

# Business Models for eHealth

This study analysed successful business models for innovative eHealth applications, focusing on financing, longer term sustainability, incentives of all the stakeholders and on the role of procurers. Particular attention is given to ICT applications for chronic disease management, with reference to research funded by the European Commission (FP6, FP7).

## Objectives of the Study

**Context:** The increased predominance of chronic disease in Europe's ageing population is set to drive up costs for European healthcare systems in the coming years, while making information and information sharing more central than ever for the effective delivery of healthcare. The role of eHealth here is key in helping the containment of healthcare delivery costs while maintaining the expected levels of quality of care and safety.

In this context, a large pan-European commercial market for eHealth solutions has emerged. In order to tap into this potential, it is necessary for eHealth services to be devised in such a way as to respond directly to the specific operational needs of the healthcare delivery stakeholders towards whom they are targeted.

This study aimed to contribute to the eHealth Action Plan, in particular those activities that deal with the collection, analysis and eventual dissemination of best practices, as well as the Lead Market Initiative for eHealth that aims to accelerate the development of the eHealth market.

**There is a need to investigate methodologies of assessment and ideal scenarios for business models for innovative eHealth applications, focusing on financing, longer term sustainability, incentives for all the stakeholders and on the role of procurers.**

**The specific goals of the study are:**

1. To review the state of the art evaluation methodologies and approaches focusing on the areas of efficiency, sustainability and economic benefits of eHealth systems;
2. To consider the current demand for eHealth systems and tools in four defined market areas identified by the European Lead Market Initiative: Clinical Information Systems (CIS), Secondary Usage Non-Clinical Systems (SUNCS), Telemedicine, and Integrated Health Clinical Information Networks (IHCIN). This was conducted with a view to evaluating the existing and potential eHealth market size;

3. To identify eHealth business models within the four market areas outlined above that represent best practices in a range of Member States, analyse and present the findings;
4. To describe a vision of sustainable eHealth systems for each of the four market areas. This will include proposed business models presuming that some seed funding was available to roll out a service on a wide scale.

## Study Description and Methodology

The study aimed to complement the analysis of the state of the art in assessment methodology of eHealth applications carried out by previous European Commission-funded studies, in particular on «Economic and productivity impact of eHealth», «Economic Impact of electronic health records» and «Financing and boosting investment on eHealth».

Case-study methods were chosen to be suitable for each given context. Consideration was given particularly to business models that sustain or reduce health delivery costs for regional/national health care authorities while improving health care delivery service, and that create profit for insurers and other industry stakeholders. Data collection methods included participant questionnaire surveys, stakeholder Workshops and a review of documents and interviews acquired directly from selected case studies.

### Findings and conclusions

**Market Trends:** Between 2008 and 2013 the largest market share is set to shift from secondary usage (SUNCS) to clinical information systems (SUCIS). This suggests that eHealth systems are targeted more towards supporting the operational processes of healthcare professionals. In addition there is a growing demand for integrated healthcare clinical information systems in light of an increasing need for data sharing among healthcare delivery organisations.

**Devising business models for value-creating and sustainable ehealth services:** The evidence suggests that such a business model should map all key supporting activities, value chain relationships, and dependencies impac-

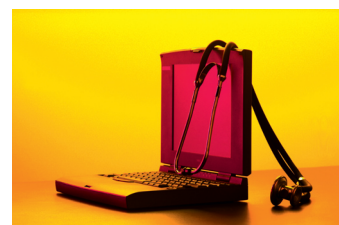
### TELEMEDESCAPE – CASE STUDY (CIS IN LEAD MARKET INITIATIVE CATEGORISATION)

Telemedescape is an electronic managing system for digitally signed test results, developed by Treviso's local health authority no. 9, one of the prominent cities in Italy's Veneto region. It allows for the digitization of clinical documents produced by Treviso's healthcare services, and their easy passage between various clinical departments and to patients themselves. Treviso hospital has saved an estimated 480,000 in staff reallocation, as well as 42,000 per year in printing materials and 15,000 per year in storage space. It has also reduced clinical mistakes by 10%, and has made dramatic savings to patients in terms of the time and cost associated with picking up clinical documents.

ted by the introduction of an eHealth service. The structuring and implementation of such a model requires strong senior management involvement throughout the design, development and delivery of an eHealth service, in order to lead the required operational steps towards their specific vision and objectives. Staff involvement is also essential to ensure that business models reflect the interactions of those actors who are to use them in their day-to-day professional activities.

**Public policy and the role of the EC:** Action requires the involvement of all stakeholders such as national healthcare authorities, health professional associations, healthcare delivery organisations, industry and the research community as well as European perspectives, so as to foster the sharing of applicable best practice and experiences. However, the provision of such pan-European services is not easy given that each EU member state is responsible for the operational delivery and financial management of healthcare. In order to remove these barriers, this study calls on the EC to take on a vital coordinating role in the development and implementation of eHealth services through:

- Launching pilots to test or simulate e Health-related projects ;
- Fostering the sharing of best practice in business models ;
- Defining benchmarking indicators for cross-organisational comparisons ;
- Supporting the development of best practice via specific incentives such as tax breaks and/or different reimbursement procedures or co-funding mechanisms ;
- Bringing legal clarity as to facilitate safe exchange and authentication of healthcare data across national borders, as well as healthcare staff ;
- Working towards the solution of technical issues and the facilitation of market developments via interoperability, common terminologies and standards for terminologies and data, and pre-procurement activities.



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**Timetable:** from December 2008 to April 2010

**Total cost:** € 199.570

**Study n°:** SMART 2008-0062

### KEYWORDS

eHealth action plan, Lead Mmarket initiative, Semantic integration of health data, eHealth business models, eHealth market, Telemedicine, Information sharing, eHealth in Europe, eHealth policy recommendations