World of Health IT 2007- short report on EC supported sessions

This year's World of Health IT conference featured a total of 1855 registrants from 59 countries, 66 exhibiting companies, and reached a considerable audience of health IT professionals, vendors, and consultants.

The European Commission's Directorate Information Society and Media played a key role in facilitating and focussing discussions on key topics in eHealth such as patient safety, standards harmonisation, industry activities or the healthcare professionals' experience with health ICT. All sessions benefited from the input of high calibre speakers and chairs and triggered lively debates.[1] The feedback gathered from attendees indicates that this high quality and the broad experience of the speakers were very much appreciated. The average number of attendees per session exceeded one hundred, and involvement of the audience in discussions – although sometimes hampered by time constraints – was high.




1 Strategies and visions of industry leaders (ES[2] 20)

Industry visions on the future of eHealth go far beyond a simple connectivity vision. This session featured contributions from industry leaders and lively debate on the proper role of industry, doctors and patients. Petra Wilson of Cisco illustrated eHealth's potential to tackle the 'healthcare squeeze' via a move towards more services without the physical presence of carers and a reallocation of time of healthcare professionals to more face-to-face interactions with

[1] The workshop presentations can be downloaded at http://www.worldofhealthit.org/speakerpresentations/ [not all presentations available]

[2] ES = Educational Session

patients when they are actually needed. Home monitoring, asynchronous communication and continuous monitoring are application areas which promise to deliver these solutions.

Jean-Francois Penciolelli (Oracle) stressed that industry's vision of future health IT is one where clinical processes trigger technology use and devices are designed with heavy user involvement. This involvement is as yet underdeveloped because users are not present as customers for industry. Once the third generation healthcare information systems processes are set, they should stay fixed and new applications should only be plugged in, but not require a complete system change every time there is a new development.

2 Good eHealth: Implementing Good Practice in Europe's hospitals (ES 25)

At the centre of this session were the results of the Good eHealth study (www.good-ehealth.org), a three year EC funded project designed to document and disseminate examples of good practice eHealth implementations. The cases presented at the session illustrated the importance of the organisational setting; the development and flexible implementation of a strong vision; and creative engagement of the staff involved in realising and making use of new eHealth systems, as well as the careful planning and change management to implement new organisational processes. In summary, these are not really new challenges, but management has been slow to grasp their key relevance in contemporary hospital and healthcare settings.

3 EU eHealth agenda and activities on patient safety (ES 31)

Ilias Iakovidis, (DG Information Society and Media; Deputy Head of Unit ICT for Health) presented the history and development of the European Commission's eHealth activities. These ranged from support for research into regional networks and infrastructure in the 1990s to funding the development of personal health systems and most recently European contributions to simulation models in the context of the global Virtual Physiological Human (VPH) initiative. Increasingly, the EC looks for cooperation possibilities with the United States, Canada and Australia. In this context, efforts are focusing on standards, interoperability and patient safety.

Feedback from participants indicated a high level of appreciation for the EU leadership in support of pressing health system needs by funding eHealth research and implementation projects.

4 Certification of EHRs: Criteria, procedures and tools (ES 34)

Defining quality criteria for EHRs is an important goal. The degree of detail and consequences for competition on the market for EHR systems were important points of debate raised in this session. George de Moor, representative of EuroRec presented the Q-Rec project (www.eurorec.org/projects/qrec.cfm) which focuses on the development of formal methods for the quality labelling and certification of EHR systems in primary care and hospital settings. His presentation was supplemented by comments from Dipak Kalra, University College London, on Q-Rec's archetype related work, which Q-Rec does not build itself but rather mechanisms and criteria for certification of existing and new archetpyes.

Dennis Niebergal, Clinicare Canada, presented the Canadian experience with certification in the province of Alberta, which included participants from industry, doctors, medical organisations and regional health authorities which led to usability requirements called VCUR. The province of British Columbia adopted a label similar to the US standard CCHIT with the explicit aim of limiting the number of possible vendors.

During the discussions following the presentations, the trade-off dilemma between detailed certification and the adverse effects on competition were vividly discussed.

5 ICT and patient safety from a health professionals' view (ES 36)

In this session experiences and views on the conditions under which ICT can make a difference for patient safety were exchanged.

An example of a successful transformation guided by quality indicators and guidelines as well as rigorous quality assessment was presented using the case of the Veterans Administrations (VA) in the United States of America. There was agreement on the need for a proper definition of quality indicators and concordant incentives for staff to drive the change towards improved patient safety. Ultimately, management and people are as much the means of improved patient safety as ICT itself.

A representative from the Copenhagen area patient safety unit presented risks associated with badly designed user-interfaces and a lack of awareness for the different professional cultures of doctors and IT-specialists. He stressed that an intensive failure analysis is crucial prior to launching an IT system.

A common opinion arising from discussions was the need for user group interaction when designing, developing and testing ICT systems for healthcare.

6 eHealth standards as a crucial element for effective Healthcare IT (ES 42)

This session focused on new and ongoing European eHealth standardisation initiatives and their contribution to regional, national and European-level systems of patient-centred continuous, seamless care. Representatives of the European Commission emphasised that all its activities in the domain are focused on providing synergies between standardisation efforts and the implementation projects to be supported in the context of the EU ICT Policy Support Programme (PSP), a part of The Competitiveness and Innovation Framework Programme (CIP). The Commission's recently published draft Recommendation on eHealth Interoperability 'Connected Health' list a comprehensive overview of those Europe issues that will contribute to interoperable, standard-compliant solutions in eHealth. A key focus will have to be placed on clinical workflow management, and information that passes between the two sectors of ambulatory and hospital care. At a technical level, system designers and service providers will be encouraged to use standards-based information models when they create eHealth systems' and services' solutions. In terms of semantic interoperability, the Recommendation pleads for an orientation towards supporting clinical pathways and clinical data sets, and information-mapping.

From the point of view of standardisation authorities, the representative for CEN explained that CEN, CENELEC and ETSI will cooperate closely on eHealth standards development and focus particularly on three key areas: patient and health professional identifiers; patient summaries and emergency data sets. Contributions from industry representatives rated as highly important joint activities between European and international, as well as Open Source initiatives. In the process of standards harmonisation, the importance of focusing on concrete, clinically relevant use cases was recalled.

7 Support for Mobile Citizens: Integrating Healthcare across Europe (ES 51)

For more than 5 years now, German public insurers AOK Rheinland/Hamburg and Techniker-Krankenkasse, and their European partners have implemented a service that enables foreign hospitals and health insurance partners to verify the insurance status of a citizen when abroad in need of healthcare and to instantly contract for services needed, thus cutting red tape and speeding up reimbursement. This solution is now further expanded and optimised with the help of eTEN funding (TEN4Health project: www.ten4health.eu). Currently based on the AOK/TK health insurance card, which provides for personal identification - and the date of birth as PIN -, the service already encompasses also the European Health Insurance Card.

In the discussions following the presentation of the service, a need for modernised laws was identified. The regional and cross-border focus of actual healthcare activities sometimes conflicts with the national perspective adopted in laws. The different national benefit catalogues pose a further obstacle to healthcare integration. A long term goal should be a harmonisation of these benefits baskets, a focus on quality, and the provision of a European interoperable eHealth network to support such services which already today support almost 10 million clients.

8 Innovative Approaches to financing eHealth solutions (An invitation only WS after the WHIT)

Supporting and boosting investments in eHealth products and services is a key objective of the European Commission's eHealth Action Plan. The workshop on financing eHealth, organised by the European Commission and a team from the EC funded "Financing eHealth" study[3], shed light on the experiences and lessons drawn so far by different stakeholders. Ilias Iakovidis, deputy head of unit ICT for Health, chaired the workshop. A representative from the US Department of Health and Human Services pointed out that the American approach to financing eHealth solutions relies on continuous certification to reduce risks for users and to let market forces play. A stronger role for public bodies characterises the Canadian approach. Through Canada Health Infoway, which covers 50% of project costs out of public money, funding for eHealth becomes predictable. Public private partnerships can play an important role in securing finance for eHealth. The experience of the European Investment Bank shows that PPPs are a remedy for capital shortages, provide higher quality and allow the management of risk by the party most capable of assuming it. On the downside, the cost of capital is higher, there is a risk of oligopoly formation of providers and often, there is a lack of integration between the infrastructure that is built and the clinical model supposed to be supported by it. Ultimately, managing interoperability is key to making available funds go further. Once interoperability is achieved, markets will become more competitive and thus services cheaper. From the perspective of a large international donor such as the World Bank, the best use of financing support for eHealth is in the framework of broader health policy changes which provide a catalyst for future development efforts. Wherever large scale national eHealth projects are implemented, such as within the NHS Connecting for Health programme in the UK, the NHS must have a clear picture of its own requirements and the market offer. It has to be able to deal with subcontractors of major contractors directly so as to avoid unnecessary delays.

Despite these challenges, discussions also provided examples of successful eHealth solutions. The County of Norrbotten, Sweden, invests in eHealth as part of the healthcare provision, fi-nanced by tax money. The driver has been, and still is, that without eHealth the county would not be able to deliver healthcare services in this sparsely populated region, with 2.6 inhabitants per square km. Financial co-operation with other regions has been an important feature; only about 10% of funding comes from EC structural funds. In Denmark, the main IT investments are financed by health provider organisations in a market environment. National budgets, including some €2m per annum for MedCom, are only a small part of the total investment. MedCom never had a written business plan; it worked on the basis of common sense and market approaches where each participant has to cover their own cost, which can form the core of an effective business plan.

[3] http://www.financing-ehealth.eu/downloads/workshops.html