SCHOOL

Course Report Dosimetry Audits

17-21 April 2023, Teddington, UK

My name is Rick Keesman and I am a resident medical physicist at the Radboud University Medical Center in Nijmegen, The Netherlands. My main focus is on MRI-guided online radiotherapy, but I went on this course because I really wanted to broaden my knowledge of the radiation oncology field, specifically dosimetry.

The most interesting aspect of the *Dosimetry audits* course for me was the way in which it put dosimetry into context. We looked at various methods for measuring dose, the impact of different methods of analysis, and the relation between measurements and treatment planning system (TPS) calculations. We proceeded by exploring different types of audits, the associated costs, the types of discrepancies that can be found, the sensitivity of the audits to detect these, and how audits can be organised (e.g., centralised versus decentralised and bottom-up versus top-down). This all came together in a great practical exercise, which was based on a real-life auditing report, in which we were asked to figure out why the audit had revealed a discrepancy between the audits' measurements and local TPS calculations.

The course far exceeded my expectations, which were already quite high given my previous experiences with ESTRO courses! The speakers were all leading experts in their fields, and every talk was well-prepared, up-to-date, and relevant to the course. The UK National Physical Laboratory was the perfect venue for this course, as all kinds of auditing phantoms as well as the experts that had developed and worked with them were present.

If you are interested in dosimetry and/or audits then this is the perfect course for you. For those with limited background knowledge, like me, the course is very accessible and and you can learn a lot on the basics. For those with more experience, this course is a great way to establish connections with other like-minded experts in the field, learn more about how audits are performed at other institutes, and maybe even learn what you need to organise a national audit in your home country!



Dr Rick Keesman Resident medical physicist Radboud University Medical Center, Department of Radiation Oncology Nijmegen, The Netherlands rick.keesman@radboudumc.nl