

Towards the Standardization and Promotion of Interoperability in eHealth

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Abstract and Objective

Interoperability and solutions based on global clinical and administrative standards are considered a basic strategy to improve medical care. In this sense, several networked initiatives in the development and promotion of Open-Source Software (OSS) are ongoing. However, these initiatives are not specifically conceived to function as collaborative resources for the multidisciplinary set of stakeholders involved in the different aspects of eHealth. In this context, SHARE project enhances this situation by means of a web platform for current and future actions in research, development and technology transfer in the field of OSS applied in the eHealth sector.

Keywords:

Open-source, eHealth, standards, Interoperability, Knowledge platform

Introduction

The eHealth market is set for explosive growth driven by increasing challenges to healthcare systems, as well as new medical information and communication technologies. At the same time, the healthcare industry is facing acute cost pressures, as far as traditional Information Technologies infrastructures based on proprietary technologies are expensive, rigid and complex to manage. In order to capitalize on this huge market potential and to improve medical care, healthcare organization must be empowered to create compelling solutions based on global clinical and administrative standards and increase interoperability with the existing tools and platforms.

SHARE project offers convenient framework to undertake a well-coordinated and focused approach and combines all the potential European contributors to scientific and technological development into a converging positive direction.

Methods

Benchmarking

The benchmarking methodology consists of a set of templates with several criteria classified in two groups: common and specific. The first group is provided by the QSOS methodology. The specific criteria are selected in an individual way and

define those attributes that only applications, belonging to a certain family, have.

SHARE Web Space

SHARE Space enables different user groups to make a collaborative utilization of resources related to OSS by means of a Web-based communication platform. The identified target groups (commercial organizations, research organizations, developers community, end users and others) can make a common use of OSS resources by means of a set of Virtual Lab services.

Results

Benchmarking

The trend in the eHealth field is not only the development of applications under an open source approach but also the use of existing ones to generate new projects. In this way, a benchmarking process provides a method to compare tools and to select the best one for a particular purpose.

SHARE Web Space

The SHARE Web Space provides users with:

- Resources sharing facilities.
- Tools for knowledge gathering and improvement in the context of a framework where collaboration among users can also be found.
- Procedures and tools for project management.

Conclusion

Virtual workspace enlarges the limits of working environments, both in time and space, in a multidimensional approach that encompasses several “spaces” continuously interoperating. Furthermore, by means of a constant information flow among all the stakeholders, SHARE will merge heterogeneous sources of knowledge and will become a complex but manageable knowledge space.