



Catalan Clinical Audit  
Network for Quality Improvement  
in Radiotherapy

# Role of Radiation Oncologist

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Barcelona / 10-13 June 2023

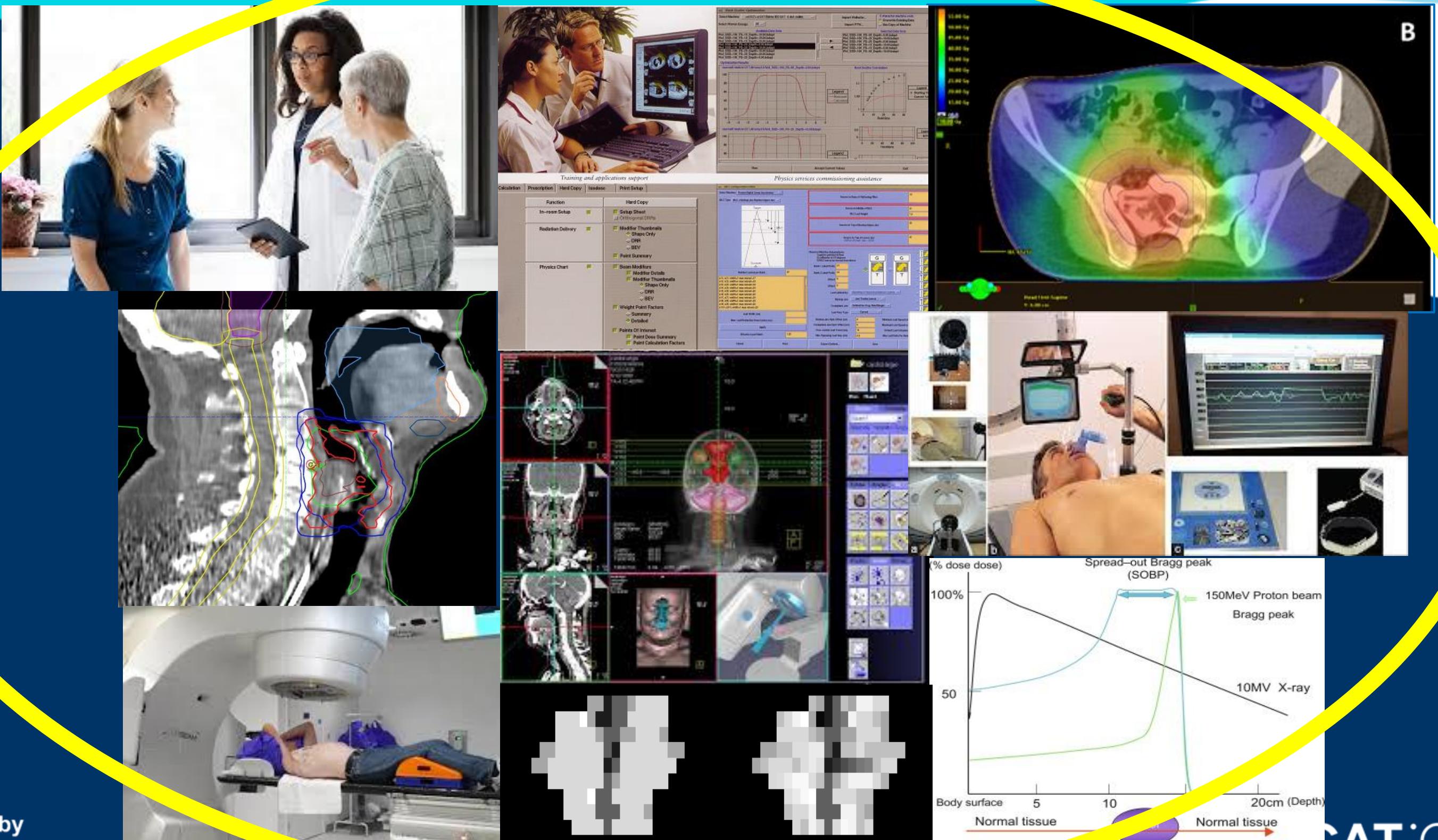


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# Comprehensive RT audit



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# 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

Access to literature

Documented procedures

Planning

Referral

Chart rounds



**PROFESSIONAL  
ORGANIZATIONS**

**HEALTH CARE  
SYSTEM**

**OTHER MEDICAL  
PROFESSIONALS**

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Follow up

Diagnostics





# 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)

<b>Contact information</b>	
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

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Quality Assurance Team for Radiation Oncology (QUATRO)

1

# Contact information

# Patient demographic

# Structure of the department

personnel  
equipment  
premises  
departmental operation

# Workload

# teletherapy brachytherapy

# 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			

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# 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

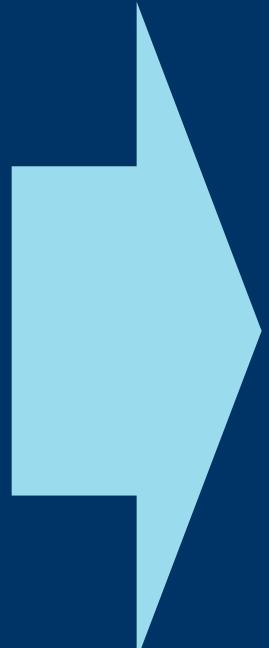




# I. The oncologist as a member of audit team

## **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 <ul style="list-style-type: none"><li>- Is patient specific and relevant radiotherapy information easily accessible by the rest of the institution?</li><li>- Does the radiotherapy department have access to all relevant patient clinical data/records?</li></ul>	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>	<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 <sup>9</sup> ?	<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



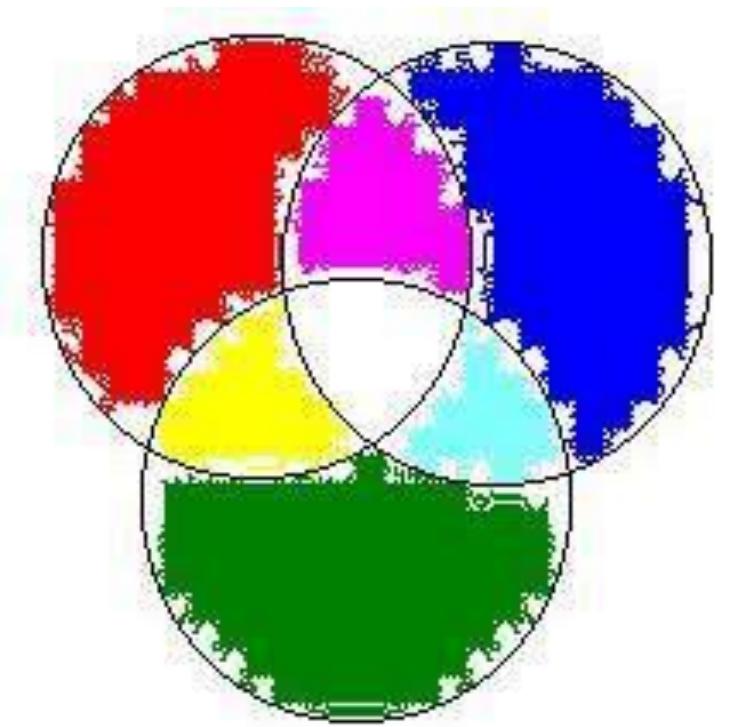


# EXIT BRIEFING

## 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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