Introduction
Since 2012, cancer has become a leading cause of death in the Cuban Society. The demand for advanced technologies, in radiation oncology, to treat this disease requires qualified personnel to assure patient safety. Medical physics applies physics concepts to healthcare and provides the physical basis for understanding and implementing new technologies. Instilling an adequate academic medical physics program can ensure the continuous supply of Clinically Qualified Medical Physicists (CQMP) in Cuba. To achieve that goal, a comprehensive education program for CQMP is being designed in the framework of a national and an IAEA’s technical cooperation projects. One of the main challenges will be the implementation of supervised, competence based clinical training programs for medical physicists in Radiation Oncology. The future of cancer treatment and the health of the Cuban population could benefit greatly through a partnership with the University of Pennsylvania (UPenn).

Methods
There is a need to reformulate the medical physics program in Cuba to address the main gaps in the current curriculum. UPenn has a long history of training graduate students and residents in Medical Physics and can serve as an external advisory committee to partner with the University of Pennsylvania to:
1. Create a Methodology for training CQMP.
2. Create and implement a Masters in Medical Physics.
3. Increase the number of PhDs in the field of Medical Physics.
4. Regularized process FMCC Professional Certification by the health authorities.
5. Establish a continuous education program in Medical Physics which extends to therapists, dosimetrists and oncologists.

Cancer incidence in Cuba

Results
Recently the IAEA has approved the project design: "Comprehensive quality improvement in the diagnosis and treatment of cancer patients incorporating advanced technology in radiotherapy and nuclear medicine", coded by the IAEA as CUB2014004. This project has 3 main outputs:
1. Staff trained in advanced techniques of radiotherapy to establish protocols.
3. Improved academic training for CQMP

This partnership can serve as a platform for bi-directional learning where health providers can exchange best practices and innovations as well as develop the skills necessary to help each other succeed in the rapidly advancing world of cancer treatment.

Conclusion
While we are just in the beginning stage of discussing a partnership, we believe there is great potential for success between all parties. The program could potentially serve as a hub for developing countries to receive clinical medical physics training through the Cuban International Cooperation in medical physics; by partnering with Escuela Latinoamericana de Medicina (ELAM), physicists can be placed in underserved areas around the world.

Cuban International Cooperation in Medical Physics

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