

AbstractID: 11273 Title: Investigation of On-line Learning Methods and Software to Augment CAMPEP Residency Training Programs

Purpose: It has been estimated that the number of CAMPEP accredited therapeutic medical physics residency programs needs to increase from 23 to approximately 100 if the ABR 2014 requirement is to be met. One hurdle for new programs is development and ongoing provision of didactic training needed to meet AAPM report 90 guidelines. A significant amount of FTE time is required to create and run courses in a traditional class room context. One solution is to create didactic training as web based modules that can be used to supplement mentored programs. This paper examines feasibility and one set of tools for creating web based training programs.

Method and Materials: Educational literature was examined for the strengths and weaknesses of web based learning and to gain insight into effective techniques. Several commercial products were examined for their ease of use in a clinical environment and adaptability to medical physics needs. On-line learning modules were created for several topics.

Results: Recent studies show 1) exam scores were not impaired by use of a web based lecture series, 2) student satisfaction ratios did not differ significantly between web based and live lectures, and 3) student satisfaction ratings did not differ significantly between PowerPoint slides with audio narration and video stream. Participation by the resident in creating content for online learning modules enhanced the resident's mastery of the didactic material as well as providing training in educational practices.

Conclusion: Creation and use of on-line learning modules are an effective component of a didactic program. They fit naturally with TG133 based structured mentorship affiliated with a primary CAMPEP accredited residency. The technology makes possible creation of a library of modules by experts in particular fields that could be used in all programs.

Conflict of Interest: There were no conflicts of interest