

Purpose: To develop and implement a novel, multidisciplinary, web-based competency certification program for specialized procedures in radiation therapy with the goals of improving standardization, safety, quality and communication within the clinical team.

Methods: The certification program employs a variety of instructional and evaluation techniques. The introductory level consists of PowerPoint presentations with voice-overs. Higher levels include links to significant recent publications in the specialty of interest. Participants are evaluated using on-line quizzes and discipline-specific competency checklists. Interdisciplinary collaboration is fostered by observation of colleagues performing their clinical roles.

Results: The program comprises four levels with discipline specific tracks at the top three levels. Adequate performance on quizzes/competency checklists is a prerequisite for progression to the next level of certification. Level 1, an introductory level which is open to all members of the radiation treatment team including physics graduate students, residents and therapy students, comprises two hours of on-line instruction. Level 2 is discipline specific and includes guided reading, with quizzes, cross-disciplinary observation, and limited participation in clinical procedures. Level 3 includes more advanced guided reading, followed again by quizzes, and develops practical skills through supervised performance of a specified number of procedures. On satisfactory completion of Level 3 the participant is deemed an independent practitioner and teacher within their discipline. Level 4 is a maintenance of certification level that entails performance of a minimum number of procedures per year and documented on-going professional development activities. Graduate students and physics and medical residents can also progress through the certification program to a level determined by their seniority and interest. The entire program, including presentations, quizzes, competency checklists, and readings, is available online through www.rtp-learning-centre.ca.

Conclusions: The certification program offers a unique, simple, and flexible method of providing advanced education and training in specialized procedures to radiation medicine professionals.