

Radiology Information System's Mechanisms: HL7-MHS & HL7/DICOM Translation

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Abstract : The innovative features of information system, known as Radiology Information System (RIS), for electronic medical records has shown a good impact in the hospital. The objective is to help and make their work easier; such as for a physician to access the patient's data and for a patient to check their bill transparently. The interoperability of RIS with the other intra-hospital information systems it interacts with, dealing with the compatibility and open architecture issues, are accomplished by two novel mechanisms. The first one is the particular message handling system that is applied for the exchange of information, according to the Health Level Seven (HL7) protocol's specifications and serves the transfer of medical and administrative data among the RIS applications and data store unit. The second one implements the translation of information between the formats that HL7 and Digital Imaging and Communication in Medicine (DICOM) protocols specify, providing the communication between RIS and Picture and Archive Communication System (PACS) which is used for the increasing incorporation of modern medical imaging equipment.

Keywords : RIS, PACS, HIS, HL7, DICOM, messaging service, interoperability, digital images

Conference Title : ICCIE 2014 : International Conference on Computer and Information Engineering

Conference Location : Toronto, Canada

Conference Dates : June 16-17, 2014