

## SUMMARY OF THE IAEA “REGIONAL MEETING ON MEDICAL PHYSICS IN EUROPE: CURRENT STATUS AND FUTURE PERSPECTIVES”

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On 7-8 May 2015, participants from over 30 Member States of the International Atomic Energy Agency (IAEA) in Europe gathered in Vienna to discuss the current status of and future perspectives for medical physics in the Europe Region. Representatives of international professional organizations, the World Health Organization, national regulatory bodies, Health Ministries and academia as well as medical physicists came together to discuss and build awareness of the important role of medical physicists in the practice of radiation medicine. Discussion topics included the overall status of medical physics in the Europe region, the medical physicist roles and responsibilities in the context of the existing international and European basic safety standards and recommendations<sup>1</sup>, requirements for medical physics education and training, certification and registration of individuals and accreditation of training programmes, opportunities for structured clinical training and continuous professional development, as well as the adequacy of staffing to ensure adequate and safe clinical practices.

Prior to the meeting, a survey on medical physics status was conducted jointly by the IAEA and the European Federation of Organizations in Medical Physics among national medical physics societies in 36 European countries. Information was collected on national educational frameworks, recognition of the profession, staffing levels and major issues in medical physics. The survey results confirm that there is the need to create national mechanisms to implement international basic safety standards and recommendations in aspects concerning the medical physics profession and to implement the European directives in national legislation in several countries. The results also suggest that medical physics staffing levels in many countries are insufficient. At the same time, harmonization

of medical physics education and training within Europe is not adequate and accredited clinical training programmes and corresponding continuous professional development (CPD) schemes are deficient in majority of countries. Another issue highlighted, was lack of recognition of medical physics as a health profession which impacts various aspects of medical physicist work and welfare. At the national level, the medical physics profession is missing in the list of recognized professions in several countries, which results in issues within the legal and fiscal environments; at the local level, lack of recognition within clinical teams results in, inter alia, suboptimal utilization of medical physicists' skills and qualifications including poor involvement of clinical physicists in hospital governance boards.

Participants at the meeting endorsed a set of recommendations addressed to the IAEA Member States in the Europe Region, which will be disseminated by the IAEA. In accordance with the provisions of “*Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards*” (General Safety Requirements Part 3, IAEA 2014) regarding the role of medical physicists in ensuring safety in diagnostic and therapeutic procedures involving the application of ionizing radiation, the meeting recommended that the Member States of the Europe Region fully recognize the clinically qualified medical physicist (CQMP) as a health professional with specialist education and training in the concepts and techniques of applying physics in medicine and competent to practice independently in one or more of the subfields (specialties) of medical physics. A similar recommendation was published in the “*Joint position statement by the IAEA and WHO – Bonn call for action*”<sup>2</sup>. Another important recommendation by the meeting participants was to ensure that medical physics aspects of therapeutic and diagnostic procedures, including patient and equipment related tasks and activities are performed by adequately trained CQMPs or under their supervision. Establishing the appropriate qualification framework for CQMPs including education, specialized clinical training, certification, registration and continuing professional development in the specializations

<sup>1</sup> The following standards and recommendations are referred to: *Radiation Protection and Safety of Radiation Sources: International Basic Safety Standards*, General Safety Requirements Part 3 (IAEA, 2014); European Council Directive 2013/59/Euratom; *Roles and Responsibilities, and Education and Training Requirements for Clinically Qualified Medical Physicists*, IAEA Human Health Series No. 25 (IAEA, 2013); *European Guidelines on Medical Physics Expert*, Radiation Protection No 174 (European Commission, 2014).

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<https://rpop.iaea.org/RPOP/RPoP/Content/Documents/Whitepapers/Bonn-Call-for-Action.pdf>

of medical physics, i.e. radiation therapy, nuclear medicine and diagnostic and interventional radiology was also recommended. The meeting stressed on that international guidelines on staffing levels in medical physics should be followed and fulfilled. At the same time, the meeting urged that mechanisms need to be developed for integration of medical physics services in all centres practising radiation medicine and for establishing, where appropriate, independent Medical Physics Departments in which accredited clinical training can take place. The meeting participants also requested that involvement of CQMPs in hospital governance boards and relevant national health committees be promoted. Another important recommendation addressed the need for establishing and enforcing the legislative and regulatory requirements related to radiation safety in medical imaging and therapy for aspects concerning medical physics, in accordance with the international and, where applicable, European basic safety standards.

It is expected that recommendations of the meeting will bring progress in strengthening medical physics capacity in the Europe Region through steps and actions that can be taken at various levels towards the implementation of international and European standards and recommendations, as well as for activities leading to the harmonization of medical physics education, training, accreditation, certification and registration, and finally towards the full recognition of the medical physicist as a health professional in the Europe Region. The recognition and proper education of medical physicists is an important factor for the future perspectives of medical physics. Such recognition, together with the assistance provided to Member States by the IAEA, will contribute to continued improvements in patient healthcare, high quality and safe radiation imaging and treatment in the Europe Region.

**EDITORIAL NOTE:** An abstract of this meeting, made by Dr Stelios Christofides, EFOMP Past-President and Chair EFOMP Professional Matters Committee, will also be published in the next issue of the IOMP Newsletter Medical Physics World.

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Photo of the participants in the IAEA “Regional meeting on Medical Physics in Europe, 7-8 May 2015, Vienna