Integrating Health and Social Care (ICT) in Finland

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Finland: Health and Social Care policy and Integration

- The need to integrate health and social care has been identified and discusses for many years in Finland
- Slowly this discussion is penetrating in to policy documents and decisions on actual implementation of new elements in the service system
  - government’s programme
  - Information strategy

VISUAL SUMMARY

Opportunities
- Service innovation
- Holistic health and well-being
- Prevention
- Personalisation and segmentation of services
- Genetics
- Big data
- Open data
- Cross-sectoral cooperation
- Evidence on effectiveness

Focus on people
- Inclusion, individualised services and well-being

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

Adaptable processes, support for high-quality work and services

Technology that supports personal well-being and the system of services

Refinement of information, knowledge-based progress and management

Enablers
- Steering and legislation
- Comprehensive planning
- Open interfaces and standards
- Mobile technology
- Service-oriented architecture
- Cloud services
- Ecosystems for development
- Security and data protection

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
Konstantin Hyppönen, Kela Finland

http://www.kanta.fi/en/web/ammattilaisille/arkkitehtuuri
Time frame on eHealth and eWelfare, Finland

• *Local EPR:s 1980´s ... 2005, Local Client information systems (CIS) of social care 1990…..*

• *EPR:s with interoperability regionally ...2005 ....2016*

• *The Act on the electronic processing of customer data in social and health care (159/2007) . Also act on eP*

• *The Decree on patient documentation (298/2009)*

• *Ministry of Social Affairs and Health Decree on national health care IT system services, 165/2012, 2015*

• *National eP 2012 …*

• *National sharing of EPRs in the Kanta-service 2014 ……*

• *Legislation on electronic client records in social care 2015*

• *PHR (+ social) for Finnish residents 2019*

• *National sharing of social service documents via Kanta 2018 (first as pdf)*

• *Acting as a part of an European eHealth infrastructure 2018*
Where are we now?
- ePrescription in full operation
- "My Kanta" in full operation
- Clinical documents shared via Kanta public sector,
- Part of private sector has joined

eSocial services

Modern registers
AvoHilmo, Implants

Direct eServices
(bookings etc)

Kanta
EPR
Repository

Kanta
ePrescription

An ongoing study on the adaptation level, usability and patient experiences 2015-2020

Other Nordic countries and many other countries are now ready for benchmarking and studies on impact

Finland is like a "living lab" for Impact of eHealth (and eWelfare)

The full impact of the change can be seen only after enough saturation has been reached

S-curve model for technology adoption with evaluation focus in different phases (OECD 2005, 223)

Dr. Päivi Hämäläinen, PhD, MA, Specialist of Public Health

15.9.2016
Timeline of Finnish Healthcare ICT Standardization for Interoperability

- Experimental legislation on seamless service chains
- National health project starts
- Regional hospital information systems starting
- National core datasets defined
- Legislation about the national Kanta system and supporting services
- ePrescription service production phase ind. My Kanta pages service for citizens
- Finnish IHE SIG founded
- Revised legislation on consent management and patient summary service
- Patient Data Repository production phase
- All public healthcare uses the Patient Data Repository
- HL7 Finland founded
- ICD-10 adopted in Finland
- First national HL7 v2 profiles
- PIkaXML definition for electronic referral process
- Finnish profile for CDAR1
- Finnish basic profile for CDAR2
- CDAR2 becomes ANSI standard
- Ministry decision on CDAR2 for national standard for structured dataset
- National Kanta architecture defined
- National pharmaceutical database founded
- KVARKKI national imaging architecture defined
- Oral and dental healthcare structured documentation specifications
- First FHIR pilots
- epSOS national contact point in production

http://www.kanta.fi/en/web/ammattilaisille/arkkitehtuuri

Picture;
Konstantin Hyppönen,
Kela Finland
Is information transferred electronically from the client information system of your organisation to the information systems of other organisations? (N=134)

Does your organisation have a recognised need for electronic information transfer from your client information system to the information system of another organisation? (N=75)

Have read-only access rights to the client information system of your organisation been granted to employees of another organisation? (N=134)

Does your organisation have a recognised need to provide read-only access rights to your client information system to the employees of another organisation? (N=94)

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Social care information exchange and a recognized need for information exchange in municipalities and joint municipal authorities (%).

The electronic information transfer of social services today in Finland

- SOKY system of the Social Insurance Institution (Kela)
- The Population Register Centre
- Accounting or payment transfer system of their own municipality
- The primary health care patient information system.

Survey of the social care organizations 2014

Hyppönen Hannele, Hämäläinen Päivi, Reponen Jarmo (eds.)
E-health and e-welfare of Finland, Check point 2015. REPORT 18/2015, National Institute for Health and Welfare, THL
In 10% of the hospital districts it was possible to access patient information that existed in a social care organisation with the permission of the patient, while 29% allowed social care organisations to have access to health care information in hospital districts.

Data from 2014

Survey of the health care organizations

At the healthcare centre (primary care) level, 29% had access to read social care information with the permission of the patient and 44% allowed social care organisations to have access to the health care information of the patient.
The Constitution of Finland

Act on processing of personal data
Law of social and health care electronic processing of client data

Health care legislation

Act on health care services
Occupational health care
Laboratory and X-ray
Dental care
Environmental health
Primary care
Screenings
.. Etc..

Social welfare legislation

Child welfare
Support for informal care
Services of guardianship
Immigrations services
Adoption counselling
Income support
.. Etc..

By Maarit Laakso 2013
Information specifications in eSocialWelfare in Finland

• National client data model (social welfare specific)
  – Specifies the contents and relationships of social services documentation
  – About 250 client document structures in 16 main document types
  – More than 150 data components (elements)
  – More than 70 classifications, including services and service commissions

• Terminologies
  – Four national terminologies to support use of data components, client documents, classification of social services, and client information systems development

• Metadata specifications for documents
  – applying national health care CDA R2 document metadata
Standards portfolio for eSocialwelfare in Finland

- **Focus on interoperability and reuse across domains**
  - XML-based base standards (portability, platform neutrality)
  - Client documentation standards
    - UN/CEFACT CCTS (Core Components Technical Specification) for implementation of semantic and structured client documents: SosXML document specifications
    - PDF/A for unstructured client documentation
    - HL7 CDA R2 documents as wrappers for client documents
      - Health / social services compatibility, metadata / header
    - HL7 version 3 Medical Records, SOAP and WS-I for messaging between national repository and client information systems
    - ISO OID object identifiers
    - Standards for modelling, digital signatures, shared service interface description (WSDL), document management, etc.

But where is the integration?
Integration

• Legislation is a must, the common over-all architecture supports the work, even the national data repositories as such do not solve the problem alone.

• Interoperability of data has to be hand made code set by code set (sex?....) during the daily work on data structures / code service together with national/regional experts.

• It is not always the social care data that has to be re-defined…
The Finnish National Health and Social care Code server

530 code sets/information structures

65 social care code sets/information structures

28 common code sets/information structures
Integrating social care services and health care services needs:

- Supportive policy
- Legislation
- Organisational structures (examples; Eksote region)
- Working methods and collaboration in client processes
- Sharing of information
- Common language (= interoperable data structures)
- Common goals (=understanding the human being as one)
Check point 2015 analyzes the new Finnish eHealth and eWelfare Strategy against the current implementation phase of the local, regional and national eHealth infrastructure

Thank you!
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