

Informal Meeting of Health Ministers

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eHealth and Health Innovation

Discussion Paper

The European healthcare delivery landscape is changing rapidly to respond to the challenges of an ageing population, higher incidence of chronic diseases, rising expectations of citizens and increasing mobility of patients and health professionals, and this at a period where EU health systems are under severe budgetary constraints.

Fostering **innovation in eHealth** (Information and Communication Technologies applied to health and healthcare systems) in Europe is a way towards ensuring safer and better quality of care for EU citizens, and contributing to more efficient and sustainable health systems and new business opportunities.

The well being market enabled by digital technologies (mobile applications, devices) is rapidly growing. The convergence between wireless communication technologies and healthcare devices and between health and social care is creating new businesses. Redesigning the delivery of care and the 'silver economy' are highly promising markets.

Despite the economic crisis, the market potential of eHealth is strong. The global telemedicine market has grown from \$9.8 billion in 2010 to \$11.6 billion in 2011, and is expected to continue to expand to \$27.3 billion in 2016, representing a compound annual growth rate of 18.6%¹. Mobile health (**mHealth**) revenues are expected to reach US\$ 23 billion worldwide in 2017 with US\$ 6.9 billion in Europe and it is estimated that mHealth could save € 99 billion in healthcare costs in the EU in 2017 if its potential is fully unlocked.

The 2010 OECD report "Improving Health Sector Efficiency: the role of information and communication technologies"² underlines that numerous findings illustrate the potential benefits that can result from eHealth. These can be classified according to four broad, inter-related categories of objectives: increasing quality of care and efficiency; reducing operating costs of clinical services; reducing administrative costs; and enabling new modes of care.

eHealth can benefit citizens, patients, healthcare professionals, and health systems. eHealth also contributes to more 'citizen-centric' healthcare and helps reduce the length of hospitalisation. It

¹ According to BCC Research study of March 2012

² Improving Health Sector Efficiency. The role of information and communication technologies. OECD Health Policy Studies, 2010

facilitates socio-economic inclusion and equality, quality of life and patient empowerment³ through greater transparency, access to services and information.

Such benefits have been demonstrated when using telemedicine for managing chronic conditions, mental health, health promotion⁴ and integrated care. Similar benefits have been identified for technology assisted therapies, which can effectively complement routine clinical care and improve the cost-efficiency of treatments as well as when using interoperable electronic health record and **ePrescribing** systems⁵.

The adoption in 2011 of the Directive on the Application of Patients' Rights in Cross Border Healthcare (2011/24/EU) and its Article 14 establishing the eHealth Network, marked a further step towards formal co-operation on eHealth, with the aim to maximise benefits through interoperability and the implementation of eHealth systems, and the facilitation of the free movement of EU citizens within the EU. The 2012-2020 eHealth Action Plan emphasises the benefits of eHealth services, while the "European Innovation Partnership on Active and Healthy Ageing (EIP on AHA) promotes opportunities for modern, innovative and sustainable ICT based services for the elderly and people with chronic diseases.

In most EU Member States and particularly in Member States under adjustment programmes, eHealth has gained significant importance as a means to improve the efficiency and effectiveness of health systems, and control of expenditures.

In order to take full advantage of these benefits both to patients and health systems it is important to explore further the areas of eHealth and health innovation that have the potential to make health systems more efficient including ePrescription and mHealth.

ePrescription

ePrescription is defined as the electronic prescribing medicine and the electronic transmission of prescription data to a pharmacy where the medicine is dispensed and aims at improving the efficiency of prescribing and dispensation process.

Article 11 of the Directive on cross-border healthcare calls for guidelines to support the Member States in developing the interoperability of ePrescriptions, meaning that those issued in one Member State can be used in other Member States. The Commission implementing directive 2012/52/EU lays down measures to facilitate the recognition of medical prescriptions issued in another country. According to its work plan, the eHealth Network will discuss the draft Guidelines of ePrescription in May 2014, with a view of adoption in November.

According to a recent study (by Empirica, 2013), 6 Member States have fully functional ePrescription systems across the country or substantial parts of the country. 12 Member States are in process of implementing ePrescription systems or have mature pilot projects running. 7 Member States and one European Region in epSOS have been piloting interoperable cross border ePrescription systems.

Member States, who have implemented ePrescription systems, report positive experiences on the unbroken chain of information (between the prescribing personnel and the dispensing personnel),

³ "Patient empowerment is a process to help people gain control, which includes people taking the initiative, solving problems, and taking decisions, and can be applied to different settings in health and social care, and self management" [ENOPE 2012].

⁴ Staff Working Document Accompanying eHealth Action Plan – innovative healthcare for the 21st century.

⁵ Economic Impact of Interoperable Electronic Health Records and ePrescription in Europe (01-2008/02-2009): http://ec.europa.eu/information_society/activities/health/docs/publications/201002ehrimpact_study-final.pdf

increased patient safety, reduction of reading errors, and increased productivity for example due to improved stock management and decreased time effort for the health care professionals. Furthermore, ePrescription seems to have positive effects on reducing fraud and prescription falsification. An ePrescription system can have integrated reimbursement and control systems, public health can be better kept under surveillance, and can provide direct accessible information about aggregated prescribing and dispensing of medicines within a health system.

For example in Greece, ePrescription has been placed at the centre of the reforms. Bilateral co-operation and exchange of good practices, particularly with Sweden, which is an early adopter of a complete ePrescription system on a country wide basis, has been beneficial in helping Greece make the right choices. As a result, the national prescription system, developed by IDIKA, a Greek state company responsible for eHealth applications, is fully deployed today and demonstrates substantial benefits.

mHealth as an emerging field in eHealth

mHealth is a sub-category of eHealth and covers medical and public health practice supported by mobile devices, such as mobile phones, tablets and other wireless devices. Examples include disease self-management and remote monitoring devices, tools offering fitness and dietary recommendations and lifestyle and wellbeing apps.

mHealth is a rapidly developing field that has the potential to improve healthcare quality and efficiency by supporting healthcare professionals in treating patients and easing continuity of care. In addition, it supports patients' empowerment and independent living in their own home environment thanks to remote monitoring solutions.

However, despite this potential, the uptake of mHealth remains limited in the EU as evidence may still be needed for Member States and healthcare authorities to implement mHealth at a wider scale.

In this context the European Commission adopted on 10 April a Green Paper on mHealth, and launched a debate with stakeholders on actions to address data protection, users' trust, patient safety, mHealth contribution to high quality healthcare and equal access, while at the same time reflecting on the potential of big data for research and innovation in healthcare.

Ministers / Heads of Delegations are invited to consider the following questions in preparation for discussion:

- Is the implementation of interoperable eHealth solutions and services including ePrescribing amongst your health priorities? Do you consider exploring the possibility of working closely with other Member States in achieving this target?
- Do you consider mHealth as part of your eHealth strategy and if yes how do you intend to promote its implementation? What actions could be taken at EU level to support Member States in implementing mHealth solutions?