eu/avservices/video/player.cfm?sitelang=en&ref=I154315>

## EU citizens still die from vaccine preventable diseases! The threat continues



**Newsweek**

**Toddler Dies From Measles in Berlin's Worst Outbreak in a Decade**



**EL PAÍS**

**Six-year-old diagnosed with first case of diphtheria in Spain since 1987**



**RAPID RISK ASSESSMENT**

**Suspected outbreak of poliomyelitis in Syria: Risk of importation and spread of poliovirus in the EU**

23 October 2013

**Main conclusions and recommendations**

**World Health Organization**

The gravest health challenges are being faced by the estimated 700 000 people internally displaced inside Ukraine, along with the Roma community, children, women, elderly, as well as people living with disabilities and the chronically sick. Pregnant women, people suffering from cancers and diabetes, and those needing mental and psychosocial support are among many Ukrainians requiring health support. There is also the risk of outbreaks of communicable diseases, including vaccine preventable diseases like polio and measles.

Other health challenges include:

- The average vaccination coverage in the country is well under 50%.
- About 30 to 70% of health care workers have fled the fighting areas or died.



# Putting people at the centre of **health and care**

Enabling secure access to health data across the EU

Data sharing for better research and personalised healthcare

Empowering patients with digital tools

#DigitalSingleMarket  
#DigitalHealth

#DigitalHealth  
#DigitalSingleMarket



# Horizon Europe: Goals, Missions

*Policy alignment*

*Example:*

***Digital tools for citizen empowerment  
and for person-centred care***

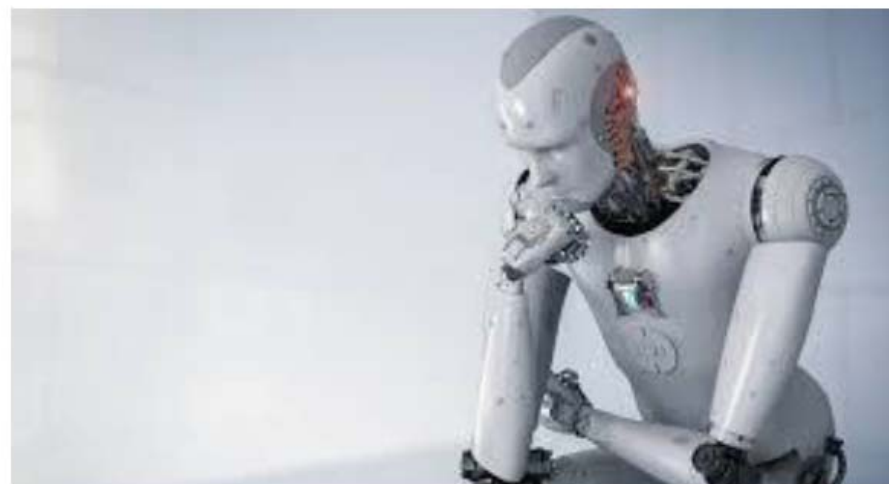
*"Person-centred approaches to organising health and care can allow citizens to assume responsibility for their health, improve their well-being and the quality of care and contribute to sustainable health systems"*





# ARTIFICIAL INTELLIGENCE

AI is helping to solve some of the world's biggest challenges: from treating chronic diseases or reducing fatality rates in traffic accidents to fighting climate change or anticipating cybersecurity threats

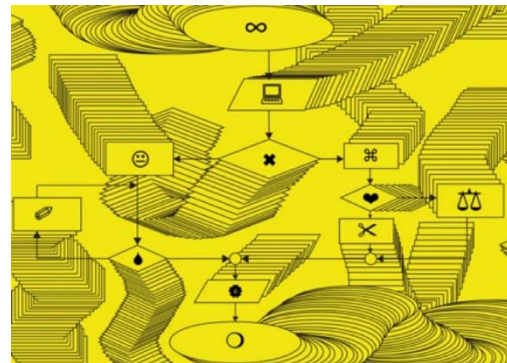


# Resources



**CANDID**

Checking Assumptions aND promoting  
responsibility In smart Development projects



*Ethics of  
Coding*



## Useful links

### Find out more about H2020:

- <http://ec.europa.eu/programmes/horizon2020/>
- <http://ec.europa.eu/research/health/index.cfm?pg=home>

### Funding opportunities 2019-2020:

- <http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

### Horizon Europe:

- <http://ec.europa.eu/horizon-europe>





**Thank you for your attention!**

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