



Catalan Clinical Audit  
Network for Quality Improvement  
in Radiotherapy

# Role of Radiation Oncologist

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Barcelona / 10-13 June 2023

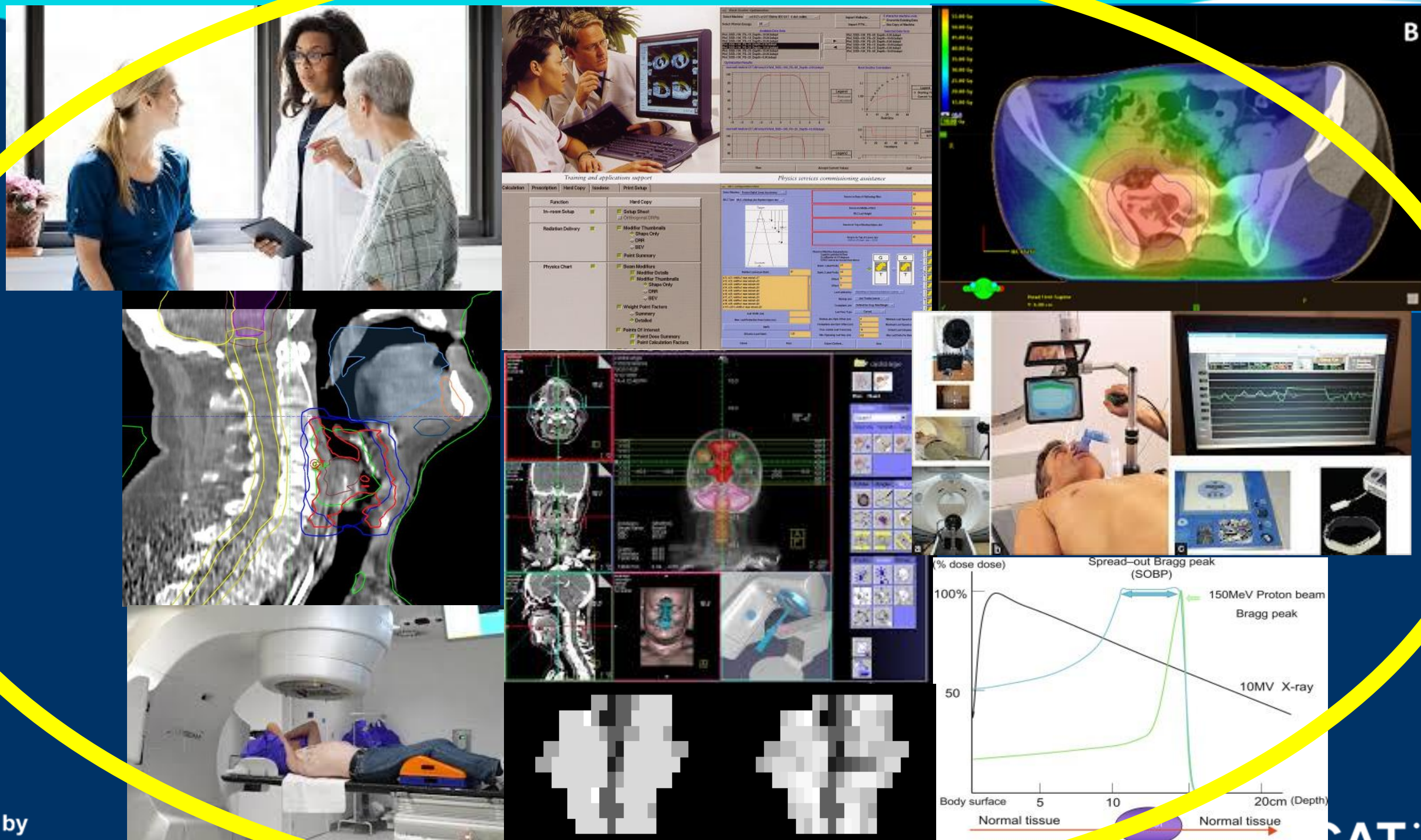


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# Comprehensive RT audit







# Comprehensive RT audit

A peer-review of a  
radiotherapy service by a  
team of three experts in RT

radiation oncologist

radiotherapy physicist

radiation therapy technologist





# Responsibility of the Radiation Oncologist

- No procedure is justified without a prescription
- The medical practitioner has the obligation of **ensuring overall protection and safety** in the prescription and delivery of medical exposure
- This obviously includes the patient, but also staff and public





# Radiation oncologists activities are centered on overall patient care

## HOSPITAL

Referral

Access to literature

Documented procedures

Planning



Follow up

Diagnostics

Chart rounds

**PROFESIONAL  
ORGANIZATIONS**

**HEALTH CARE  
SYSTEM**

**OTHER MEDICAL  
PROFESSIONALS**

**CAT·ClnART**





# Components of RT audit

Request for the audit

Preparation for the audit

The site visit



## Entrance briefing

- I Assessment of Infrastructure
- II Patient related procedures
- III Equipment related procedures
- IV Assessment of training programmes



## Exit briefing

Report





# PREPARATION phase

- Participation in the preparation of the audit program
- If appointed as team leader: communication with department representative(s) & IAEA staff
- **Collecting information about the department to be audited**





# PREPARATION phase



## Quality Assurance Team for Radiation Oncology (QUATRO)

Workload (patient throughput on radiotherapy equipment, statistics)

Contact information	
Name of the Hospital	
Name of the Department	
Hospital web page	
Address	Street
	PO Box
	City
	ZIP
	County/State
Country	...
Main contact	
E-mail address	
Key staff:	Radiation Oncologist
	Medical Physicist
	Radiotherapy Technologist
	Radiation Protection specialist
Type of institution	Other

Patient demographic		
1.1 New cancer cases		
1.2 New patients undergoing RT		
1.3 New courses of treatment in RT:		
1.4 Types of cancer (primary sites and number)		
Primary site	Number	Most frequent stage
1.5 Source of information, e.g. cancer registry		

## CHECKLISTS 1 → 41

### CHECKLIST 1. Patient Assessment

Items to be reviewed by the auditor	YES	In progress	NO	N/A
Does the hospital possess an electronic medical record (EMR) system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If yes, is the radiotherapy department integrated within this system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If no, does the radiotherapy department have access to all relevant clinical data/records?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is there an ease of access to patient imaging data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the pathology report included in all patients' files?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Are patients staged?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall Score	Compliant	Partially compliant	Non-compliant
Is the department's workload in accordance with current recommendations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commendations/Recommendations			

- Contact information
- Patient demographic
- Structure of the department
  - personnel
  - equipment
  - premises
  - departmental operation

- Workload
  - teletherapy
  - brachytherapy





# SITE VISIT

- I The oncologist as a member of audit team**
- II Assessment of Infrastructure**
- III Patient related procedures**
- IV Equipment related procedures**
- V Assessment of training programmes & research**





# I. The oncologist as a member of audit team

- Typically seen as a very important member of the team by the host institution
- Liaises with representatives of the health system in the host country
- Liaises with other medical professionals in the institution
- Specific tasks
- Can advise on best clinical practice





# I. The oncologist as a member of audit team

## TASKS:

- Identification of the patient
- Diagnosis & staging
- Indications & decision to treat
- Treatment preparation & instruction for planning
- Prescription & planning
- From planning to delivery
- Treatment delivery:  
teletherapy
- Deviations in radiotherapy  
administration
- ...



## TOOLS:

Complete **tour of the facility**

**Observation** of practical  
implementation of working  
procedures

**Review & evaluation of:**

- procedures
- all relevant documentation
- treatment records

**Staff interviews**

(communication with staff)





# I. The oncologist as a member of audit team

## Unique tasks for the oncologist:

### Access to

- Patient areas
- Consulting rooms/examination offices
- Wards
- Operating theatres
- Diagnostic procedures/depts.

### Attendance in

- Multidisciplinary clinics
- Chart rounds

### Review of

- Referral patterns
- Case mix
- Diagnostics
- Indications for RT
- Contouring & dose prescription
- Clinical protocols
- Privacy issues
- Communication
- FUP







## II. Assessment of infrastructure

**Infrastructure includes not just technical aspects but:**

- Patient areas
- Consulting rooms / examination offices
- Wards
- Privacy issues

**Other important considerations:**

- Operating theatres
- Brachytherapy
- Pathology
- Access to diagnostic procedures





## III. Patient related procedures

- Assessed largely using **CHECKLISTS** & review of **PATIENTS CHARTS** (checklists will be discussed in more depth in later lecture)

Items to be reviewed by the auditor	YES	In progress	NO	N/A
Integration of the patient's radiotherapy treatment information with the hospital electronic medical record (EMR) system				
- Is patient specific and relevant radiotherapy information easily accessible by the rest of the institution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
- Does the radiotherapy department have access to all relevant patient clinical data/records?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Please comment				
Is there an ease of access to patient diagnostic imaging data?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is the pathology report included in all patients' files?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Overall Score	Compliant	Partially compliant	Non-compliant
Is patient assessment properly carried out by the radiotherapy department?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commendations/Recommendations			





## III. Patient related procedures

**Follows  
patient  
flow  
through  
the  
department**

- Unique identification of the patient
- Diagnosis & staging
- Indications & decision to treat
- Treatment preparation & instruction for planning
- Prescription & planning
- From planning to delivery
- Treatment delivery: teletherapy
- Deviations in radiotherapy administration
- Brachytherapy
- Treatment summary and follow-up
- Examples of typical treatments





## IV. Equipment related procedures

- Oncologist is the ultimate judge about functionality of equipment:

**Fit for Purpose?**







# V. Assessment of training programmes & research

**An essential part of workforce and quality audit**

**Relevance for:**

- Members of staff (qualifications, motivation, CPE)
- Other professionals (training of others in a centre of competence, train the trainer)
- Societies (accreditation)





# V. Assessment of training programmes & research



## Professional training (academic & clinical)

- teaching faculty & examining body
- accreditation for training
- resident/consultant ratio
- training duration
- training support (libraries, lectures, laboratories)
- registration of profession

## Continuous professional education

- support by the institution
- national policy

## Accreditation





# V. Assessment of training programmes & research

- Access to resources?

Library?

Colleagues?

Internet?

Conferences?





# V. Assessment of training programmes & research

- Not just a luxury
- Informs practice
- Provides motivation (and possibly even additional resources through companies, universities, research grants, ...)
- Helps with training





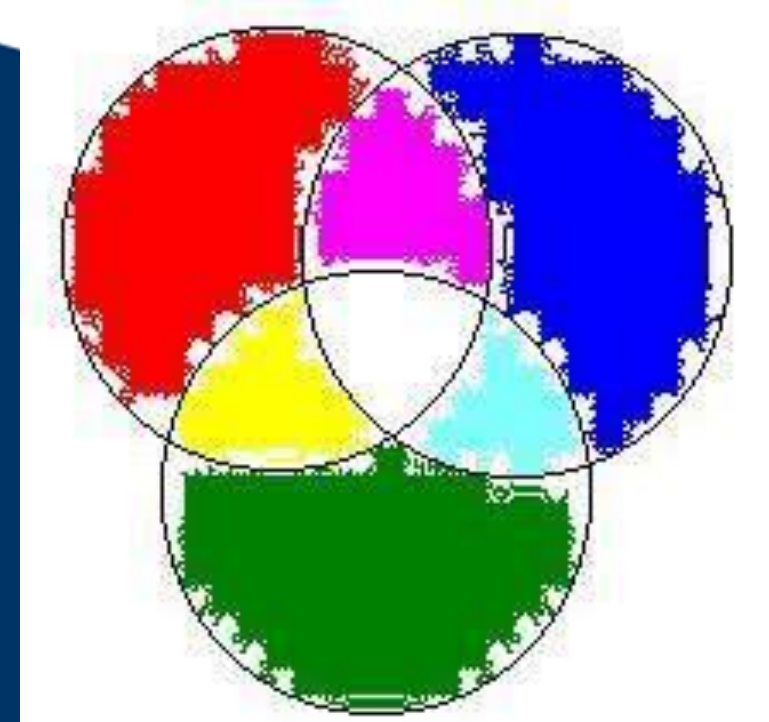


# EXIT BRIEFING

## Daily post-audit activities:

- review of daily activities
- exchange of observations, impressions
- preparation of exit briefing presentation with recommendations

**= Together with other team members!  
Exit report = CONSENSUS**





# FINAL REPORT

- Input of all three team members
- CONSENSUS report





# Conclusion

- All clinical practice starts with the oncologist



- centered to patient care

The **role of the RO** in the QUATRO team is defined by:

- the role of the RO in the RT process
- the agreement between the team members  
(who will do what)



- **an INDISPENSABLE member of the RT audit team**





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