Europe's E-Health Initiatives: An Overview of European Interoperability Initiatives

Save to myBoK

By Jeremy Thorp

The European Union (EU) provides a common framework for policies and services across its 27 member states. There are common policies in many areas, but healthcare remains a national prerogative.

While there are substantial variations between the United States and European national healthcare systems, both are facing similar issues, including an aging population, increased prevalence of long-term conditions, and financial pressures. There is a shared focus in patient safety and improvement in quality of care.

As a result, the US and EU have similar ambitions for healthcare reform. For example, the rights for mobility of patients and healthcare workers have highlighted the need to share health records across national boundaries.

In the past, member states have cooperated informally on health policy, but more needed to be done to improve the access and quality of care for European citizens. Healthcare reform was discussed during the 2003–2006 Ministerial Conferences, and an eHealth Action Plan was adopted in 2004. This led to the 2007 creation of the eHealth Initiative, which aims to establish open cooperation between EU member states and associated states to implement European-wide interoperable cross-border ehealth services.

Through its Information Directorate, the EU's executive body, the European Commission, has led e-health activities with:

- A proposed directive on patients' rights in cross-border healthcare, which provides a community framework for safe, high-quality, and efficient cross-border healthcare by reinforcing cooperation between member states and providing legal certainty over the rights of patients to seek healthcare in another member state
- A recommendation on cross-border interoperability of electronic health record systems, which is intended to support the premise that connecting people, systems, and services is vital for the provision of good healthcare in Europe insofar as it is necessary to enable the free flow of patients as well as e-health products and services
- A communication to support member states in their efforts to deploy telemedicine for the benefit of patients, healthcare systems, and society

This framework has been supported by three specific EU-sponsored initiatives: a pilot project to demonstrate exchange of patient information, a thematic network to discuss and plan interoperability activities with a wider stakeholder base, and a mandate for work on e-health standardization.

The European Patient Smart Open Services Pilot Project

Established in 2008, the European Patient Smart Open Services (epSOS) project is intended to provide concrete cross-border services that ensure safe, secure, and efficient medical treatment for citizens when traveling across Europe. Two specific areas were identified: a shared patient summary for EU citizens and an e-prescription service (including e-dispensing).

The project consists of 12 member states and 29 beneficiaries, including an industry consortium of more than 30 partners. It is a time-limited project aiming to provide pilot implementations of the use cases. The project completed its specification stage in 2009 and is currently engaged in the design and development phase. The goal is to begin testing in late 2010 and piloting in 2011.

The technical issues are just one element of this challenge. Therefore project teams within have also been addressing legal interoperability issues, organizational interoperability (with supporting agreements), and semantic interoperability. The semantic

challenge is complex, especially given the many languages across Europe, and includes mapping concepts from scheme to scheme and specific translation issues.

CALLIOPE

The epSOS work has wider applicability than the 12 member states, and the establishment of the CALLIOPE (CALL For InterOPErability) network in 2008 was seen as an important way of involving a wider group of stakeholders in discussions and plans for the future.

CALLIOPE has 27 national members (including some countries that are not formal members of the EU but are committed to e-health) as well as a number of professional and patient representative groups. The aim has been to set up a network that provides recommendations on the EU eHealth Interoperability Roadmap, with a consolidated report due by the end of 2010.

Early CALLIOPE meetings have included detailed discussion of epSOS proposals through the creation of a joint working group (CALLEPSO). This has provided opportunities for wider debate on epSOS specification proposals and in so doing informed the emerging roadmap proposals.

One aspect of CALLIOPE's work is to consider standardization for national and Europe-wide requirements. At a national level, this includes standards strategy, national activities, standards adoption, conformance mechanisms, and implementation support. From a Europe-wide perspective, this includes issues such as prioritization, licensing, intellectual property, content development, and maintenance and distribution.

Work on Standardization

CALLIOPE's work on standardization is developing in parallel to the European Commission's mandate for e-health standardization. This mandate was issued to CEN, CENELC, and ETSI, the three European standards development organizations. The resulting proposal, eHealth Interop, aims to provide a consistent set of standards to address the e-health needs for the benefit of future provisions.

eHealth Interop has set out a whole-life approach to standardization. It begins with prioritization of needs and development of use cases, then consideration of potential need for standards development, profiling of standards for a particular use case, conformance testing, implementation, and finally review.

The aim is for the outputs from the epSOS pilots to be early candidates for standardization, following discussion across the CALLIOPE network. The network would also provide a mechanism for identification of future priorities derived from road map proposals.

Sustaining the E-Health Initiatives

All three of these initiatives have been considering the issue of sustainability, conscious that specific activity (particularly in pilot sites) needs to be consolidated into long-term action. The European Commission understands this and has already set in place actions for progression.

In late 2009 the commission announced proposals for an extension to epSOS, which will run for an additional two years, with a view to expanding the number of members and extending the use cases in operation.

In early 2010, the commission announced proposals for a joint action approach to e-health governance, including the commission and member states and a thematic network to support the joint action. It aims to:

- Ensure the e-health initiatives make a contribution to health outcomes and efficiency in delivering services
- Ensure patients and health staff have more influence on thee-health agenda alongside the health IT industry
- Work toward an efficient and safe system of transferring patient data across EU borders to support cross border care

These are ambitious aims, but they are clearly linked to shared objectives for improved health and outcomes. The challenges are many, but all member states are aware of the shared responsibility to support the needs of patients and are committed to making this happen.

Jeremy Thorp (jeremy.thorp@nhs.net) is the director of business requirments in the Technology Office of NHS Connecting for Health.

Article citation:

Thorp, Jeremy. "Europe's E-Health Initiatives: An Overview of European Interoperability Initiatives" *Journal of AHIMA* 81, no.9 (September 2010): 56-58.

Driving the Power of Knowledge

Copyright 2022 by The American Health Information Management Association. All Rights Reserved.