An Estonian example – Digital Health in Estonia

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Estonia is an e-country

- **e-governance**
  - Did you know that 99% of public services are available to citizens as e-services?
    - Government Cloud
    - i-Voting
    - State e-Services Portal
    - e-Cabinet

- **mobility services**
  - Did you know that self-driven vehicles have been allowed to drive on public roads in Estonia since 2017?
    - Intelligent Transportation Systems
    - Mobile Parking
    - Border Queue Management

- **business and finance**
  - Did you know that you can establish a company in Estonia just in 18 minutes?
    - e-Tax
    - e-Banking
    - e-Business Register
    - Industry 4.0

3700 IT companies in Estonia
7% GDP in IT sector
SKYPE Development Centre in Tallinn
NATO Cyber Defence Centre in Tallinn
Innovative e-solutions in Estonian healthcare

- 99% of health data digitized
- 99% of prescriptions are digital
- e-referral, e-consultation
- 100% electronic billing in healthcare
Estonia Offers 100,000 Residents Free Genetic Testing

Estonia has started a program to recruit and genotype 100,000 new biobank participants as part of its National Personalized Medicine programme. Effort aims to develop personalized medicine in national healthcare.

The government wants to develop its healthcare system by offering all its residents genome-wide genotyping that will be translated into personalized reports for use in everyday medical practice through the national e-health portal. The country has many encrypted digital solutions incorporated into government functions that link the nation’s various databases through end-to-end encrypted pathways.

“Today we have enough knowledge about both the genetic risk of complex diseases and the interindividual variability of the effects of medicines in order to start using this information to benefit people,” said Tiina Kackvere, an expert in the field.

Gene donors storming the Genome Center

Till 20. March 2016, 4:54 PM
Architecture of Estonian nation-wide Health Information System (since 2008)

Secure data exchange layer provided by the state
X-Road, ID-card, mobile-ID, State IS Service Register

- Patient Portal 2009
- X-Road Gateway Service 2009
- Pharmacies and Family Doctors 2009
- Nation-wide Health Information Exchange Platform (EHIS) 2008 December
- Estonian Health Insurance Fund 2001
- Prescription Centre 2010 January
- Estonian Genome Center University of Tartu
- Nation-wide Picture Archiving and Communication System 2005

Secure data exchange layer provided by the state
X-Road, ID-card, mobile-ID, State IS Service Register
Use of digital data in Estonia

Patient queries per month
Healthcare professional queries per month
EU launch of a cross-border drug prescription on 21.01.2019

Finns can buy medicines with a digital prescription in Estonia

"Estonia and Finland, as the first countries, will launch a service that allows buying prescription drugs in another country," said Riina Sikkut, Minister of Health and Labour. "Agreements between member states lead to real solutions that will enable health data to move along with the person and thereby enable to provide better medical care to millions of European people who travel, study or work in another European country. This is what Estonia stood for also during the Estonian EU Presidency."

According to Riina Sikkut, the launch of a cross-border prescription is a historic milestone, but still only a first step on this long road. "In the next few years, we would also like to enable the transmission of other health data so that, in case of a health problem in a foreign country, the physician would also have access to a summary of the medical history for the provision of better treatment."
Digital Cardiology in Estonia
Over 100 European organisations address digital innovation in healthcare

Today, 17 October, at a high-level e-health conference in Tallinn, a joint declaration of e-health organisations was announced to accelerate digital innovation in healthcare. The declaration of over 100 European organisations’ calls for concrete steps to develop e-health in Europe and all stakeholders interested in the future of e-health are expected to co-endorse it and to join the taskforces working on concrete actions and solutions.

European Commissioner for Health and Food Safety Vytenis Andriukaitis, who attended the eHealth Conference in Tallinn, has also been at the forefront of e-health development in Europe. “I welcome that the Estonian Presidency has made EU cooperation to support digital health innovation a priority. At the informal Council meeting in July, health ministers articulated their willingness to be more ambitious on digital health and to collaborate more effectively on issues such as data security, cybersecurity and new software products for data sharing,” Andriukaitis said. “It seems that the momentum to converge our efforts has finally arrived. Let us all work together with governments, health professionals, businesses, and researchers, but above all with the patients to make digital health in Europe a reality.”
Welcome to the ESC Digital Summit!
Tallinn, October 5-6, 2019

About the ESC Digital Summit

"Digital Health is disrupting the usual way the patients and healthcare professionals interact" Prof. Martin Cowie, FESC, Digital Health Committee chair

Digital Health is now the third largest industry in the European health sector, after pharmaceuticals and medical devices. But where do the experts stand on Digital Health today and what are the opportunities and the hurdles that lie ahead?

With this first Summit on Digital Health, the ESC is positioning itself at the forefront of this new domain in Cardiovascular Medicine. We aim to provide a structured scientific and educational programme, as well as a platform for exchange and interaction to support the development of Digital Health across the ESC and its constituent bodies.
THANK YOU VERY MUCH!

eHealth screen