
# Comprehensive Quality Management in Radiotherapy: Quality Assessment and Improvement

6-9 April 2025 | Athens, Greece

**In the rapidly advancing field of radiotherapy, achieving excellence requires a strong commitment to quality ingrained in the culture of healthcare institutions. This course is designed for radiation oncologists, medical physicists, radiation therapists, and hospital administrators—everyone involved in ensuring patient safety and effective treatment.**

**Leadership plays a crucial role in fostering an environment where quality thrives. Heads of departments and future leaders will find this course particularly valuable, as it provides essential knowledge to establish and maintain robust quality systems.**

**Over the coming days, you'll engage with a team of quality champions and experts from the field who will share practical strategies for setting up effective quality systems, defining key quality indicators, and applying methodologies to enhance safety and efficiency in your practice.**

**Our goal is not only to equip you with knowledge but also to increase the number of quality champions in all radiotherapy departments. Join us as we focus on making quality a shared commitment that benefits both our departments and the patients we serve.**

## Target group

Good quality is impossible to attain if quality standards are not embedded in the culture of the department/institution. Therefore, all staff contributing to the treatment chain are encouraged to attend. Obviously without a heavy involvement of team leaders a quality system will be difficult to set up and to maintain, consequently, all heads of departments and future leaders - should ideally be familiar with what this course will cover.

For these reasons, this course is specifically designed for radiation oncologists, medical physicists, radiation therapists (RTTs), Quality Managers and hospital or department administrators. It is an excellent opportunity for any team member who aspires to take on leadership roles or is currently enrolled in a training program aimed at becoming a department head. To foster interdisciplinary collaboration and maximize the course benefits, we highly encourage the attendance of a team of three professionals from different disciplines within the same institution. ESTRO is pleased to offer a special discounted fee for institutions that register a team, making this a valuable opportunity to strengthen both individual expertise and team cohesion.

## Course Aim

- Cultivate Quality Champions: Empower participants to become leaders in fostering a robust quality culture within their departments.
- Establish Effective Quality Systems: Provide a comprehensive guide to setting up quality systems, including defining meaningful quality indicators and implementing methods to monitor and improve quality continuously.
- Enhance Awareness of Clinical Audits and Clinical Trials: Highlight the role of clinical audits and clinical trials in strengthening a department's quality system and driving evidence-based improvements.

Build Clinical Audit Structures: Equip participants with the knowledge to develop and implement effective clinical audit frameworks.

- Understand Accreditation and Certification: Offer an overview of accreditation and certification systems, emphasizing their importance in maintaining high standards of departmental operations.
- Optimize Staffing and Roles: Address critical issues of staffing levels and role definitions, focusing on enhancing operational efficiency, ensuring optimal patient care, and achieving effective resource allocation.

## Course Content

Lectures will be held in the morning followed by practical cases and discussion in the afternoon. We aim to allow the participants to put to practice what will have been discussed during the morning lectures and to learn how to work in a multidisciplinary and international group.

- From risk management to quality improvement: how can we use the information that we get from FMEA, fault tree analysis, etc. to feed our QI system?

- Quality assessment:
1. metrics for quality measurement: quality indicators
2. quality standards
3. monitoring quality indicators (general)
4. how to interpret quality measures
5. monitoring quality indicators through SPC
6. how should tolerance and action levels be set?

- Methods for quality improvement:
1. introduction to different methods
2. a focus on LEAN

- Quality improvement strategies: clinical audits and feedback

- Technology assessment methods:
1. cost-effectiveness studies: HERO project
2. QA in clinical trials

- Staffing levels in RT
1. European directives on quality and safety in radiotherapy