
Audit 23

Evaluation of the role and responsibilities of the medical physics expert

Definitions (Council Directive 2013/59/Euratom, December 2013)

- ★ "medical physics expert" means an individual or, if provided for in national legislation, a group of individuals, having the knowledge, training and experience to act or give advice on matters relating to radiation physics applied to medical exposure, whose competence in this respect is recognised by the competent authority;

This template itemises the expected roles and responsibilities of the medical physics expert and can be used to develop a dedicated audit questionnaire, targets to be locally derived and agreed.

Medical physics expert tasks

The medical physics expert:

- ★ takes responsibility for dosimetry, including physical measurements for evaluation of the dose delivered to the patient and other individuals subject to medical exposure
- ★ optimises the radiation protection of patients and other individuals subject to medical exposure, including the application and use of diagnostic reference levels;
- ★ Concerning medical radiological equipment
 - ☆ gives advice;
 - ☆ defines and performs quality assurance;
 - ☆ performs acceptance testing;
 - ☆ prepares technical specifications and installation design;
 - ☆ performs surveillance;
 - ☆ analyses the events involving, or potentially involving, accidental or unintended medical exposures;
 - ☆ is involved in the selection of equipment required to perform radiation protection measurements;
- ★ performs training of practitioners and other staff in relevant aspects of radiation protection
- ★ shall be involved:
 - ☆ in radiotherapeutic procedures other than standardised therapeutic nuclear medicine procedures;
 - ☆ in standardised therapeutical nuclear medicine procedures as well as in radiodiagnostic and interventional radiology procedures, involving high doses;
 - ☆ for other medical radiological procedures for consultation and advice on matters relating to radiation protection concerning medical exposure;
 - ☆ in the development of new clinical protocols or research;
- ★ shall liaise with the radiation protection expert