ICT and societal challenges

Health, Demographic Change and Wellbeing

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ICT addressing societal challenges

E.g.

- **Health & Wellbeing**
- **Demographic Change & Ageing**
- **Public Services**
- **Trust & Security**
- **Smart Cities & Sustainability**

FP7: Agendas for Ageing and ICT

FUTURAGE: Roadmap for European Ageing Research

BRAID: Bridging Research in Ageing and ICT Development

Impact orientation, user involvement

SEACW (CIP): Action for Healthy Ageing

DOREMI (FP7): Decrease of cOgnitive decline, malnutRition and sedEntariness by elderly empowerment in lifestyle Management and social Inclusion

CIP project "SEACW"

Ecosystem for all those interested ageing well

Marketplace, online courses, apps, social network, jobs

Currently in pilot phase

(15 pilots in 7 countries)

H2020:
Ensuring societal impact in SC#1

We strive to improve our understanding of and response to complex societal issues related to health, demographic change and well-being

This requires interdisciplinary integration of knowledge, methodologies, data, concepts and perspectives from SSH and non-SSH disciplines

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.**

Capturing the "Triple Win"

As reflected in the Monitoring Framework of the European Innovation Partnership on Active and Healthy Ageing

First calls under Horizon 2020 (1/2)

PHC 19 – Service robotics in active assisted living environments

- **multi-disciplinary research involving behavioural, sociological, health and other relevant disciplines**

PHC 20 – Independent living with cognitive impairment

- **Expected impact: Clear evidence of improvements to quality of life and active ageing for involved users and carers**

SSH in the first round of calls

Examples of problems / needs for improvement wrt the true understanding of the role of SSH

- **Confusion over relation between SSH and RRI**
- **Beyond just "user acceptance"**
- **Avoid "box-ticking"**

First calls under Horizon 2020 (2/2)

PHC 21 – ICT solutions for early risk detection and prevention

- **multi-disciplinary research involving behavioural, sociological, health and other relevant disciplines, and on stakeholder engagement in order to be driven by relevant user needs to ensure end-user acceptance (including gender aspects)**

PHC 25 – ICT systems for integrated care

- **participation of a wide range of users, developers and stakeholders, including medical doctors, nurses, social workers, patients as well as programmers and interaction designers. Gender and ethical issues should be paid due attention**

From retained proposals for a sample of 20 SSH-flagged topics

Integration of SSH:

40% none, 25% good, 35% fair

GOOD = significant contributions from a variety of SSH fields are integrated throughout the R&I chain

FAIR = contributions from a few recurring fields such as business models and user behaviour are included to serve a limited role

NONE = contributions from SSH are lacking or play an insignificant role

Innovation for Active and Healthy Ageing

- **Independent living**
- **Workplace**
- **Integrated Care**
- **Age-friendly environments**
- **Patient / User empowerment**

Patient empowerment

Article 75 of the DAE : Give Europeans secure online access to their medical health data (and achieve widespread telemedicine deployment)

- **Citizen engagement in health, wellbeing and prevention of diseases**
  - Creation of a supportive environment for healthy behaviour
  - Health promotion, health literacy and disease prevention
  - Development of a multi-stakeholder ecosystem
  - A migration path towards comprehensive solutions that could be incorporated into health care processes

Good practice:
Ethics framework for care-robots

Autonomy

Independence

Enablement

Safety

Privacy

Social connectedness

Engaging with the SSH community

Workshop on Health, Demographic Change and Wellbeing, November 2014

- **Moving from sickness to wellbeing (citizen) model**
- **But, SSH - definition of the term "wellbeing"?**
- **Great challenge for SSH – measuring impact! Needed in a challenge based approach that aims at making lives better**
- **Call from SSH community to continue being less prescriptive, be even less prescriptive than 1st call to allow for create approaches (but problem of evaluation accuracy, comparability of proposals)**

Recommendations to the Commission

- Systems-oriented approach to behavioural change
- Interplay of individual/collective behaviour change, institutional and organisational change
- SC#1: look at relation between key health agencies (hospital, home care, community care, social services)
- Encourage funding: How to get policy makers, managers, industry involved in SSH lead research?
- Are we asking the right (big) questions? Shared definition of research priorities needed (see e.g. JPI MYBL, EIT KIC, societal challenges in H2020…)
- Changing role of the individual: empowerment, self-monitoring, self-help, exploration of new participatory infrastructures?

Recommendations to the Commission

- More longitudinal studies (5-10 years)
- Combination of qualitative and quantitative measures
- Be clearer on expectations for non-formal knowledge ("Non-formalized knowledge may come from relevant societal actors and stakeholders such as healthcare practitioners, farmers, user groups etc.")

Further lessons learned

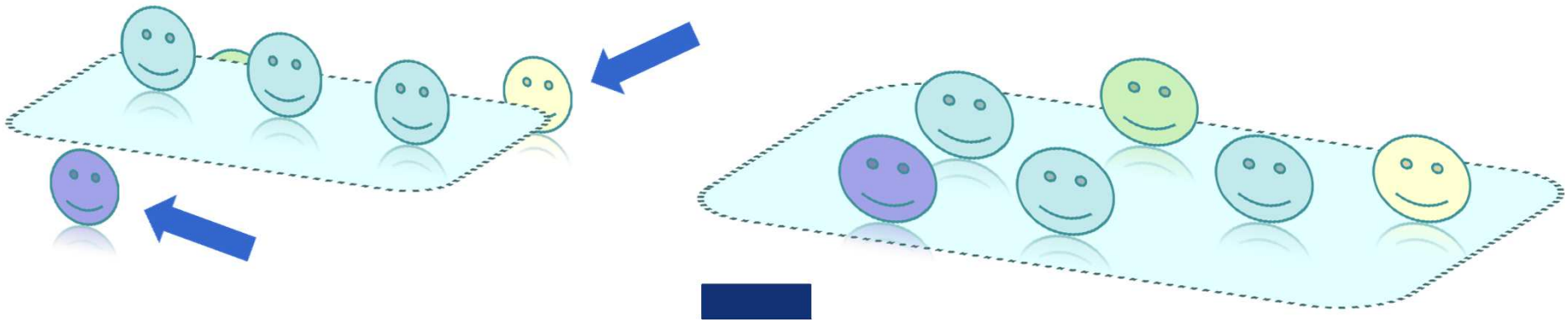
- **Societal challenge 1: greater focus on the wellbeing aspect and life-course research**
- **Requirement of transdisciplinarity – we need innovative and creative ways and go beyond interdisciplinarity – was lacking in first round**
  - **Approaches and methodologies that integrate as necessary:**

    (a) theories, concepts, knowledge, data, and techniques from two or more scientific disciplines, and

    (b) non-academic and non-formalized knowledge. In this way, trans-disciplinarity contributes to advancing fundamental understanding or solving complex problems while fostering multi-actor engagement in the research and innovation process.

ICT-10-2015 c) – Digital Social Platforms

- Involving those in the innovation process that have been left out so far (co-creation)
- Identification of blockers for participation
- Finding (ICT supported) enabling factors
- Interdisciplinary research, particularly DSSH, behavioural change
- Incentives, rewards, possibly business models
- Transferability and scalability
- Building on "existing ecosystems"



One last thing to consider:
Be more specific

"SSH"

Sociology, Psychology, Anthropology, Cultural studies, Demography, Education, Religion, History, Economics, Administration, Political Science, Philosophy, Ethics, Law…

"RRI"

Public Engagement

Open Access

Gender

Ethics

Science Education