

# **Transmural Exchange of Cardiology Related Information Between Two Academic Centres and Referring Hospitals using XDS(-I)**

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More than 50% of the patient population undergoing a therapeutic invasive procedure in an Academic Centre has undergone diagnostic based procedures in a referring hospital. These procedures generate the data that forms the basis for the policy to propose therapeutic treatment in our department. Until recently the information was paper- and CD-based. It is widely recognised that an electronic system leads to better patient care. In this paper we describe two different IHE-XDS(-I) (Integrating the Healthcare Enterprises Cross-enterprise Document Sharing (for Images)) solutions based on a network that facilitates the exchange of documents as well as images. XDS is based on existing medical standards like HL-7 and DICOM, industrial standards like ebXML and SOAP and internet standards like HTTP(S) and JPEG. The existing systems, a variety of PACS systems and Hospital information systems, were easily interfaced to the XDS network, due to the on standards based infrastructure. The recently adapted nationwide patient ID serves as unique patient identifier in the XDS infrastructure. Conversion to locally used ID numbers is incorporated. Using IHE-XDS(-I), cardiologists from the regional hospitals can share rather than exchange their angiographic, echocardiographic and ECG data sets. Additionally they can include various reports and forms. After treatment, the Academic Centre can share back information to the referring cardiologist. Preliminary data has shown that the time between a patient presenting in the physicians office and the case review in the intervention centre has decreased by 1 to 2 days.