

QUDI Project QR01.iii

Diagnostic imaging standards for portable media, phase 2

Report summary

Introduction

The piecemeal introduction of digital imaging technology into radiology in Australia has led to widespread problems with the data quality, interoperability, and communication of diagnostic images on portable media, most notably on Compact Discs. This project continues earlier QUDI work (QR01.i and QR01.ii) to elucidate these problems and provides a standards-based solution for moving forward.

The Integrating the Healthcare Enterprise (IHE) Portable Data for Imaging (PDI) Integration Profile "promotes the coordinated use of established standards...to address specific clinical need in support of optimal patient care. Systems developed in accordance with IHE communicate with one another better, are easier to implement, and enable care providers to use information more effectively"¹.

Aim

This project aimed to engage stakeholders in the development of a standardised approach to the provision of digital images on portable media.

Methods

The primary means of stakeholder engagement was a workshop held in Sydney from 10-12 December 2007. This workshop aimed to provide the strategic and technical direction required to implement the Integrating the Healthcare Enterprise (IHE) standards for portable data for imaging (PDI) in Australia. Following on from feedback received from stakeholders at the workshop and through further consultation, the consultancy developed a draft guideline on PDI to inform the RANZCR Standards of Practice, and also a draft Code of Practice/Principles for the provision of digital images.

Outcomes

Recommendations for RANZCR Standards of Practice

The report provides detailed recommendations for diagnostic imaging on portable media which will inform the current revision of the RANZCR Standards of Practice. The recommendations are based primarily on the IHE profile for PDI, with additional guidance on labelling, which is not addressed by IHE. Requirements include: Exchange media and file systems; malicious software; auto-run/auto-load; labelling, packaging and storage; selection and presentation; media, DICOM and web content; instruction files; reports; DICOM views; compliance and conformance testing; change management.

¹ <http://www.ihe.net.au>

Draft Principles for the Provision of Digital Diagnostic Images

The first principle states that diagnostic imaging examinations should result in a report and diagnostic quality images, in a format suitable for the referring or subsequent doctor.

The second principle requires that the electronic transmission of images and reports be conducted in a way that complies to appropriate standards.

The third principle advises that adequate computer systems need to be put in place by referrers and treating practitioners if they are to make the best use of digital imaging technology. Workflow and patient management systems may also need to be adjusted.

The final principle suggests that storage media should be standards compliant, and recommends an image archive period of at least 6 months.