RTTs: Vision for the Future

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RTTs: Global homogeneity?

- Education
- Role
- Opportunities
- Perception of the RTT in the MDT
From Western Europe....
To Bangladesh.....
To Eastern Europe......
To Singapore...
Vision 1: Improved UG education

- The vast majority of countries will incorporate the principles of RTT education, from the IAEA core curriculum for RTT education or from the ESTRO Core Curriculum for RTTs, as appropriate.
- Realistic Time Frame: Disparity from region to region and country to country but within 10-15 years.
- RTTs with sound education at undergraduate level can be viewed as equal members of the multidisciplinary team (MDT).
Education is key

Competencies in radiation oncology: A new approach for education and training of professionals for Radiotherapy and Oncology in Europe

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The IAEA Curriculum

THE CORE CURRICULUM - Defining the needs of an education programme for RTTs

• The clinical component must be significant but transcend skills training in the basic sense.

• Graduates need to be able to think and understand what they are doing while they are doing it.

• To be able to apply their knowledge in the clinical setting, implement or suggest change where appropriate and thereby become reflective practitioners.
Clinical practice must be grounded in understanding and not based on observed behaviour.

Students should be exposed to a wide range of clinical practices but must gain experience and be competent in the core elements essential to radiation therapy delivery.

Practitioners need both the capability to obtain and interpret research-based evidence in general [Eraut 2003]
The IAEA Curriculum

• THE CORE CURRICULUM - Defining the needs of an education programme for RTTs
  • The RTT will need:
    • professionalism and communication skills
    • computer skills
    • problem solving ability and a commitment to continuing professional development.
  • RTTs should also be active (together with other health professionals) in educating the public on cancer prevention and promoting a healthy lifestyle).
The IAEA Curriculum

• DEVELOPING A PROGRAMME FROM THE CORE CURRICULUM - The current role of the RTT
  • Do they have a level of autonomy?
  • Do they have a defined role within the structure and a clear definition of the inter-relationship with the other disciplines?
  • Can they act on their own initiative?
  • Are they responsible for their own practice?
  • Are the roles and responsibilities clearly defined?
  • Is their education level sufficient to enable them to carry out their role?
RTTS AS PROFESSIONALS IN THE MDT
Professional RTT Practice

- Being able
  - to distinguish between good and bad practice
  - to always only accept best practice
- Being competent
  - to meet new challenges
  - adapt to changes in the environment
Professional Education is key

- With an appropriate education programme the RTT is in a position to identify and query possible errors creating a system of co-operation which will reduce or eliminate systematic and random errors.
Professional Education

- It is not enough to simply carry out instructions
- she\he must question, comment and suggest improvements
- thereby participate in the management of the patients as an autonomous team member
Professional Education

- The RTT must be educated rather than trained.
- As part of the education process, learn to be critical in a constructive way of her/his professional practice.
The RTT: An Autonomous Professional

- An autonomous RTT implies
  - performing as a member of the radiation oncology team
  - with freedom to question, comment or suggest on any aspect of the patient
  - not to carry out tasks as requested, afraid to intervene or lacking the confidence to query a decision
Vision 2: 
Role of RTT in personalised care

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ESTRO Vision 2012

ESTRO 2012 Strategy Meeting: Vision for Radiation Oncology

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European Society for Radiotherapy and Oncology (ESTRO), Brussels, Belgium
ESTRO Vision 2020

• ‘Every cancer patient in Europe will have access to state of the art radiation therapy, as part of a multidisciplinary approach where treatment is individualised for the specific patient’s cancer, taking account of the patient’s personal circumstances’
MEETING THE CHALLENGES: ‘STATE OF THE ART’ RADIOTHERAPY
ESTRO Vision 2020

• ‘Every cancer patient in Europe will have access to state of the art radiation therapy, as part of a multidisciplinary approach where treatment is individualised for the specific patient’s cancer, taking account of the patient’s personal circumstances’
State of the Art Radiotherapy: Challenges

- ‘State of the Art’ Radiotherapy
  - Technological Advances
  - Image Guided Radiation Therapy
  - Adaptive Radiation Therapy

Necessitates a shift in skill set and responsibility
- Plan Evaluation
- Radiographic Anatomy
- Increased:
  - Decision-making
  - Problem-solving
  - Critical analysis
Further Education

Vision 1.3:

‘Access to continuing medical education (CME) and continuing professional and personal development (CPPD) will empower both healthcare professionals and patients to fully participate in all decisions regarding treatment’.
Further Education

- Formal Postgraduate Education
- Structured Departmental Education Programmes
- ESTRO School Activities
- CPD Activities
  - Journal Clubs
  - Writing Groups
  - Lunchtime Lectures
  - Case Analysis
  - Critical Incident Analysis
Challenges on Further Education

Resources

"Maybe I haven't made myself clear enough. I really don't want to be disturbed today."
ESTRO Vision 2020

• ‘Every cancer patient in Europe will have access to state of the art radiation therapy, as part of a multidisciplinary approach where treatment is individualised for the specific patient’s cancer, taking account of the patient’s personal circumstances’
Multidisciplinary Approach

ESTRO Vision: Radiation Oncology and Patient Care

Point 4: ‘In recognition of the multidisciplinary nature of radiation oncology, the patient will significantly benefit from the additional expert input from other members of the radiation oncology multidisciplinary team and allied healthcare disciplines’

Vision 1.1. (b): ‘ESTRO will support the need for a unique range of healthcare professionals, working as an interdisciplinary team, to be centrally involved in the delivery of all aspects of clinical, physical, technical and biological aspects of radiation therapy’.
Multidisciplinary Approach: Challenges

- Perception of the profession of RTT within the MDT
  - Varies within Western Europe
    - Education Level
    - Professionalism
    - ‘Territorial Issues’
Multidisciplinary Approach: Challenges

RTTs in extended, advanced or specialist roles

• Educational background is key
• Opportunities
  • IGRT
  • Volume and OAR delineation
  • Treatment Planning
  • ART
• Patient Review
• Research
• Quality Management
• Risk Management
• Management

• Responsibility
• Respect
• Remuneration
ESTRO Vision 2020

• ‘Every cancer patient in Europe will have access to state of the art radiation therapy, as part of a multidisciplinary approach where treatment is individualised for the specific patient’s cancer, taking account of the patient’s personal circumstances’
Individualised Treatment

Vision 1.1: ‘Integrating new clinical and preclinical evidence from biology, molecular/functional imaging and the use of novel systemic agents together with the delivery of high precision radiation therapy in a safety aware environment’
Individualised Treatment: Challenges

Our focus cannot solely be on technology to provide individualised care

_Biological Developments_

- Systemic Agents
- Interaction with Radiotherapy
- Effects on dose volume constraints
- Management of Toxicity
- Special Groups: Paediatric, Geriatric

Education is key
Individualised Treatment: Challenges

Molecular/Functional Imaging

- Influence on pre-treatment and delineation
- Influence on treatment planning and dose painting
- Influence on treatment delivery:
  - How does biological information inform a decision to re-plan
  - How is this incorporated into geometric and volumetric optimisation?

Education is key
Individualised Treatment: Challenges

RTTs work in a high-risk environment

- Incident and Near Miss Reporting
- Incident and Near Miss Analysis
- Quality Management System
- Clinical Audit
- Prospective Risk Assessment

Education, Education, Education
ESTRO Vision 2020

• ‘Every cancer patient in Europe will have access to state of the art radiation therapy, as part of a multidisciplinary approach where treatment is individualised for the specific patient’s cancer, taking account of the patient’s personal circumstances’
Patient Welfare

Our focus cannot solely be on technology...
Patient Welfare: Challenges

• Providing information and support in an appropriate manner
  • Health Literacy
  • Dedicated Time and Space
  • RTT Role

ESTRO Core Curriculum:
• “Able to demonstrate a sensitive and caring attitude to patients”
• “Able to demonstrate professional behaviour”
Meeting the Challenge

Education

• With appropriate education the challenges posed by the ESTRO Vision can be met
  • Benchmarking Document and Core Curriculum: ESTRO RTT Committee
  • Formal Educational Courses
  • ESTRO School
  • Departmental and Personal Activities
Meeting the Challenge

Role of RTT in Multidisciplinary Team

• Raising our professionalism
  • Definition of the profile of RTTs (ESTRO RTT Committee)
• Changing Perceptions
• Examples of outstanding practice
Meeting the Challenge

Patient-Centred Care