

# eHealth

priorities and strategies  
in European countries



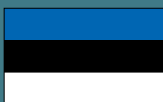
**Fact sheet**

# Estonia

March 2007

Towards the Establishment  
of a European eHealth  
Research Area





# Estonia

## Strategic perspective

Estonia has a well developed eGovernment Service infrastructure that is also being used in the eHealth domain, for example when establishing the connection between the health services and the patient. In particular, 80% of the 15 – 75 year old population have an electronic identity card. The card has the ability to handle the functions of authentication, signature and encryption which gives it a central role in data protection and security risk management in the health service arena.

Since 2000, the eHealth strategy of the Estonian Ministry of Social Affairs (MoSA) is based on three pillars:

- establishment of a nationwide integrated electronic health record system, also known as the "Electronic Health Record Project of Estonia (2005 – 2008)",
- a strong focus on standardisation and in particular on interoperability, and
- the use of the existing IT infrastructure.

The strategy foresees a comprehensive central register of the health information for all 1.35 million Estonians from birth to death. The register is intended to facilitate the exchange of all types of health data between health care providers. It is also meant to support centralised health-care management and strategic planning through better quality and accuracy of the necessary data for organising healthcare. Responsibility for implementation has been entrusted to the private non-profit Estonian eHealth Foundation. It was set up by the hospitals and professional associations in October 2005 following an initiative of the Estonian Ministry of Social Affairs. The main goals of this foundation are the development and governance of nationwide eHealth projects, and the coordination of the unification of Estonian health care provider information systems.

The main drivers of eHealth development in Estonia are central public administration and public-private partnership (PPP). Several legal and other requirements have spurred implementation of administrative systems.



Foremost are

- a) the regulation set by MoSA in 2000, which demands computer and internet connection in all primary care practices, and
- b) the mandatory requirement (2001) of the previously voluntary recommendation (1996/1997) that all claims for re-imbursment sent to the Estonian Health Insurance Fund (EHIF) must be in electronic format.

## Implementation perspective

### THE ELECTRONIC HEALTH RECORD PROJECT (EHR)

The digital health record project is currently (2006) under development. It consists of one large Electronic Health Record (EHR) project and three smaller projects connected to the EHR, notably digital images storage and access, fixing appointments online and digital prescriptions. The project implementation period is 2005 – 2008. Booking, prescriptions and images are scheduled to be



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operational by end of 2007 and the full EHR by end 2008. A patients' health history is recorded and made securely and easily available. The central database of EHR includes three types of data:

- 1 Patient's primary information. This includes contact details, insurance information, allergies, and important drug information.
- 2 A link directory that points to other sources which include stored medical data about the patient, for example in the IT systems of hospitals and GPs.
- 3 Centrally stored medical records. Vaccinations are also recorded in the EHR-system.

In case of referrals, the general practitioner can use the EHR system to send information to the specialist, and the system facilitates finding the right specialist.

## TERVISEPANK ("HEALTH BANK", HB)

By 2003, 99% of family doctors (FD) in Estonia were using computers and 88% had broadband internet access. Most of these systems were mainly dedicated to administrative routines. Few had any link to a clinical system or usage. To address this gap, the Estonian Society of Family Doctors (ESFD) initiated the development of a centralised internet solution. It can satisfy financial and administrative needs, and even more importantly can help manage clinical information in primary care which is estimated to absorb about 30% of total workload. Thus in the second half of 2005 a patient information and practice management system for family physicians called Tervisepank ("Health bank" HB) was launched. This is a centralised web application capable of serving all family doctors and insured people (1.25 million) in Estonia.

## Future activities

Estonia's eHealth strategy is ambitious. A system of medical information that registers all the health data of every citizen from birth to death is without international precedent. As it evolves into maturity the Electronic Health Record Project initiative will bring together or provide access to the patient clinical data in systems in all medical

centres. This includes hospitals, general practitioners, emergency care institutions and pharmacies, as well as the information system of the Health Insurance Fund, and other registers and databases.

The Electronic Health Record Project initiative will also support the provision and usage of eHealth services for and by the public in Estonia. All patients will be able to securely access and review their medical data and make it available to the health care professionals they are dealing with. This also includes the ability to – via the Internet – obtain appointments online, submit prescription renewal requests, and exchange test results such as blood pressure readings.

The realisation of the digital health record project requires not just implementation of advanced information technology across a deeply complex system. It is widely recognised that significant efforts will be required in re-organising existing organisational and service delivery structures and in establishing an innovation friendly ethos.

## Core resources

**Internet based patient information and practice management system for primary care, by Ain Aaviksoo, PRAXIS Centre for Policy Studies:**

[http://www.ehealthconference2006.org/index.php?option=com\\_content&task=view&id=110&Itemid=178&lang=EN](http://www.ehealthconference2006.org/index.php?option=com_content&task=view&id=110&Itemid=178&lang=EN)

**eHealth in Estonia (May, 2006) by Kristiina Rebane,**

**Ministry of Social Affairs of Estonia:**

[www.ehealthconference2006.org/pdf/REBANE.pdf](http://www.ehealthconference2006.org/pdf/REBANE.pdf)

**Health Policy Developments Issue 6: Focus on Continuity in Care, Evaluation Techniques, IT for Health / edited by Reinhard Busse, Annette Zentner and Sophia Schlette. Bertelsmann Stiftung, Gütersloh, 2006.**

**The Ministry of Social Affairs (MOSA), Estonia Web Site:**

<http://www.sm.ee/eng/pages/index.html>

**ID Card Issuing Statistics:**

<http://www.id.ee/pages.php/03030102>

## About eHealth ERA

This fact sheet is the outcome of research in the context of the *eHealth ERA* project (Towards the Establishment of a European Research Area). The project is implemented by empirica GmbH (coordinating partner, Germany), STAKES (Finland), CITTRU (Poland), ISC III (Spain), CNR (Italy) and EPSRC (United Kingdom), based on a Coordination Action contract with the European Commission.

The European Commission, Directorate General Information Society and Media, supports this project to contribute towards greater transparency across Member States and other participating countries on eHealth strategies as well as innovation-oriented research and technology development (RTD) initiatives, including the coordination of Member States' eHealth strategy formulation and implementation.

The fact sheet is an excerpt from the report "eHealth priorities and strategies in European countries", published by the European Commission in April 2007. The complete report is available for download at [http://ec.europa.eu/information\\_society/newsroom/cf/itemlongdetail.cfm?item\\_id=3346](http://ec.europa.eu/information_society/newsroom/cf/itemlongdetail.cfm?item_id=3346).

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