

Abstract ID: 17308 Title: Patient Safety Education First do no harm. Prominent newspapers and other reports over the last several years have reminded us of this maxim. To make the patient's journey through radiation therapy safer requires all disciplines to develop an awareness of what can go wrong and why, develop practical skills in common error management techniques and consider what additional patient safety measures can realistically be implemented. This year's Education Council Symposium addresses the role of the medical physicist in patient safety education, with lectures on three distinct topics:

Establishing a culture of safety through education

The medical physicist plays a vital role in being informed about and disseminating key safety information in the use of radiation in medicine. The education and technical knowledge of the medical physicist positions him/her to understand, evaluate and address safety concerns and risks from a procedure standpoint. This point of view is used to establish mechanisms to provide specific periodic, and general ongoing education to clinical staff to prevent patient harm. The same knowledge base also allows the medical physicist to explain the risks and safety measures of the complex procedures to patients undergoing treatment and to lay persons outside of the clinic.

Inclusion of patient safety into didactics and clinical training of medical physicists

In Calgary, Canada, a patient safety training course was designed to address all these issues for a multidisciplinary audience, but focusing on medical physicists who contributed to some of the most catastrophic incidents reported. Error management is a very practical activity. In recognition of that observation almost half of the 14 hour course is devoted to skill development through mentored practical exercises. The course starts with a review of the IAEA slide set describing 5 recent well known incidents in radiation therapy. This slide set forms the basis for several exercises. This is followed by a discussion of human factors and the power distance index – topics quite unfamiliar to the medical physicist. Subsequent sessions provide overviews of recent activities in patient safety encompassing incident learning and recommended preventative measures. Two-hour sessions are devoted to each of the key analysis techniques: root cause analysis, failure modes and effects analysis and fault tree analysis. The messages in the didactic part of each session are reinforced and skills developed during structured exercises. The course has been generally well received by the participants and may serve as a useful model for graduate and residency medical physics education.

Training individuals to use voluntary reporting systems

Development of event reporting systems has been a significant point of recent discussions and national and international activities. Such systems should ideally be implemented along with organizational training efforts and should be a part of a broader process improvement program. Event reporting systems are just tools which work best within an organization with healthy safety and reporting cultures. Without healthy safety and reporting cultures even the best designed event reporting systems ultimately result in poor outcomes and may even become a source of organizational frustrations and problems. When event reporting systems are placed in such a healthy environment, where safety culture is supported and valued from the highest levels of management down through all employees, these systems can be great learning and organizational diagnostics tools. Development of such an environment requires understanding and acceptance of event reporting principles and culture by everyone in an organization.

Learning Objectives

- The role of the medical physicist in establishing a culture of safety through education
- Review a template training course for patient safety within didactics and clinical training
- Preparing individuals to utilize voluntary reporting systems