

Purpose: To summarize the medical physics educational and training materials freely available through the website of the International Atomic Energy Agency (IAEA).

Methods: The IAEA works for the safe, secure and peaceful uses of nuclear science and technology. Much this work relates to human health, including the worldwide cancer problem. The medical physicist fulfils an essential role in the safe and effective use of radiation in medicine, most commonly in cancer treatment, x-ray diagnostic imaging and nuclear medicine. The IAEA produces a large amount of educational and training materials much of which is relevant to the medical physics community worldwide. Resource materials range from setting up a radiation therapy program, to dosimetry calibration protocols, quality assurance guidance documents, basic medical physics education textbooks, along with thousands of ready-made PowerPoint slides downloadable and ready to use by students and instructors. Furthermore, a detailed residency training program is now available for radiation oncology physics and similar material for diagnostic radiology and nuclear medicine physicists is in print.

Results: These resource materials are available through the IAEA website, <http://www.iaea.org> and subcomponents of this website including the newly developed website called “IAEA Human Health Campus”, <http://humanhealth.iaea.org>. Furthermore, there are significant patient safety resources available through the “Radiation Protection of the Patient” website, <http://rpop.iaea.org/>, also including multiple PowerPoint presentations. New teaching/learning resources are being developed for advancing to more sophisticated image-based radiation therapy, ranging from 2-D to intensity-modulated and image-guided radiation therapy.

Conclusions: The IAEA has developed a wealth of educational resources now readily and freely available through its new “Human Health Campus” website. These resource materials and website contents are continuously evolving to meet the increasing needs of the IAEA member states. The emphasis is on advancing radiation medicine safely and effectively. Many of these resources are useful to the medical physics community worldwide.