

QUALITY CONTROL AND PATIENT DOSIMETRY IN DIGITAL RADIOLOGY. ON LINE  
SYSTEM: NEW FEATURES AND TRANSPORTABILITY

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The purpose of this study is to describe the new features of a system for quality control and patient dosimetry “on line”, working on a digital radiology department and using the information contained in the DICOM header of some modalities. Transportability of the system and MPPS integration are also described.

A system extracting and processing the relevant dosimetric information contained in the DICOM header for some digital modalities working in a large University Hospital, has been working during the last five years. New features allowing the audit of parameters other than patient doses have been included, setting alarm conditions to alert on malfunction of the X ray system or bad operation modes, in addition to the values of patient doses, have been implemented. Transportability to other centers has been tested. A new module to collect and process the relevant information transferred by the MPPS service has also been launched.

Several examples with the exploitation of the new features will be presented. The transportability of the system has been tested in two remote hospitals during several months.

The QCONLINE system and the new MPPS module have demonstrated to be a good tool to optimize procedures in digital radiology departments managing in real time quality control and patient dosimetry data. This experience could be useful to help in the implementation of the on-going IEC-DICOM standard on patient dosimetry.

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