

AbstractID: 5976 Title: DICOM: What the Physicist Needs to Know

The DICOM (Digital Imaging and Communications in Medicine) standard has allowed for tremendous changes to occur in the workflow of a modern radiology department. Prior to DICOM, radiological images were generated, transmitted, and stored in proprietary formats by imaging vendors. DICOM provides a standard to define objects such as images and services that may be performed upon those objects. As with any disruptive technology, it has solved some problems and created a whole host of new issues. Some of these issues are being addressed within the DICOM standard while others have taken on a new life under the auspices of IHE (Integrating the Healthcare Enterprise). IHE is an initiative by healthcare professionals and industry to improve the way computer systems in healthcare share information.

This lecture is intended to provide an overview of the DICOM “language” and look at some current DICOM issues at our institution.

Educational Objectives:

1. Review the history of the DICOM standard and understand its origins and goals.
2. Understand the language of DICOM objects and services.
3. Understand the possible sources of DICOM issues.
4. Learn of available online resources for additional information.