

ABSTRACT

Interoperability of medical information has become an issue in the development of modern healthcare services. Advanced healthcare institutes has struggled for years to achieve interoperability of medical information, but stumbles on the problem to establish a good information standard that supports it. HL7 is one of the world's most recognized health information standard organization, and the developer of Fast Health Interoperability Resource or FHIR, a latest health information standard that excels in implementing a fast and robust health information structure. The interoperability aspects focused in this research is the medical imaging archive using Picture Archiving and Communication System or PACS. PACS is an information system specifically designed to handle the archiving and usage of medical images that uses a medical imaging information standards known as DICOM. This research is focused on developing a PACS system in Cicendo Eye Hospital to support the medical image archiving and usage, also to test the system's interoperability using FHIR standards.

Keywords: DICOM, FHIR, HIE, HL7, PACS, Medical Imaging