Digital Single Market

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eHealth studies: an overview

These studies are at the basis of our work in the field of digital health and care. Their topics range from the impact of eHealth solutions on society to analyses of each Member State and case studies.

1. Eurobarometers

Attitudes towards the impact of digitisation and automation on daily life [1]; including a chapter on digital health and care (chapter V, p. 19 in the Summary report [2]) - Eurobarometer 460 (published May 2017)

European citizens' digital health literacy *[3]* - Eurobarometer 404 (published November 2014)

User language preferences online *[4]* - Eurobarometer 313 (published May 2011)

2. EC policy papers

Interim evaluation of the eHealth Action Plan 2012-2020 *[5]* (published 2014) - This interim evaluation carried out by Deloitte aims to provide a basis upon which to assess the accomplishment of the eHealth Action Plan 20120-2020 [6] after two years of operation and to identify the remaining challenges for the full implementation of the Action Plan by 2020. For this purpose, data is collected through several tools including desk research, interviews with involved stakeholders, surveys among the eHealth community as well as expert input/review.

3. Use of eHealth in the EU

From innovation to implementation – eHealth in the WHO European Region (2016) [7] - carried out by the World Health Organisation in 2016.

Security and Resilience in eHealth Infrastructures and Services *[8]* with an annex [9] analysing the eHealth situation per EU member state (published December 2015).

These studies were both published in March 2014 (press release [10]):

- *Benchmarking deployment of eHealth services in Hospitals (2012–2013)* [11]
- *Benchmarking deployment of eHealth among General Practitioners (2013)* *[12]*

Dynamic health systems and new technologies: eHealth solutions at regional and local level

[13] (2011)

European Countries on their journey towards national eHealth Infrastructures *[14]* (published 2011)

Methodology to assess Telemedicine Applications *[15]* (published 2010): telemedicine applications in use in Europe. The study also identifies enablers and obstacles to the deployment of telemedicine applications and provides an initial overview of national policies in telemedicine.

4. Benefits of eHealth and its impact

Interoperable eHealth is worth it - Securing benefits from EHRs and ePrescribing [16] (published 2010) analyses the economic impact of interoperable Electronic Health Records (EHRs) and ePrescription in Europe.

Best practises in Europe on "ICT enabled independent living for elderly" *[17]* (published 2008). People in the EU are growing older and older. That puts severe pressure on our healthcare systems, and because of that, this study (published 2008) examines if it is true that the use of ICT contributes significantly to keeping care related costs manageable, and also influences the economy through the creation of new market opportunities.

eHealth for Safety - Impact of ICT on Patient Safety and Risk Management *[18]*. How can ICT applications improve patient safety and risk management in healthcare? Based on both a review of tools in use and research on their use, the experts of this study (published 2007) show that eHealth can help prevent medical errors, initiate rapid responses to any event, and track events, should they occur, as well as provide feedback to learn from them.

eHealth is worth it - Regional case studies *[19]* (2006). Improved treatment quality, better access to care, avoidance of unnecessary public expenditure. Information and communication technologies (ICT) can greatly benefit all aspects of delivering healthcare. These 10 case studies (published 2006) clearly demonstrate that eHealth matters, that it is well worth the investment, and that it can lead to substantial economic and social benefits.

5. Interoperability and legal frameworks

The *eHealth Interoperability Framework Study* *[20]* (published 2013) defines a vision of a cross-border EU eHealth Interoperability Framework.

Legal framework of Interoperable eHealth in Europe and an analysis of each Member State [21] (published 2009) contributes to the creation of a framework for greater legal certainty of eHealth products and services. It also gives an analysis of each member state.

The *Connected Health: Quality and Safety for European Citizens* [22] study (published 2006) sets out the steps required to build interoperable eHealth services across Europe. The report was written with input from both the i2010 sub-group on eHealth and the eHealth stakeholder group.

6. Business models and financing oppportunities

Business models for eHealth *[23]* (published February 2010) analyses business modelling approaches aimed at making eHealth applications financially and operationally sustainable in the longer term. Interests and requirements of the stakeholders have been taken into consideration and particular attention has been given to ICT applications for chronic disease management while also considering research activities carried out in this field with the support of the European Commission.

Assessment of financing opportunities available to Member States to support and boost investment in eHealth [24] (published 2008) aims to support the specific action outlined in the eHealth action plan of supporting, boosting, and leveraging investment in eHealth. The study sheds light on the options available to Member States, and the solutions that exist to face their common challenges.

7. Promising applications in healthcare

Policy options for Radio Frequency Identification application in healthcare [25](published 2009). Radio Frequency Identification (RFID) is thought to have a high potential for increasing efficiency, quality of healthcare, and most importantly: patient safety. The study on the requirements and options for actions in RFID applications in EU healthcare delivery (published July 2009) identifies the drivers, obstacles and critical uncertainties surrounding the current and future deployment of this and similar technologies.

Roadmap for application of robotics in medicine and healthcare [26] (published 2008). The objective was to produce a roadmap of promising healthcare robotics applications, which encompasses the associated technologies, research directions and expected impact.

8. Sharing good practices

Study on exchange of good practices in eHealth [27]. The "Good eHealth" study (published March 2008) aims to advance the implementation of a comprehensive and continuous approach to dissemination and transfer of learning experiences. The study seeks to identify the benefits deriving from specific good practice examples, to develop stronger approaches to sharing good practices, and to stimulate faster uptake of new eHealth systems and services.

Links
[1] https://ec.europa.eu/digital-single-market/en/news/attitudes-towards-impact-digitisation-and-automation-daily-life
[2] http://ec.europa.eu/commfrontoffice/publicopinion/index.cfm/ResultDoc/download/DocumentKy/78279
[3] http://ec.europa.eu/commfrontoffice/publicopinion/flash/fl_404_en.pdf
[4] http://ec.europa.eu/commfrontoffice/publicopinion/flash/fl_313_en.pdf
[5] http://ec.europa.eu/newsroom/document.cfm?doc_id=40845
[6] https://ec.europa.eu/digital-single-market/en/news/ehealth-action-plan-2012-2020-innovative-healthcare-21st-century
[7] http://www.euro.who.int/en/publications/abstracts/from-innovation-to-implementation-ehealth-in-the-who-european-region-2016
[8] https://www.enisa.europa.eu/publications/security-and-resilience-in-ehealth-infrastructures-and-services
[9] https://www.enisa.europa.eu/publications/security-and-resilience-in-ehealth-annex-a-countries2019-report
[10] http://europa.eu/rapid/press-release_IP-14-302_en.htm
[11] https://ec.europa.eu/digital-single-market/en/news/european-hospital-survey-benchmarking-deployment-ehealth-services-2012-2013
[12] https://ec.europa.eu/digital-agenda/news-redirect/15280
[13] http://cor.europa.eu/en/documentation/studies/Documents/Dynamic-health-systems.pdf
[14] https://ec.europa.eu/digital-agenda/news-redirect/12206
[15] https://ec.europa.eu/digital-agenda/news-redirect/12195
[16] https://ec.europa.eu/digital-agenda/news-redirect/12207
[17] https://ec.europa.eu/digital-agenda/news-redirect/12389
[18] https://ec.europa.eu/digital-agenda/news-redirect/12250
[19] https://ec.europa.eu/digital-agenda/news-redirect/2892
[20] https://ec.europa.eu/digital-agenda/news-redirect/11386

[21] https://ec.europa.eu/digital-agenda/news-redirect/12205
[22] https://ec.europa.eu/digital-agenda/news-redirect/12391
[23] https://ec.europa.eu/digital-agenda/news-redirect/12197
[24] https://ec.europa.eu/digital-agenda/news-redirect/12222
[25] https://ec.europa.eu/digital-agenda/news-redirect/10600
[26] https://ec.europa.eu/digital-agenda/news-redirect/12223
[27] https://ec.europa.eu/digital-agenda/news-redirect/12235 http://www.good-ehealth.org/index.php