

QUALITY CONTROL MEASUREMENTS FOR FLUOROSCOPY SYSTEMS IN EIGHT COUNTRIES PARTICIPATING IN THE SENTINEL EU COORDINATION ACTION

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Quality control is becoming increasingly important in relation to the introduction of digital medical imaging systems using x rays. This is owing to, e.g., the fact that overexposed films which provided a natural dose limitation are no longer observed in digital systems. In SENTINEL work package 1 on functional performance and standards it was decided to organise and perform a trial on image quality and physical measurements. A survey on inventory of equipment and equipment standards was organised to collect information on equipment available for measurements in the trial, equipment available for toolkit to be used during the trial and protocols available for the measurements. Eight participants responded to the questionnaire. Equipment for the toolkit could be made available by three participants. Among the protocols available for quality control of (digital) fluoroscopy systems the protocol developed by the Department of Medical Physics & Bioengineering, Dublin, Ireland appeared to be the most suitable. In addition, monitors could be checked using a software tool made available by the University of Leuven.

The SENTINEL toolkit containing equipment and instructions circulated among seven participants in the period August 2006 to October 2006. Due to problems related to customs (Bulgaria is not yet a full EU member state) the measurements in Bulgaria were made with local equipment.

Measurement results of the trial will be summarised. The impact on the protocol and on equipment standards will be presented during the SENTINEL workshop.

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