

Quality assurance (QA) framework comprises procedures and activities necessary to provide confidence that a treatment is prepared and delivered safely and accurately. Just like the ocular proton therapy, development and maintenance of a quality assurance program is a multi-disciplinary effort, with many role groups providing valuable input and resources. Detailed guidance is provided, e.g., in the AAPM Task Group Reports (accessible internationally and free of charge from <https://www.aapm.org/pubs/reports/> ). Several recent publications formulated specific recommendations for particle therapy: Report 224 (proton machine QA), 275 (plan and chart review). While QA activities are largely focused on performance of radiation machines and accuracy of dose calculation, recent developments emphasized the role for risk assessment in the broader radiation therapy process and workflows (see, e.g., AAPM Report 100). Standardization and automation are often cited as core requirements for quality, as important as staff training. In this presentation we will review the highlights of QA for ocular treatments on a single-scattering dedicated fixed beamline at Massachusetts General Hospital, where we balance our traditions (and equipment such as the multi-layer ionization chamber, developed by the legendary researcher, inventor and educator, Dr. Bernard Gottschalk!) dating back to Harvard Cyclotron, with the demands of modern radiation therapy.