

The IAEA Inter-Regional Project on Harmonisation of Medical Physicist Roles and Responsibilities in Radiation Medicine

**Meghzifene, A ; Izevska, J; Azangwe, G and
van der Merwe, D**



IAEA

International Atomic Energy Agency

Main key issues in Medical Physics

- Worldwide shortage of medical physicists
- The role of medical physicists not understood/recognized
- Lack of clear education & training (clinical) requirements
- Lack of professional status and recognition

Technical Cooperation Project INT/6/054

- An interregional TC Project (INT/6/054) aiming at strengthening medical Physics in radiation medicine was approved by the IAEA Board of Governors for the period 2009–2013.
- The IAEA, together with other stakeholders from medical physics professional societies worldwide, seeks to strengthen medical physics in radiation medicine to ensure safe and effective treatment and diagnosis of patients.

Objectives of project

The project objectives are to:

- Define internationally endorsed roles and responsibilities of Medical Physicists and requirements for education and training, including clinical requirements.
- Identify gaps in education and training and develop/harmonize materials as needed.
- Raise awareness and recognition of Medical Physics as a profession.



Roles and Responsibilities of Clinically Qualified Medical Physicist (CQMP)

- Roles and Responsibilities common to all specialities
 - Calibration and verification of measurement instruments.
 - Technical supervision of equipment operation and maintenance.
 - Records and documentation.
 - Clinical computing and networking.
 - Research and development.
 - Education and training.

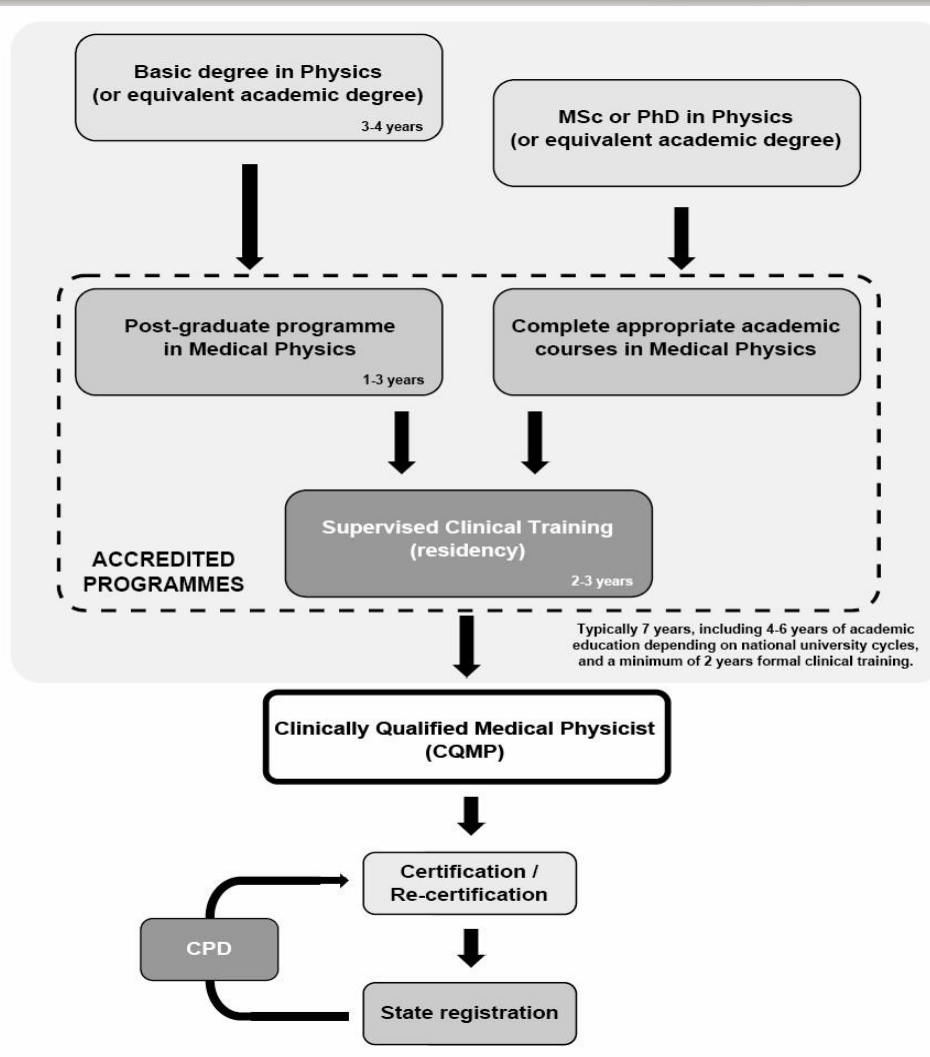
Roles and Responsibilities of CQMP

- Roles and responsibilities specific to the specialties of RT, NM, DIR (including MRI and ultrasound) and RP
 - Optimization of the physical aspects procedures.
 - Collaboration with other clinical professionals as key team members
 - Radiation safety and protection of patients, staff and general public.
 - Quality management of the physical and technical aspects.
 - Patient radiation dosimetry.
 - Facility design and shielding.

Other issues addressed

- Staffing and organisation of a medical physics service
- Recommendations for the academic and clinical training of CQMP
 - Large international survey conducted
 - Qualifications (academic and clinical training)
 - Accreditation, certification and registration
 - CPD
- Professional Ethics

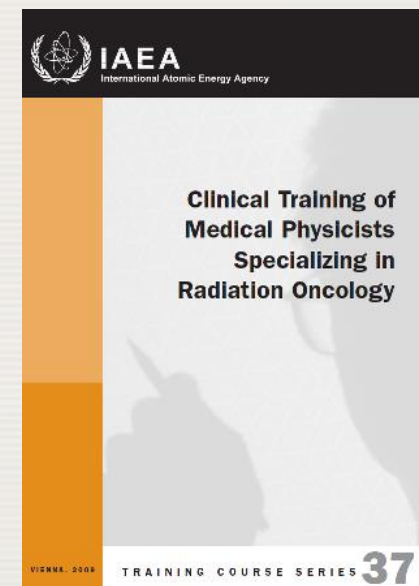
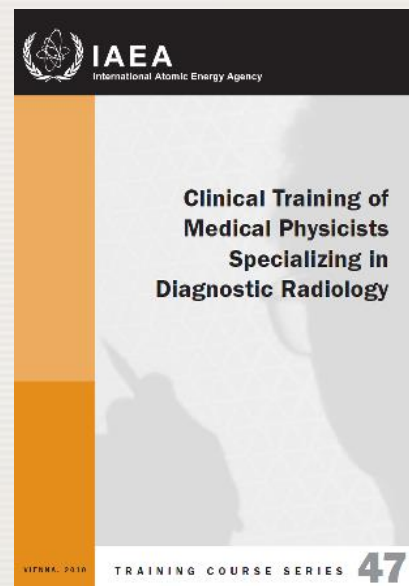
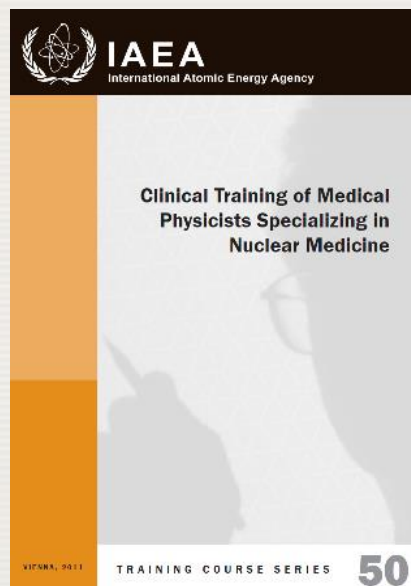
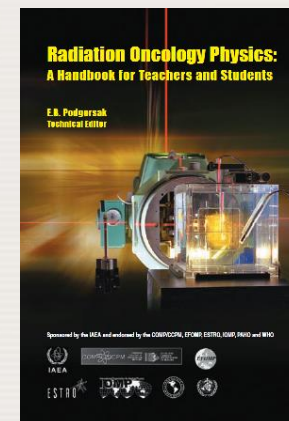
Recommendations for Academic education and Clinical Training



IAEA Support in Education and Training

IAEA Publications on education & training

- Training course series 37, 47 and 50
- Translation French, Russian & Spanish
- Handbooks for teachers and students
- Academic syllabus (2013)



Role of IAEA in CPD

- Joint IAEA-ICTP training
- IAEA support to medical physicists to attend ESTRO and EFOMP courses
- About 10 regional training courses and workshops are organized each year



Advanced radiotherapy course
April, 2011

THANK YOU

