How can we safely face eHealth and digitalisation can we ensure it with legislation?



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Finland

- Population 5,4 million
- GDP per capita 47 000\$ (US 64 000 \$)
- Life expectancy M 77 / F 83 years
- Total fertility rate 1.85
- Infant mortality 2.4/100 (us 6,5)
- 38% have tertiary education (us 41%)

OECD





Challenges

- Ageing population
- Increased demand of services
- Urbanisation
- Accumulation of social and health problems; poverty, unemployment, poor health, poor mental health
 - 10 % of population are using 80 % of social and health care resources
- Increasing inequalities





14.10.2014 TSO/el

The decision to build a national eHealth solution

- Government decision in 2002: Finland should have a nation wide interoperable EHR system by end of 2007
- By 2005 agreement on the National archive for health information (Kanta) comprising three nation wide services
 - ePrescription
 - eAccess
 - eArchive
 - Based on structured documents (HL7 V3 CDA R2)
 - In co-operation with local systems to feed care documents and using them
- New legislation was needed to allow the new features
 - Placing the centralized service to Kela (National Insurance Institution)
 - Consent management, privacy & security aspects





The main goal of Kanta services

- A centralised data repository for health information and services associated with this data
 - Offers healthcare and social care professionals up-to-date information about patients' health and wellbeing and its history, and serves as a data mediator between organizations
 - Improves patient safety
 - Decreases the need for the local archiving of data
 - Provides a foundation for better statistics, research and other secondary use
- In addition to health-related data, will include data for social services.





National archive of health information

- ePrescription
 - Provides medication summary and enables a fully electronic prescription – dispensing – reimbursement process
- eArchive (Patient Data Repository)
 - Centralised active and real-time data store + legal archive
 - Allows sharing of data between healthcare providers securely and with patient consent
- eAccess (MyKanta)
 - Citizens can view their own prescriptions and electronic records
- National services are accessed through local systems
 - Implement same interoperability standards also in local systems (HL7 V3 CDA R2)





Electronic Prescription

- Well over 90 % of all dispensations are based on electronic prescriptions
 - All public healthcare service providers use ePrescription
 - Many private healthcare service providers have joined the service, others are joining in 2016.
- Electronic prescription will become mandatory from 1.1.2017
 - Doctors may not write paper prescriptions or prescribe over the phone, except in extraordinary situations
 - Any paper or phone prescriptions will be entered in the Prescription Centre by the pharmacies.
 - Kela will provide a web-based service (HCP portal) for handling electronic prescriptions, to be used mainly by individual doctors and small organizations





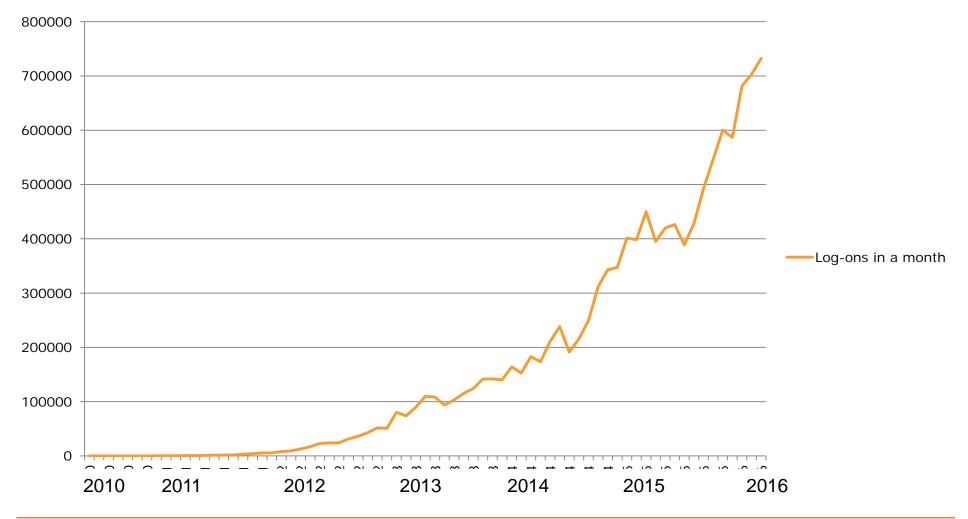
Patient Data Repository

- A national centralized repository into which patient records are entered nationwide
 - Contains the patient's health record, data about encounters and periods of ward care. Lab results, referrals, etc.
- All public healthcare organizations store data in the Patient Data Repository (1.12.2015)
- First private healthcare service providers have joined the Patient Data Repository in the beginning of this year.





My Kanta Pages statistics





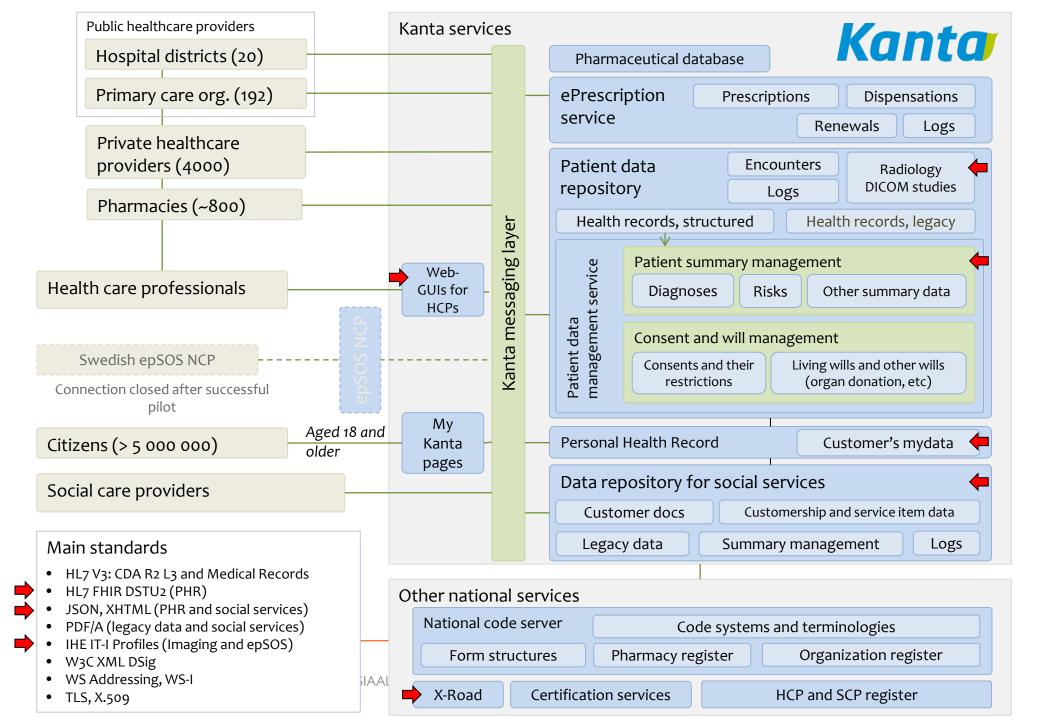


Personal Health Record

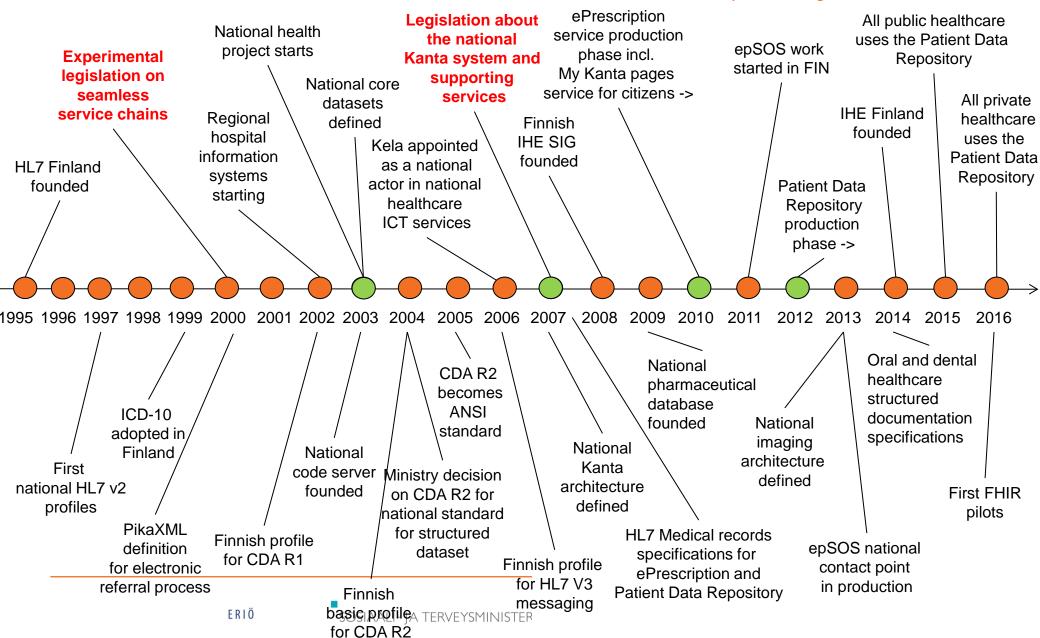
- Using the PHR people will be able to enter in Kanta their own data related to health and wellbeing.
 - Data can be entered through various web applications and apps.
 Examples of use are home monitoring, risk tests, smart diagnostics online, even fitness applications and other data that patients want to follow.
 - Kela is designing and building the data management platform.
 - Third parties will develop services which produce, store and analyze the data. Many nationally and regionally coordinated projects are developing self care solutions, a general trend and hot topic at the moment.
- Healthcare professionals will be able to access the data with patient's consent, and put parts of it on the official patient health record.
- Currently being designed, first phase ready by end of 2017.
- Based on HL7 FHIR, OAuth etc.







Timeline of Finnish Healthcare ICT Standardization for Interoperability



General legislation related to data protection and security issues

- Act on person information (523/1999)
 - General law on how person information must handled
 - Custodian, consent etc. defined
 - Is used as a rule UNLESS specific legislation states otherwise
 - Principles of person act are widely followed in different areas of society
- Act on electronic authentication and signatures
 - Generic legislation for different levels of authentication and signatures





History of eHealth legislation

- Act on Experiments with Seamless Service Chains in Social Welfare and Health Care Services and with a Social Security Card (811/2000)
 - regional information systems
- National health care project (2003-2007)
- Decision to create national ICT services for healthcare (2005)
- Legislation preparation in 2006





Specific legislation related to eHealth

- National ICT services
 - Act on electronic processing of customer information in social and health care services (159/2007)
 - under amendment during 2015-2016, consent social care
 - Act on electronic prescriptions (61/2007)
- Content handled in national ICT services
 - Act on customer documents in social care (254/2015)
 - Decree on national ICT-services (165/2012, renewed 2015)
 - phased increase of content in national ICT services
 - Decree on patient records (298/2009)
- Several individual articles in different laws
 - eg. article 9 in the Healthcare law specifies a joint register for a hospital district and all municipalities belonging to that hospital district





Name

Monitoring of information processing

- Privacy protection and the legality of the information processing are monitored by the health care organisations, pharmacies and Kela.
- To enable retrospective checks, log files are kept about the use and release of data.
- Patients can monitor through MyKanta portal, which organisations access or process their personal information and to which organisations the information is released.





Healthcare and social welfare reform in Government Programme

- Prime Minister Juha Sipilä's Government Programme was published in May 27th 2015
- Main objectives of the social welfare and health care reform are
 - reduction of health inequality and
 - cost-efficiency
- Government is willing to reduce public costs by 4 billion euros on long term
 - Social and health care reform's share is 3 billion euros





Bills on health, social services and regional government reform

- On 29 June the Government published draft bills on reforming health and social services and on establishing counties. http://valtioneuvosto.fi/en/article/-/asset_publisher/10616/hallitus-julkisti-sote-ja-maakuntauudistuksen-lakiluonnokset
- The main legislative acts governing the reforms are the Counties Act, the Act on Organising Health and Social Services, the Implementation Act and the Act on the Financing of the Counties.
- The services will be <u>integrated</u> in a customer-centred way based on people's needs.
- All public health and social services will be brought under a single umbrella management, i.e. into the counties.
- Decisions on steering of digital solutions

V A L T I O V A R A I N M I N I S T E R I Ö



Number of customers Proportion of eServices

Physical Physical Demanding SelfeServices Basic **Special Special** assessment Information service service services Cost/ client Electronic General Identified University connection to the **Health Center** Hospital Web Services Web Services Hospital provider My Kanta (PHR) Web pages Kanta / Kansa Mental Health House System of service voucher Service Directory **ODA** Virtual Hospital Health Library Self-care pathway Apotti / UNA HALLITUKSEN VALTIOVARAINMINISTERIÖ REFORMI SOSIAALI- JA TERVEYSMINISTERIÖ

QUESTIONS?

Ministry of Social Affairs and Health www.stm.fi/eng

Social and Healthcare Reform http://alueuudistus.fi/en/frontpage

National services: www.kanta.fi

eHealth strategy 2010:

http://www.julkari.fi/handle/10024/125955

Translations of Finnish legislation:

https://www.finlex.fi/en/laki/kaannokset/

Focus on people Inclusion, individualised services and well-being

Smart tools for professionals Usability, summaries, decision support and process

Adaptable processes, support for high-quality work and services

Technology that supports personal well-being and the system of services Refinement of information, knowledgebased progress and management

Quality and availability of services, new operating models, competence, steering and cooperation

Data repositories: national social and health information, personal health records, high-quality data

Reliable and scalable information infrastructure for service production and development.



