

AbstractID: 8282 Title: Acceptance and routine quality control in Direct Radiography systems: initial experiences with the Italian Association of Physicist in Medicine protocol

Medical x-ray imaging systems must be designed to guarantee that maximum image quality is obtained for an acceptable radiation risk to the patient, and quality assurance (QA) procedures are used to ensure these standards are maintained.

A quality control protocol for direct digital radiography (DDR) systems is described and discussed. A software to automatically process and analyze the required images for controls was developed, too.

In this poster the initial results obtained on equipments of different DDR manufacturers were reported.

In order to establish a generally acceptable baseline performance of the systems, fourteen different commercially available DDRs from four different manufactures were periodically tested and their results compared in the frame of the Digital Quality Assurance Task Group of the Italian Association of Physics in Medicine (AIFM).

The protocol, designed to be performed in short time (all the tests were done in a clinical environment), seem to be able to highlight discrepancies from the standard operating performances.