I. INTRODUCTION
The European Commission has been investing in eHealth research for over 20 years. Since 2004, it has been developing targeted policy initiatives aimed at fostering widespread adoption of eHealth technologies across the EU¹.

In 2010, the flagship initiatives Digital Agenda for Europe² and Innovation Union³ were launched as part of the EU’s "Europe 2020" strategy for smart, sustainable and inclusive growth. Both flagships incorporate an important role for eHealth: the Digital Agenda for Europe includes a number of targeted eHealth actions and goals as part of a wider strategy towards sustainable healthcare and ICT-based support for dignified and independent living. The Innovation Union strategy, introduces the concept of a pilot European Innovation Partnership on active and healthy ageing, which will be launched in 2011.

In parallel, Member States have been taking a complementary and pro-active approach to eHealth. Council Conclusions adopted on 1 December 2009 called upon the European Commission to update the 2004 eHealth Action Plan. This has been followed up by the creation of the "eHealth Governance Initiative", driven by Member States and jointly supported by DG INFSO and SANCO. The overall objective of the initiative is to contribute actively to the shaping of the eHealth political agenda at EU level, with a specific focus on interoperability.

This second eHealth action plan (eHAP) provides an opportunity to consolidate the actions which have been addressed to date, take them a step further where possible and provide a longer term vision for eHealth in Europe, in the context the EU 2020 Strategy, the Digital Agenda for Europe as well as Innovation Union and its associated European Innovation Partnership on Active and Healthy Ageing.

II. Objective of the Questionnaire
The questionnaire forms part of the European Commission’s official public consultation process. Wide consultation is one of the Commission’s duties according to the Treaties and helps to ensure that proposals put to the legislature are sound. By fulfilling its duty to consult, the Commission ensures that its proposals are technically viable, practically workable and based on a bottom-up approach. This serves a dual purpose by helping to improve the quality

² (COM (2010)245 final)
³ (COM(2010) 546 final),
of the policy outcome and at the same time enhancing the involvement of interested parties and the public at large.

The questionnaire is open to all interested stakeholders and aims at understanding if the proposed policy objectives are in line with the aims, objectives and expectations of stakeholders. It further aims to examine if there are additional areas which require further development in the context of the action plan.

The public consultation will remain open for 8 weeks. Following this, the results of the consultation will be analysed, published on the European Commission website, and taken into consideration in drafting a policy document setting out an Action plan for eHealth, which is planned to be adopted by the Commission in 4Q 2011. The Commission invites all interested parties to submit their contributions in response to the questions raised below. Thank you in advance for your contribution.

III. EHEALTH Action Plan – overall objectives

The proposed action plan will run from 2012 until 2020, mirroring the timeline of Europe 2020, the Digital Agenda for Europe and Innovation Union.

The overall policy objectives of the initiative are: to continue to support Member States and healthcare providers so that they may benefit from ICT solutions in the best interest of patients, healthcare systems and society; to help enable an innovation friendly enviroment and to make best use of innovation in health. In addition, eHealth Action Plan shall ensure the successful achievement of objectives of the Digital Agenda\(^4\) and European Innovation Partnership on Active and Healthy Ageing. To achieve such overall policy objectives at EU level, the Commission plans to work to:

1.- Increase awareness of the benefits and opportunities of eHealth, and empower citizens, patients and healthcare professionals
2.- Address issues currently impeding eHealth interoperability
3.- Improve legal certainty for eHealth
4.- Support innovation and research in eHealth and development of a competitive European and global market.

The questions outlined in the questionnaire have been organised under these four objectives.

\(^4\) DAE: Key Action 13: Work with Member States to equip 15% of Europeans with secure online access to their medical health data by 2015. By 2020 widespread deployment of telemedicine services; Key Action 14: Adopt EU wide standards, interoperability testing and certification of eHealth systems by 2015; Agree on a minimum set of patient data to be accessed/exchanged across Member States by 2011;
III. QUESTIONNAIRE

Respondent information

1. I reply on behalf of:
   a. Myself
   b. My employer (other than a public authority)
   c. A public authority

If "myself":
2. Please provide your name, country of residence and email address

If "My employer":
2. Please indicate the sector(s):
   a. Industry - Large Enterprise
   b. Industry - Small-Medium Enterprise
   c. Health and social care provider
   d. Research/academic
   e. Association and/ or NGO (please specify)
   f. Other (please specify)

Please provide your organisation’s name and department (if any), country and email address

EuroHealthNet
Belgium
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How many members of your organisation/association have directly approved this contribution?

If "Public authority":
2. Please indicate scope:
   a. international
   b. EU
   c. national
   d. regional
   e. local
   f. Other (please specify)

EU

Please provide your public authority's name and department (if any), country and email address
Benefits of eHealth Solutions

3. In your view, what are the main benefits you expect from the large scale deployment of eHealth solutions?

- **Economies of scale** – resulting in cheaper technologies and supportive services and thus improved access.
- **User empowerment** – increased access to health information, democratisation of information and tools for self-monitoring and self-management of health and disease.
- **Expansion of the trend regarding personalisation of health technology** – technology that is tailored the individual’s needs and competencies and conveys enhanced potentials for effectiveness.
- **Potential (!) for decreasing health inequities** – e-health can provide solutions for geographically secluded areas, and online tools can offer free-of-charge and ready available health information and advice for everyone (dependent on internet access)
- **Optimisation of healthcare processes**, allowing more resources to be channelled into disease preventing and health promoting strategies.

The Four Objectives of the Action Plan

4. Taking into consideration the background described in the introduction and existing policy developments made since 2004, do you agree with the four objectives of the Action Plan (listed below)?

i. Objective 1: Increase awareness of the benefits and opportunities of eHealth, and empower citizens, patients and healthcare professionals

   a. **Yes, I agree**
   b. Yes, I partially agree
   c. No, I disagree
   d. I don’t know

Comments:

Points to consider, before it is advisable to advocate for e-health as purely beneficial and positive;

- **Equity:**
  Not everyone is positioned to reap the benefits of e-health, especially in the area of user empowerment (if there is a lack of e-health literacy, internet access or financial ability to acquire supportive technologies or services).
- **Evidence of (cost)-effectiveness**
  There is not a solid evidence base regarding the added value of e-health when actually implemented into healthcare systems (some evidence points to added complexity - at least initially, and long term cost-effectiveness has not been confirmed).

- **Integration into healthcare systems**
  Related to the above; there is little experience with how e-health can best be integrated into healthcare systems – how easily can it become part of already established care processes, work styles, culture etc.? How to manage this change effectively?

- **Benefits depends on current infrastructures**
  How relevant is technology to healthcare systems that are currently not efficient or sufficient (e.g. in some Eastern European countries). Will it only add further pressure and complexity and no benefits?

- **Quality of care and quality of work environment**
  If not correctly implemented, use of health technology may affect both users/patients and health professionals; de-personalisation of care, added workload, abrupt workflows etc., are possible negative consequences.

- **Health promotion**
  There is still very little focus on how e-health can be used to promote health and prevent disease outside of healthcare settings.

ii. Objective 2: Address issues currently impeding eHealth interoperability

  a. Yes, I agree
  b. Yes, I partially agree
  c. No, I disagree
  d. I don't know

Comments:

iii. Objective 3: Improve legal certainty for eHealth

  a. Yes, I agree
  b. Yes, I partially agree
  c. No, I disagree
  d. I don't know
iv. Objective 4: Support research and innovation in eHealth and development of a competitive European market.

a. Yes, I agree
b. Yes, I partially agree
c. No, I disagree
d. I don't know

Comments:

- Need to ensure that there is no discrimination in terms of whom the EU-sponsored technologies or services are designed for. (Public money should create public good!). There are grounds for believing that e-health will add most value in highly operable and resourceful systems, just as single technologies seem to be designed and targeted at technology and health savvy users. (i.e. risk of increasing inequalities between countries and within populations)
- Need to also focus research and innovation on e-health’s applications in health promotion and disease prevention (to reduce current and up-coming burden of chronic diseases) even though the immediate economic prospects may be most apparent in healthcare, rehabilitation and elderly care.
- Lack of public health (and health equity) representatives in EU-level initiatives, such as the European Innovation Partnership for Active and Healthy Ageing. Important to have a balanced debate, taking in views of all stakeholders to ensure that the e-health development does not favour some stakeholders or agendas without sound rationales and openness.

Main Barriers

5. What do you consider to be the main barriers preventing the large scale deployment of eHealth solutions? (Please choose maximum 5)

a. Lack of large scale evidence for potential improvements to healthcare processes
b. Budgetary constrains
c. Lack of leadership (policy makers, local managers)
d. Lack of users' (i.e. patients' and/or healthcare professionals') awareness
e. Limited users' (i.e. patients' and/or healthcare professionals') skills in using ICT
f. Health professionals’ acceptance
g. Inappropriate legal frameworks and lack of reimbursement schemes
h. Lack of interoperability
i. Inappropriate organization of the healthcare process
j. Access to standards
k. Lack of cross-sectoral coordination / integrated healthcare schemas

1. Other (please specify)

- o a) Without evidence of effectiveness on a large scale, healthcare managers will not venture into the enormous initial investments required to purchase the technology, install and maintain the IT infrastructure and train the health professionals in how to deploy them.

- o b) Financial shortage in healthcare systems hinders innovation. This is further complicated by the fact that there is no clear division of cost and benefits between different bodies (sectors) of the health system, and consequently, the uncertainly of return of investments.

- o e) Limited user’s skills can make the health professionals apprehensive about “pushing” technology on patients – highly related to liability issues and fear of legal repercussions. Patients themselves may be equally apprehensive and prefer traditional methods.

- o f) This is also related to physician attitudes towards technology in health and healthcare. Often expressed concerns relate to de-personalisation of health, increased liability, data-overload, increased workload given the constant flow of information, and general resistance to change established ways of working.

6. In your view, how should the European Commission contribute to addressing the barriers you selected above, and provide incentives to promote eHealth solutions?
(Please choose maximum 5)

a. Propose legislation

b. Facilitate cooperation between Member States and/or regions to address common challenges

c. Support systematic evaluation of the benefits and costs, effectiveness/usefulness of eHealth solutions

- Provide guidance on planning, implementation, and change management processes

d. Support deployment of eHealth services/solutions based on evidence

- Explore innovative financing, reimbursement and incentive schemes to promote innovation in eHealth

e. Provide guidance for achieving EU wide interoperability, for example use of common standards, profiles, terminologies etc.
g. Enhance awareness of benefits and opportunities of eHealth
h. Improve ICT skills of users (citizens/patients/health professionals)
i. Other (please specify)

- By including MS at national and regional level, the structures and capacities of all healthcare systems are taken into consideration, which allow for the technologies to be adapted to match, and not obstruct, established systems.

- As expressed, demonstration of cost-effectiveness is essential for larger scale uptake, and should take priority.

- Equally important is knowledge and guidance on actual implementation. Health managers need to trust that e-health will be compatible with current processes, and there is a strong need for guidelines on successful implementation, taking into account the differences between various systems.

- A step wise approach should be adopted that prioritizes implementation in zones where immediate benefits could be achieved – geographically remote areas for example- followed by an evaluation on the impact and cost effectiveness in their initial settings.

- To ensure that e-health will be consumer-driven and not top-down market driven, the users (citizens, patients and healthcare professionals) need to make claims to be technology savvy. There is thus a need to enable the users (of various socio-economic groups and cultural backgrounds) to engage in e-health. This includes increasing user competencies in terms of e-health literacy, technologic know-how and make sure that the e-health technology is universally accessible.

6.1. Objective 1: Increase awareness of the benefits and opportunities of eHealth, and empower citizens, patients and healthcare professionals

i. In your view, what actions should the European Commission consider to improve awareness and empowerment of citizens and patients?

- Consult with a wide range of stakeholders, especially with Patient and Consumer Networks and Associations.
ii. In your view, what actions should the European Commission consider to improve healthcare professionals' awareness and acceptance?

- Consult with a wide range of stakeholders, especially with health professional associations

iii. Additional comments

- The broader public health community, including health promotion and prevention actors, should be continually consulted throughout the process.

iv. In your view, in which of the areas listed below European cooperation is most important? (Please choose maximum 3 options.)

a. ICT systems for clinical use (decision support systems, EHR, ePrescription, Radiology Information Systems etc.)

b. ICT systems for non clinical use (administrative software, booking, statistic applications, professional education etc.)

c. Information systems for Public Health (patient registries, other data bases for public health, research etc.)

d. ICT systems for patients / individuals (lifestyle, prevention, monitoring)

e. Other (please specify)

6.2. Objective 2: Address issues to achieve eHealth interoperability

The Commission Recommendation on cross-border interoperability of electronic health record systems⁵ and a number of studies like "Interoperable eHealth is worth it"⁶ or "Semantic Interoperability"⁷ have analysed specific areas of eHealth interoperability. More recently, in 2010, the Calliope Thematic Network published a report called "EU eHealth Interoperability Roadmap" in which the Network makes several recommendations to promote eHealth interoperability in Europe⁸.

i. In your view, in which of the areas listed below European cooperation is most important? (Please choose maximum 3 options.)

a. Taking steps to achieve secure, unambiguous and portable electronic identification of EU citizens

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⁸ http://www.calliope-network.eu/LinkClick.aspx?link=439&tabid=277
b. Taking steps to advance technical interoperability to facilitate de-fragmentation of the eHealth market

c. Taking steps to advance semantic interoperability to lay the foundation for a European level info-structure, to facilitate the access to and the reuse of common semantic interoperability resources

d. Taking steps to address legal barriers to interoperability

e. Taking steps to address lack of financial resources - through coordination, support actions, pilots, knowledge sharing, etc.

f. Other (please specify)

ii. A European Interoperability Framework could be developed to provide support to Member States and stakeholders to solve interoperability issues. In your view, in which of the areas listed below is European cooperation most important? (Please choose maximum 3 options.)

a. the harmonised standards, profiles and technical specifications to be used to ensure cross border eHealth Interoperability

b. the harmonised interoperability testing and conformance systems to be put in place

c. the harmonised medical terminologies, ontology, classifications and codification systems that need to be used at EU level

d. defining common interoperability use cases for cross-border healthcare

e. defining measures to achieve convergence of national eHealth interoperability frameworks

f. Other (please specify)

6.3. Objective 3: Improve legal certainty for eHealth

i. In your view, how should the European Commission address legal issues related to eHealth? (Please choose maximum 3 options.)

a. Encourage and support Member States in addressing relevant legal and organisational issues in a coordinated manner

b. Propose a European legal framework to cover the rights of users of eHealth services in cross-border situations

c. Encourage professional associations, scientific societies and civil society representatives to promote best practices through the development of guidelines and/or codes of conduct for eHealth services

d. Other (please specify)

ii. In your view, which areas should the European Commission focus on? (Please choose maximum 3 options.)
a. Liability
b. Reimbursement
c. Data protection
d. Licensing and accreditation of professionals and healthcare providers
e. Other (please specify)

6.4. Objective 4: Support research and innovation in eHealth and development of a competitive European and global market

i. In your view, how should the European Commission support innovation? (Please choose maximum 3 options.)
   a. Provide strategic recommendations to Member States and stakeholders
   b. Provide funding for the scaling up of innovative eHealth solutions, for example by facilitation deployment of research results
   c. Provide more flexible financing mechanisms to support research and innovation
   d. Support collection, dissemination and analysis of information on innovative healthcare services
   e. Support user-driven research through use of appropriate financial instruments (for example use of CSO\(^9\) or similar instruments)
   f. Other (please specify)

ii In your view, in which of the areas listed below should the European Commission cooperate with international partners? (Please choose maximum 3 options.)
   a. Stimulate the international policy dialogue to facilitate the deployment of eHealth solutions.
   b. Taking steps to advance interoperability
   c. Support R&D to advance new innovative solutions (incl. Virtual Physiological Human, Personal Health Systems, ICT for Public Health)
   d. Promote benchmarking and evaluation projects in order to provide evidence to support deployment of eHealth solutions.
   e. Promote the use of EHR
   f. Promote deployment of telemedicine services
   g. Other (please specify)

7. Other comments

\(^9\) CSO is one of the financial instrument in EU Research Framework Programmes to support research needs of Civil Society Organisations