openEHR clinical modelling under the umbrella of HL7 Finland

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Health and Social Reform is on

- The aim of the reform is to offer the population more equal access to services, to reduce disparities in health and wellbeing, and to restrain costs
  - service coordination, integrated healthcare and social welfare services, and well-managed care paths and digital services and digitalization of processes
- Massive organizational transformation within the next 320 days [Framsida | Social- och hälsovårdsreformen (soteuudistus.fi)]
  - 21 Wellbeing Counties + Helsinki and Åland
    - for organizing healthcare, social welfare and rescue services
    - funding of the counties will principally be based on central government funding.
  - Administrative shift from
    - Healthcare: 160 primary health care centers, 21 central hospitals of which 5 university hospital
    - Social care: 290 social care units by municipalities
    - Rescue services: 22 rescue departments managed by municipalities
- Employer of 200 000 people changes
Survival rather than development in the beginning?

- There is limited human power to promote rearrangements for integrated care paths
  - To be able to maintain at least existing quality of services means little changes in the everyday life of service providers next year
- County level harmonization and development of care ICT gives way for ICT of administrative needs
  - Minimum needs of sharing client information within a county (instead of an old separate register keeper) may be reached by Kanta-services and using Dashbord & CoreUNA
- There is great concern of resources among the chief information officers
  - The main source of cost reduction in Counties has counted to be digitalization
- The Big reform of the legislation of management of social and health information has just started
  - Very little good news for care path integration: The new first package for proposal of the laws has still separate registers for social and health
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History

• In Finland, we have discussed utilization of OpenEHR for some years.
• Meanwhile many Finnish Vendors have adopted already OpenEHR data models in their development.
• Our discussion has included many aspects including interoperability of FHIR and OpenEHR, OMOP interfaces, Snomed-CT and OpenEHR.
• How to organize the process to end up to one Finnish localization of international archetypes?
  → Subgroup of HL7 Finland association

We believe that open ecosystems consist of many open standards such as OpenEHR, FHIR, OMOP and Snomed-CT
Organization

- HC and SC providers
- Projects
  - Centres of Excellence, working groups
- Health and Care professionals
- Vendors
- National authorities, “national” medical experts
- Association for ICT “interoperability”

una cooperation
Localization process (HL7 model)

Localization from a member

New archetype from a member

Check international model
Compare to other localisations

Need of extensions; Finnish translations

Ready for Voting round 1

Voting

Remodel

Ready for Voting round 2

Voting

Ready or Start again

Share / Publish

International proposal

Need of extensions; Finnish translations

Ready for Voting round 1

Voting

Remodel

Ready for Voting round 2

Voting

Ready or Start again

Share / Publish

International proposal
Trial of localization Vaccination

We asked last autumn Heidi Koikkalainen to model the Finnish national Vaccination dataset in openEHR by utilizing international archetypes maximally

Findings

Most data fields could be mapped to openEHR archetypes 25 / 33

Local extensions were needed for 8 datafields

Discussion

What do we want? A local archetype “vaccination” or internationally reusable template of archetypes documented in the context of vaccinating a patient on in Finnish healthcare

Conclusions

Currently we are lacking high level authority understanding and driving the change to internationally reusable data models. In case of UNA it’s difficult to promote this development without demand from our health and social counties.

Learnings

The path to Open EHR needs something else than academic interest
Starting OpenEHR Finland

Priorities to start with

Vendors’ needs for international models due to their product development

Wishes

There would be at least one domestic use case demonstrating in practice how a provider benefits from having an OpenEHR repository in use.

Authorities demonstrate how they think providers to get all the administrative information they claim from Wellbeing Counties without source tailored integrations and without double documentation by professionals – without OpenEHR like modelling and data repositories.

- There seems always be money for timely integration projects – especially in a hurry – and professionals to get the blame of poor documentation.

OpenEHR would be included on the agenda of eHealthNetwork (volunteer network for national authorities in health and social data).

Finnish authorities would seriously estimate the need to reinvent data models of health.

Hope

There will be a true demand of Dynamic Care Plan from any Wellbeing County.

- Hard to see such a product to be possible without an on-line data repository covered by authorization management in use.
Dynamic Care Plan – a possible path in Finland?

Stage 1:
Showing all present available information from Kanta and local ict-systems related to planned care, services and client related background information affecting planning

Remarks: All needed technology ready to go; source information partly poorly recognisable inside Kanta-documents

Stage 2:
Transmitting client data to be analyzed by external decision support service and showing results to be shown as a part of client information gathered for planning

Remarks: All needed data ready to go, small technological adjustment is needed

Stage 3:
Updopping documents from different organizations

Remarks: In theory only a question of right to update Kanta-documents from different registers. Fundamentally question of how a patient record system handles documents updated from outside.

Stage 4:
Sharing and receiving plan data with and from business/customership/task management systems

Remarks: a repository exhibiting data up to date and with single clearly defined meaning needed