

Standardization for eHealth got high priority in the European agenda

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Abstract

eHealth will provide people with better quality care, access to health information and health systems will be more efficient; besides this, eHealth has also major business potential for industry; however, further market acceptance and trust in eHealth services will depend on the interoperability of the services and applications and protection of data protection. Safe and secure interoperability is a key to the faster adoption of ICT throughout the healthcare systems in Europe. European institutions believe that global standardization, based on consensus between all the relevant stakeholders, is the prerequisite to achieve eHealth interoperability. Standards are required that have been verified by consistent and coordinated interoperability testing. eHealth interoperability, within and among national, regional and global health systems became a major political priority. EUROPEAN COMMISSION addressed a Standardization mandate to European Committee for Standardization (CEN), European Committee for Electrotechnical Standards Institute (CENELEC) and European Telecommunications Standards Institute (ETSI) in the field of Information and Communication Technologies. The mandate asks to provide an analysis and planning of existing relevant standards and reports, including work under way, and the creation of a work programme for standardization in eHealth to be carried out by the three Standards Development Organization (SDOs). The work will take into account the published ETSI Special Report SR 002 564 (Applicability of existing ETSI and ETSI/3GPP deliverables to eHealth) produced by the European Telecommunications Standards Institute (ETSI) Project eHEALTH.

Key words: Telemedicine; Biomedical Technology; Computer Communication Networks; Access to Information; Information Services; Health Services; Quality of Health Care; Europe.

Resumen

Normalización de la eHealth: una prioridad en Europa

La eSalud (uso de sistemas electrónicos vinculados al cuidado de la salud) suministrará a las personas una mejor calidad de atención, un mayor acceso a la información relacionada con la salud y hará más eficiente al sistema de salud. Además, eSalud tiene un importante potencial de negocios para el sector. Sin embargo, la mayor aceptación y confianza del mercado en los servicios de eSalud dependerá de la interoperabilidad de los servicios y aplicaciones y la protección de los datos. La interoperabilidad segura y protegida es un elemento clave para una adopción más rápida de la tecnología de la información y las telecomunicaciones (ICT, por su sigla en inglés) en los sistemas de cuidados de la salud de Europa. Las instituciones europeas creen que dicha estandarización global, con base en el consenso entre todas las partes interesadas relevantes, es un prerequisite para lograr la interoperabilidad de la eSalud. Los estándares deben verificarse mediante pruebas de interoperabilidad consistentes y coordinadas. La interoperabilidad de la eSalud, dentro y entre los sistemas salud de los países, las regiones y a nivel global, se ha convertido en una importante prioridad política. La COMISIÓN EUROPEA ha encaminado un mandato de estandarización al CEN (Comité Europeo de Estandarización), al CENELEC (Comité Europeo de Estandarización Electrotécnica) y al ETSI (Instituto Europeo de Estándares de Telecomunicaciones) en el campo de las tecnologías de la información y las comunicaciones. El mandato solicita que suministren un análisis y planificación de los estándares e informes relevantes existentes, incluyendo el trabajo que se está realizando, y pide a las tres Organizaciones de Desarrollo de Estándares (SDOs) la creación de un programa de trabajo para la estandarización en el campo de la eSalud. El trabajo tomará en cuenta el Informe Especial SR 002 564 de ETSI (Aplicabilidad de las medidas de ETSI y ETSI/3GPP a la eHealth) producido por el ETSI Project eHEALTH.

Palabras clave: Telemedicina; Tecnología Biomédica; Redes de Comunicación de Computadores; Acceso a la Información; Servicios de Información; Servicios de Salud; Calidad de la Atención de Salud; Europa.



Padronização para eSaúde: uma prioridade na Europa

A eSaúde fornecerá às pessoas uma melhor qualidade de cuidados assistenciais, um melhor acesso à informação e tornará mais eficiente os sistemas de saúde. Além disso, a eSaúde tem grande potencialidade para o setor empresarial. No entanto, a futura aceitação do mercado e a confiança em serviços de saúde dependerão da interoperabilidade dos serviços e aplicações de proteção de dados. Segurança e interoperabilidade são as chaves para a rápida adoção das TIC em todo o sistema de saúde na Europa. As instituições europeias acreditam que padronização global, baseada no consenso entre todos os públicos interessados, seja pré-requisito para alcançar a interoperabilidade na e-saúde. Para o estabelecimento de padrões é necessário que tenham acontecido testes de interoperabilidade. A interoperabilidade na eSaúde, dentro e entre os sistemas de saúde nacionais, regionais e globais se tornou uma grande prioridade política. A Comissão Europeia, encaminhou o mandato de padronização ao Comitê Europeu de Padronização, Comitê Europeu de Padronização Eletrônica e Instituto Europeu de Padrões e Telecomunicações, no domínio das Tecnologias da Informação e Comunicação. O mandato solicita fornecer uma análise e planejamento dos padrões pertinentes e relatórios, incluindo os trabalhos em curso, bem como a criação de um programa de trabalho para padronização em saúde a ser realizada pelos três Organizações Produtoras de Padrões (SDOs). O trabalho levará em conta o relatório especial publicado ETSI SR 002 564 (Aplicabilidade das medidas ETSI e ETSI/3GPP para eSaúde), produzido pela ETSI Project eHealth.

Palavras-chave: Telemedicina; Tecnologias Biomédica; Redes de Comunicação de Computadores; Acesso à Informação; Serviços de Informação; Serviços de Saúde; Qualidade da Assistência à Saúde; Europa.

BRIEF COMMUNICATION

Advances of eHealth applications and services and the growing level of implementation in the EU Member States oblige policy makers, industry, medical professionals and other stakeholders to carefully assess developments, taking into account the need to build seamless information networks across borders in regions and countries.

eHealth will provide people with better quality care, access to health information and health systems will be more efficient; besides this, eHealth has also major business potential for industry; however, further market acceptance and trust in eHealth services will depend on the interoperability of the services, applications and protection of data protection. Safe and secure interoperability is a key to the faster adoption of ICT throughout the health-care systems in Europe.

Is even more evident now that European institutions believe that global standardization, based on consensus between all the relevant stakeholders, is the prerequisite to achieve such interoperability. Standards are required that have been verified by consistent and coordinated interoperability testing.

eHealth interoperability, within and among national, regional and global health systems became a major political priority as a result of the eEurope 2002 -2005 action plan.

This eHealth action plan aims to enable the European Union to achieve the full potential of eHealth systems and services. This concept was further pursued by the 2005 -launched strategic framework i2010 – European Information Society 2010. This initiative sets as priorities the completion of a Single European Information Space, the promotion of innovation, and strong support for the inclu-

sion of all European citizens – topics which are at the heart of eHealth interoperability.

The result of such a co-ordinated eHealth standardization process will be a set of standards and guidelines on eHealth interoperability. This will require a plan to migrate from the currently set of loosely connected standards to the next generation. There the results of the state of the art work currently being undertaken by the Standard Development Organizations, various consortia and in R&D projects can be fully explained and exploited in an implementable and interoperable way. The result would be a set of standards that would be much more effectively implemented in the Member States and at the level of the European Union, notably to facilitate compliance with cross -border mobility and legal requirements.

EUROPEAN COMMISSION addressed a Standardization mandate (M/403)¹ to CEN and CENELEC and ETSI in the field of Information and Communication Technologies. The mandate asks to provide an analysis and planning of existing relevant standards and reports, including work under way, and the creation of a proposed co-ordinated work programme for standardization in health informatics (eHealth) to be carried out by the three SDOs.

The goal of phase 1 of the mandate (planning and analysis) of the programme should be to list existing relevant standards and technical reports with short descriptions, and to list relevant needed tasks for achieving the result, it is important that the most needed standards are planned for adoption earlier.

The goal of phase 2 (execution) should be to agree on implementable standards, technical reports, guidelines, methods etc. In the work the European Standardization

Organizations shall use quality and project management principles to ensure that content and context within and between the standards are consistent.

The work will take into account the ETSI Special Report SR 002 564² (Applicability of existing ETSI and ETSI/3GPP deliverables to eHealth). The Report details which of the existing standards may be usefully implemented for eHealth applications, and which ones may have to be prepared or updated. Relevant aspects address in particular transmission, technical interoperability, security, authentication, authorization, data privacy and usability.

The development of testing and verification methods, the drafting of testing standards, as well as the demonstration of interoperability between eHealth services is also key. The experience in this area exists within the European Standardization Organizations (in particular within ETSI with the Protocol and Testing Competence Centre, and the ETSI Plugtests service).

In ETSI the Project eHEALTH form the 'horizontal' nucleus for the co-ordination of ETSI's activities in the Health ICT domain. EP eHEALTH work in close co-operation with all relevant bodies within ETSI and 3GPP e.g. such as ERM TG30 - Wireless Medical Devices, SCP (Smart Card Platform), EMTEL (Emergency Telecommunication). Vital aspects considered by EP eHEALTH are: security of systems and data, quality of services, interoperability and validation by testing, usability.

EP eHEALTH has have primary responsibility to collect and define the Health ICT related requirements from relevant stakeholders and to input the requirements to the concerned ETSI Technical Bodies; to identify gaps, where existing ETSI standards do not fulfill the Health ICT requirements, and suggest further standardization activities to fill those gaps and to develop Health ICT related deliverables in all areas not covered by existing system specific and horizontal Technical Bodies or other SDO.

Some of the current work of the project is focussing on an eHealth architecture, considering user service models and application classification into service models and short range radio communication and networking.

Participation in EP eHEALTH is open to all ETSI members; guests from all over the world may be invited on their request.

REFERENCES

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