European Initiatives for Shared Patient Records

HL7 Plenary
Atlanta, 21 September, 2009
AGENDA

• European health
• epSOS
• CALLIOPE
• M403
• Towards standardisation
EUROPEAN HEALTH
Background to Healthcare in Europe

• Healthcare a strict national prerogative
• Previously only a limited co-operation on a general policy level
• Substantial variations between national healthcare systems, but also similar challenges are faced and…. 
• …substantial similarities in political ambitions to reform healthcare as well as in the challenges to reach these goals
• The work started in 2003-2006 at the Ministerial Conferences
• In 2004 the eHealth Action Plan was adopted and the I2010 was created
• And in 2007 in Berlin the eHealth Initiative was created…. 
Availability of patient identifier 2008

Source: epSOS Report 1.1.1, June 2009
Availability of patient identifier 2010

Source: epSOS Report 1.1.1, June 2009
Availability of patient summary 2008

Source: epSOS Report 1.1.1, June 2009
Availability of patient summary 2010

Source: epSOS Report 1.1.1, June 2009
Availability of ePrescription 2008

Source: epSOS Report 1.1.1, June 2009
Availability of ePrescription 2010

Source: epSOS Report 1.1.1, June 2009
Cooperation is Necessary

base from Mikael Erlandsson
Cooperation is Necessary

Oh, so you are also implementing eHealth?

base from Mikael Erlandsson
a new era in legal and policy framework for EU Cooperation on eHealth

- Proposal for a European Directive on patients’ rights in cross-border healthcare
- Commission Recommendation on cross-border interoperability of electronic health record systems
- Communication on telemedicine for the benefit of patients, healthcare systems and society
- eHealth Standardisation Mandate 403
... and 3 key EU-Sponsored initiatives

• A pilot project to demonstrate exchange of patient information - epSOS
• A thematic network to discuss and plan interoperability activities with a wider stakeholder base - CALLIOPE
• A mandate for standardisation in eHEalth - M403
epSOS: European Patient Smart Open Services

• Goal for the epSOS eHealth Project:
  – “to develop a practical eHealth framework and ICT infrastructure that will enable secure access to patient health information, particularly with respect to a basic patient summary and ePrescription, between European healthcare systems”

• Challenges to get there:
  – Legal Interoperability
  – Organisational Interoperability
  – Semantic Interoperability
  – Technical Interoperability
From Strategies to Services

- Provide **concrete cross border services** that ensure safe, secure and efficient medical treatment for citizens when travelling across Europe
- Focus on services close to the patient:
  - Patient Summary for EU Citizens
    - Occasional Visit
    - Regular Visit
  - ePrescribing for EU Citizens
    - Medication Re-dispense
    - Medication Occasional Dispense
- Build on **existing National eHealth Projects** and use experiences and knowledge from all Member States
The epSOS Project Team

The Project Team consists of 27 beneficiaries from 12 member states: AT, CZ, DE, DK, EL, ES, FR, IT, NL, SK, SE and the UK

– 9 National Ministries of Health, 18 National/regional Competence Centers; ANDA, ATNA, CATA, CLM, DENA, DKNA, ELGA, EMPIRICA, FRNA, GEMATIK, GIPDMP, FRNA, IHE, IZIP, LOMBARDY, MEDCOM, NHIC, NHS, NICTIZ, NLNÅ, SALAR, SENA, THESS, CNRS, FRAUNHOFER, PHARMAXIS, ZI

– Competence Centers Including/working with local organizations with thousands of Contributors

– IHE-Europe representing ICT industry team

– Empirica responsible for administrative management
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<th>The epSOS Industry team</th>
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epSOS Project Structure

Scope: Time-limited project to deliver pilot version of cross-border interoperability for specific, defined use-cases for patient summary and e-prescriptions

Bodies: 12 Members States, Industry consortium co-ordinated by IHE-Europe

Other projects (e.g. telehealth) are likely to follow

Project Coordination and Technical Project Management (PD 5)

- Information Gathering (PD 1.1, 2.1)
- Analysis (PD 3.1, 3.2)
- Defn of Services (PD 3.3-3.10)
- Pilots (PD 4)
CALLIOPE
THE CALLIOPE PROJECT

- Aim to set up the thematic network and make it operational
  - Governance and Infrastructures
  - Produce value in three priority areas
- co-financed the European Commission within the Competitiveness and Innovation Programme (CIP)
- Launched on 1st of June 2008
- Duration 30 months
Cooperation with National Authorities

have formally asked to join epSOS

– Estonia
– Finland
– Iceland
– Slovenia
– Portugal

have also joined Calliope

– Norway
– Switzerland
– Luxembourg
– Belgium
– Malta
eID Collaboration

Liaison between epSOS & STORK (HPRO Card and Netc@rds)

- Develop common rules and specifications to assist mutual recognition of eIDs across national borders;
- Test, in real life environments, secure and easy-to-use eID solutions for citizens and businesses
- Interact with other EU initiatives to maximize the usefulness of eID services

http://www.eid-stork.eu/
THE CALLIOPE PROJECT - OUTPUTS

- Propose a European Road Map for eHealth interoperability
- Contribute to the next issue of the EU Recommendation
- Contribute to Standardisation Activities in ehealth
Call for Interoperability (CALLIOPE)

Scope: Thematic network to support interoperability in e-health. Aim is, by mid 2011, to have created a sustainable network.

Bodies: 27 Member States
- Industry
- National Competency Centres
- Open to other stakeholders

CALLIOPE Executive Committee (EXCO)

- Roadmap
- Proposals
- Recommendations
- Standardisation
CALLIOPE Standardisation

- **Aim:** to work with epSOS and M403 eHealth Interop to contribute to standardisation plans and activities

- **Deliverable:** standardisation report (Month 30)
This project ‘eHealth-INTEROP', addresses the requirements of the European Commission mandate to the European Standards Organizations (ESOs) (CEN, CENELEC, ETSI) on standardization in the field of e-health

(M/403) aims to provide a consistent set of standards to address the needs of this rapidly-evolving field for the benefit of future healthcare provision.

http://www.ehealth-interop.nen.nl/
M403 - European Standardisation Mandate for eHealth

Scope: Health Informatics Standards, aim of creating a process for standardisation which is sustainable
Bodies: CEN, CENELEC, ETSI

Use Case definition and prioritisation
Base Standards development
Profile development and maintenance
Conformance Test Plans and Tools
Sharing of Best Practices in deploying eHealth projects

Coordination – Strategy & Communication
M403 Deliverables

The deliverables from this execution plan are:

– 1. (updated) Standards
– 2. Profiles as Workshop Agreements
– 3. Reports from interoperability testing
– 4. A use case prioritization process determines the subject of the Profile and Report deliverables
   • The result of this process is a list of use cases
   • This list as well as the criteria are produced as a Workshop Agreement
– 5. The feedback from the ‘real world’ is shared in a best practice forum
   • This forum will be organized twice a year and the results are Conference Proceedings
Base standards work

To meet use case priorities, fill identified gaps in the standards work programme at the European and/or International level:

– development of integrated safety / security and privacy strategy

– development of integrated infrastructure for care outside conventional care facilities in accordance with the motivating rationale of the Mandate, enable timely use of key communications infrastructure components (such as body and personal area networks) needed for integrated ubiquitous care (monitoring, well-being, assisted living)
Base standards work

• Facilitate semantic interoperability because, although the longer-term goal should be to enable harmonisation among the various national terminologies and the adoption of consistent (at least) 35 pan-European terminologies, some shorter-term steps are needed:
  – consistent terminological representation in support of use cases
  – support for safe semantic interoperability
  – Establishment of maintenance arrangements
Base standards work

• Resolve the inconsistencies, or at least facilitate co-existence, between standards based on fundamentally different principles
  (e.g. Electronic Records exchange formats using either CEN 13606 or HL7 RIM based documents - see NHS CfH, Results of Investigating the Transformability Between HL7 V3, openEHR and EN/ISO 13606)

• Increasingly coordinated contribution from Europe to international standardisation efforts to meet its needs in internationally accepted standards (e.g. for acute and home care devices with IEEE, terminologies with IHTSDO, etc.).
Overview of Initiatives

Project: EPSOS

Information Gathering  Analysis  Defn of Services  Pilots

Project(s)

Processes

CALLIOPE

Roadmap Proposals  Recommendations  Standardisation

M403

Use Case definition and prioritisation  Base Standards development  Profile development and maintenance  Conformance Test Plans and Tools  Sharing of Best Practices
Possible Working Relationships

Information Gathering ➔ Analysis ➔ Defn of Services ➔ Pilots

Roadmap Proposals ➔ Recommendations ➔ Standardisation

Evaluation output ➔ Feedback from pilots ➔ Dissemination

Early deliverables (questionnaire, regulatory report)
Specific Use cases
Specifications
Evaluation output
Evaluation output
Evaluation output

Use Case definition and prioritisation ➔ Base Standards development ➔ Profile development and maintenance ➔ Conformance testing ➔ Sharing of Best Practice

Priorities and use cases
Use case voting
USERS: support and input
USERS: review
COMPETENCY CENTRES: Liaison
Expectation that CALLIOPE will be focus of later dissemination
Next Steps

- epSOS Demonstrators in 2010/2011
- CALLIOPE Recommendations for Road Map and further European development
- Potential for epSOS 2
- M403 agreed standards outputs