

Medical Physics in Latin America – how can the AAPM help?

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Purpose: 1) To examine current clinical and educational needs in Medical Physics in Latin America and recent AAPM efforts to meet them. 2) To assess how can AAPM be more effective in Latin America.

Methods: Data from the region are used to update the needs for training and education of Medical Physicists vis-à-vis current and projected staffing needs. Developments in the state of practice, and upgrades of equipment, are considered in the assessment of needs. Activities and resources of the AAPM are appraised for their specific requirements and their potential effectiveness.

Results: Several programs and local resources have been added or expanded in a number of countries since the last update in 2010. These concentrate mainly in Radiation Oncology Physics, where the perceived need is most evident. Current and projected staffing necessitate more extensive education, training and certification in most countries in Latin America. There is marked difference in utilization of Medical Physics services in imaging between the region and North America. Regulatory requirements and adoption of practice standards are uneven between and within countries. AAPM, and a considerable number of its members, have supported, participated and contributed to a variety of educational and professional activities carried out by local and regional organizations. Several of these involved collaboration with international organizations such as IAEA and IOMP. A smaller number of projects involved individual commitments for longer durations. These provide an

insight into ways of enhancing and further developing regional capabilities.

Conclusions: There is measurable growth in the regional capabilities to educate and train Medical Physicists in Radiation Oncology, with a slower pace of growth in Imaging. The introduction of new technologies and methods requires this pace to be accelerated in order to meet current and projected needs. The AAPM has significant human and organizational resources to offer and can make a meaningful contribution to expand this local capacity. There is a need to leverage its resources by increased collaboration and coordination with international organizations and to explore funding mechanisms from companies to augment these resources. Longer term projects and partnerships need to be developed.

Learning Objectives

- 1) Understand the current needs for Education and Training in Latin America
- 2) Assess the resources that the AAPM and its members can offer to support the regional programs
- 3) Discuss ways for leveraging the AAPM resources for a sustained and effective effort to meet the regional needs