J Health Med Inform 2016, 7:3(Suppl)
http://dx.doi.org/10.4172/2157-7420.C1.010

Design of Semantic-based Transducer Electronic Data Sheet for Semantic Wearable ECG Monitoring Systems (SemWECG)

Ajigboye S Olamidipupo
Kingston University, London, UK

This paper presents a semantic approach to store and read Transducer Electronic Data Sheets (TEDS) that is compliant with IEEE 21451.4 standard. The design focus on the use of TEDS to improve the performance of wireless wearable Electrocardiogram (ECG) monitoring devices; semantic TEDS is created using OWL language, with emphasis on the contextual metadata; temporal metadata and thematic metadata, that gives detail expressivity to acquired and transmitted patients' vital signs (ECG) to the health care information systems. To develop the ontology fact-based approach to domain modeling is used to enable us capture the structural and behavioral features of the problem and as well as the solution, this was to enhance the semantic mapping to the HL7 standard use for medical information messaging, and to allow the TEDS ontology to offer an additional self-awareness i.e. communication nodes will undertsnad their own structure and can modify their functions at runtime, also the nodes can query the capabilities and current states of other nodes allowing them to modify the processing packets during communciation session both at the source and the destination. Finally the use of the ontology will add flexibility, inferencing, and reasoning features that are not available with ad hoc data structuires or database schemas.

O.S.Ajigboye@kingston.ac.uk

DNA and LOP at Radiology Department: Can we use the research findings to reduce the problem?

Majed Alturbag
King Fahad Specialist Hospital Brayden, Saudi Arabia

Although there has been research conducted for nearly 40 years, the number of patients who Did Not Attend (DNA) their scheduled clinical appointments is on the increase and a worldwide problem. While reasons and effects of DNA may differ between hospital departments, different factors which predispose DNAs also vary from one setting to another. This paper's interest is in the Radiology department. Despite the importance of radiology procedures in supporting diagnosis, management and prediction of diseases, research related to DNA for Radiology Departments (RD) is limited. This research aims to understand the relationship between previously identified factors and models to RD procedures, and also report its initial research findings. Suggestions on new models, which will incorporate these findings in order to reduce DNA and Lack of Preparation (LOP) at RD, will be discussed.

Majed_alturbak@hotmail.com

Notes: