

To: The Secretary, Joint Standing Committee on Treaties

Reflection on interactions with Regional Cooperative Agreement (RCA) for Asia and Pacific region

In addition to my role as a principal medical physicist, at the Canberra Hospital over the past 5 years, I have worked in collaboration with the RCA as the lead country coordinator (LCC) on a medical physics regional project. Previous to this I was on staff with the IAEA as a medical physicist including work on RCA regional development projects. My current work at the hospital is in medical imaging involving radiation equipment performance and safety, including mammography, CT, angiography etc.

The project I am leading is engaged in the education and training of medical physicists (in radiation therapy (RT) for cancer treatment, nuclear medicine (NM) and diagnostic radiology (DR)) to government parties in the region. While other IAEA projects give knowledge transfer to developing countries through short and medium term training schemes including placement in overseas institutions, this project aims give the needed clinical training over a 2 to 3 year period in the country itself, through a clinical training syllabus (one for each specialty) supported by identified resources, external coordination and periodic training review events and assessment. To date the countries that have undertaken piloting of this program include, Thailand (RT, DR, NM), Philippines (RT, DR), Malaysia (RT, DR), Bangladesh (NM) with a total of about 80 medical physicists passing the training. Such a training scheme, where the graduating residents have been examined to an agreed standard by international examiners (mainly Australian), creates a nucleus of local experts to train upcoming physicists locally without external assistance. To date Thailand, Philippines and Bangladesh have introduced follow up cohorts for clinical training.

The work of drafting the RCA clinical training program was undertaken internationally, however was led by Australian medical physicists, utilising existing (RT) training material in Australia at that time. Critical new ideas introduced into the RCA guide, have now been adopted into current Australian training guidelines, as well as the local adoption / adaption of new guides in nuclear medicine and diagnostic radiology. Indeed India has adopted and adapted the training guidelines to form clinical training in India (RT), which currently is the largest in the world with over 80 centres functioning currently.

The current RCA project involves the development of an e-learning platform with the vision to make resources and administration of clinical training more readily available and to aid communication. In this current project Indonesia, India, Singapore, Bangladesh, Philippines and Thailand are currently trialling the electronic platform. It is hoped that such a platform can assist in reaching countries such as Cambodia, Nepal, Laos for example – which currently have fledgling medical physics programs.

From a practical perspective to the region, RCA regional projects have been involved in the strengthening of post graduate education courses in a number of government parties, including Indonesia, Malaysia, Philippines, Pakistan and Sri Lanka, a number including direct review or advice from Australian academics in their field. A good example of impact can be found with Indonesia where the standard and growth of MSc medical physics training has improved remarkably in the last 12 years. While the main credit must go to the local participants and their vision and energy, they are able to utilise assistance, often from local Australian medical physicists and academics, who have reviewed courses, run hands on training programs, advised on standards and entered into collaborative work. The work of the RCA, along with some professional and community initiatives, demonstrate to the region that Australia has a capacity and a will to assist developing countries, particularly in the areas of Human Health.

I am aware that the project I am involved in is but one of many successful RCA projects – of these others perhaps the DATOL program for nuclear medicine is one I have otherwise heard most about. Certainly this respected project has had a very far reach in the region and beyond.

Donald McLean, PhD

Principal Medical Physics Specialist - Radiology Medical Physics and Radiation Engineering



Clinical Support Services

Care Excellence Collaboration Integrity