

Implementation of the IHE XDS in Electronic Medical Data Interchange

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■ Abstract

A new integrated information system, based on electronic document, is to be implemented in the Polish Health Care System in 2017. Electronic medical records are the obligatory form of medical documentation in this system. Two crucial elements of this system are: EHR (Electronic Health Record), i.e. defining criteria and standards of electronic medical documentation and constructing a communication system allowing exchange of data and information between various institutions – stakeholders functioning in the healthcare system. IHE XDS (Integrating of Health Enterprise Cross Enterprise Document Sharing), developed specially for usage in healthcare systems, should be implemented in the Polish healthcare information system as both a local and global solution. European Union regulations dealing with electronic public service, openness and interoperability of information systems are important requirements and standards.

Key words: medical data, IHE XDS, electronic public service, interoperability, openness

Słowa kluczowe: dane medyczne, IHE XDS, elektroniczna usługa publiczna, interoperacyjność, otwartość



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Effective implementation and smooth functioning of the electronic workflow of medical records is crucial for the digitalization of healthcare in Poland. The transition to a higher level of information processing enabled by the use of digital data resources regarding medical events is dictated firstly by the need to adapt the current model of providing healthcare services to the needs of the aging population, and new organizational conditions where this care is provided. Secondly, as a member state of the European Union, Poland is committed to the consistent implementation of Community guidelines in the field of integrated healthcare system based on modern information and communications technologies [1]. The implementation of the Electronic Health Record and the construction of an integrated information system of healthcare based on electronic documentation and teletransmission has

been underway in Poland for several years now, and according to the already modified guidelines should start functioning in 2017. One of the basic elements of this system is the efficient exchange of data and information between the vast number of diverse companies operating in the healthcare system.

The solution enabling efficient digital data exchange also in the information system of healthcare are data transfer buses. The integration of electronically supplied services, in particular access to the data collected, for example, in data warehouses or in cloud computing, is enabled by data transfer buses. In this paper we present the concept of using IHE XDS (Integrating Healthcare Enterprise Cross Enterprise Document Sharing) telecommunications paths in the information system of healthcare being constructed. The possibility of processing