Why, what, and how much QA is necessary for IMRT

Jatinder Palta (Moderator)

What needs to be really done in IMRT QA, Ben Mijnheer

Why we do what we do in IMRT QA, George Sherouse

Economic issues surrounding IMRT QA, Jim Hevezi

Discussion Panel: Ping Xia, Gary Ezzell, and Mike Sharpe

Intensity–modulated radiation therapy (IMRT) represents one of the most significant technical innovations of the modern day radiation therapy. Unlike conventional three-dimensional conformal radiation therapy (3DCRT), both the treatment planning and delivery of IMRT are more complex and less intuitive to the users. Thus, IMRT requires much more diligence in understanding the whole planning and delivery process, associated quality assurance procedures, QA frequencies, and QA tolerance limits with action levels over and beyond what is currently understood for 3DCRT. The complexity of IMRT technology has vastly outgrown our current task group checklist system. It will now require the implementation of new and innovative paradigms of science and engineering of quality management. It is just not possible to develop a single checklist for comprehensive IMRT QA.

This panel will describe the objective technical details of what should be done for IMRT QA. It will address why we do what we do and how we could do a better job of allocating our limited resources. The presenters will expound on the influence that the specific wording and interpretation of current procedural terminology (CPT) codes has on IMRT QA and how it may change in the future.