Using Fast Healthcare Interoperability Resources standard in obstetrics-gynecology domain

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Abstract

The interoperability topic is very important for the digital healthcare domain, ensuring standard data gathering, continuity in processing and meaningful use of health data for human wellbeing. The exchange of information between different medical units had to be made and the interoperability ensured. The interoperability between different medical units can increase the life expectancy, reduce medical errors and provide more medical information for medical personnel, in case of an emergency the life of a patient can be saved because of a timely and quick access to information. To ensure interoperability, lately the HL7 FHIR (Fast Healthcare Interoperability Resources) standard was developed. FHIR is a standard for healthcare data exchange published by HL7 organization. The specification of FHIR describes a set of base resources, frameworks and APIs that are used in many different contexts in healthcare. The talk will cover a review of the standard and its application for the Obstetrics-Gynecology Department Information System (OGD IS). The cloud computing technology is used for storing the files in the standard format, from where can be accessed by a different accepted medical unit. The OGD IS is a web application developed using Visual Studio.NET 2015, using ASP.NET pages and C# language, the database is Microsoft SQL and the cloud used is Microsoft Azure. Using these technologies will improve the exchange of information, because the cloud is always available, the communication is fast, the only requirement is that the information system to have Internet connection.

Keywords:

Interoperability; HL7 FHIR (Fast Healthcare Interoperability Resources) Standard; Cloud Computing; Obstetrics-Gynecology