

RAYS OF HOPE ANCHOR CENTRES

Examples of possible support from the IAEA to the Anchor Centre

I. Technology support and resource mobilization

- I. Education: multimedia room, cameras, streaming facilities, access to online training packages, such as contouring.
- II. Enablers: mannequins, dummy workstations, etc.
- III. Upgrading the local IT networking facilities and workstations.

II. Quality assurance and training support

- I. Identification of needs.
- II. Improvement plans and expertise.
- III. Implementation and review of existing Quality Management System.
- IV. Training infrastructure to train the trainers in the region.

III. Research and innovation

- I. Good clinical practice training to support clinical research.
- II. Establishment of clinical research support.
- III. Institutional Review Board training.
- IV. Availability of research coordinator.
- V. Database infrastructure support.
- VI. Pilot funding.
- VII. Support for clinical research office.

IV. Equipment

- I. Educational tools: residency software support.
- II. Training tools: multimodality imaging workstations, healthcare IT such as contouring software, dummies for diagnostic imaging and radiotherapy training, virtual reality suite, such as Virtual Environment Radiotherapy Trainer (VERT) or customized.
- III. Equipment, such as brachytherapy/LINAC, Quality Control toolkits, dosimetry equipment and medical imaging equipment for training.

V. Benefits for RoH Anchor Centres

- I. Enhanced reputation at national and regional level.
- II. Continuous professional development for staff.
- III. Improvement in education, training and research infrastructure.

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Examples of Regional Responsibilities of Anchor Centres

Activities (by the Anchor Centre / Collaborating Centre) to act as a capacity building and knowledge hub for the respective region	Outputs (deliverables)
<p>Train fellows/residents recommended by the IAEA, in fields such as:</p> <ul style="list-style-type: none"> • Medical physics residency programme (minimum 2 years) • Radiology residency programme (minimum 3 years, average 3-5) • Nuclear medicine residency programme (minimum 3 years, average 3-5) • Radiation oncology residency programme (4 years) • Fellowships in oncologic imaging (1 year), including breast imaging, interventional radiology, paediatric cancer imaging, or others. (Shorter duration radiology subspecialty trainings / clinical rotations may be considered on a case-by-case basis.) • Radiation Oncology fellowship programmes (1 year) • Radiation Oncology short term training (1 to 6 months) • Other programmes for the requisite multidisciplinary team of professionals will be tailored to the Member State's needs (radiographers, nurses, nuclear medicine technologists, and other medical specialists) 	<p>✓ Training provided, and fellows/residents trained in relevant areas with practical work experiences in radiation oncology, radiology, nuclear medicine, and medical physics.</p>
<p>Host inter-regional, regional or sub-regional training events in radiation oncology, radiology, nuclear medicine, and medical physics supported by the IAEA (training events to be decided in consultation with relevant IAEA departments).</p>	<p>✓ Representatives from IAEA Member States trained in workshops hosted by the centre.</p>
<p>Provide experts in radiation oncology, radiology, nuclear medicine, and medical physics to the IAEA for its regular budget (consultancy & technical meetings) as well as technical cooperation activities (field expert missions, lectures in training courses, etc.) pertaining to the target countries and region.</p>	<p>✓ Relevant expertise provided to IAEA Member States through the participation of experts in IAEA-supported events. ✓ Training provided in radiation oncology, radiology, nuclear medicine, and medical physics in IAEA-supported training events.</p>
<p>Support IAEA Coordinated Research Projects (CRPs) by designing, implementing and following up on research activities. Activities under a CRP will be conducted based on respective research contracts or agreements with the IAEA.</p>	<p>✓ Training in the design and implementation of clinical trials provided to IAEA Member States. A special focus of this research can be translational or implementation science: how to successfully implement evidence-based medical imaging and radiation therapy infrastructure, in a phased resource-stratified approach, towards maximizing measurable improvements in outcomes of large target patient populations. The goal is to empower the country's local capacity, with lasting impact, through rational, phased, strategic, data-driven decisions.</p>
<p>Support IAEA activities in the development and implementation of best practice and evidence-based guidelines for low- and middle-income countries (LMICs) in:</p> <ol style="list-style-type: none"> 1. radiation oncology 2. radiology and nuclear medicine 3. medical physics 	<p>✓ Published IAEA reports and peer-reviewed papers on best practice and evidence-based guidelines in radiation oncology, radiology, nuclear medicine, and medical physics.</p>
<p>Support the production of specific training and e-learning material in radiation oncology, radiology, nuclear medicine and medical physics for the Anchor Centres, the target countries, and the IAEA's Human Health Campus (list and contents of training material to be agreed with relevant IAEA sections).</p>	<p>✓ Published training materials to support local capacity building in radiation oncology, radiology, nuclear medicine and medical physics.</p>
<p>Support IAEA activities in quality improvement in radiation oncology, medical imaging and medical physics by promoting and conducting local Quality Assurance/Quality Control audits, or by promoting the implementation of relevant IAEA methodologies:</p> <ul style="list-style-type: none"> • QUATRO (radiation oncology) • QUANUM (nuclear medicine), and/or • QUAADRIL (radiology) missions in the region. 	
<p>Participate in regular consultancy meetings of the IAEA Rays of Hope Anchor Centres that will convene representatives from various world regions, to learn from one another and best synergize efforts, in collaboration with relevant IAEA sections.</p>	
<p>Support IAEA for the update of radiotherapy data for the DIRAC database, and for the update of nuclear medicine and radiology data, for databases such as IMAGINE and NUMDAB.</p>	