

QuADRANT



QuADRANT Workshop

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# National Experience of Clinical Audit: The Belgian Experience **Radiotherapy**

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INSTITUT  
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CANCÉROLOGIE ET HÉMATOLOGIE  
Cliniques universitaires SAINT-LUC / UCL Bruxelles



Cliniques universitaires  
**SAINT-LUC**  
UCL BRUXELLES

# How?

- 2001: 97/43 directive is transposed into a Royal Decree
- 2010: Federal cancer plan 
  - Action 16 → Budget for quality improvement initiatives in radiotherapy
  - Condition: clinical audits needed to be developed
- Task attributed to the Belgian College for Physicians in Radiation Oncology:
  - Commission is composed of Radiation Oncologists (RO), appointed by the Ministry of Health and assisted by external experts such as medical physicists (MP) and RTTs.
  - Its mission is to promote the quality of radiotherapy on a national level.

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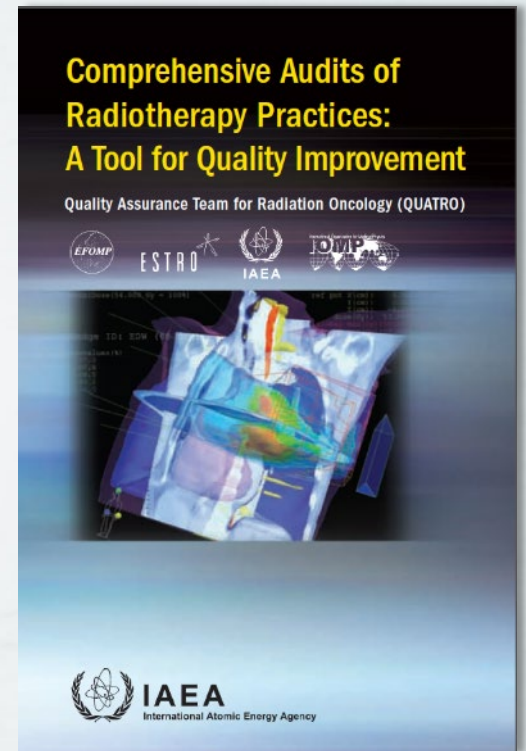
# How?

→ Decision to use the **IAEA “QUATRO methodology”**

→ multidisciplinary peer review clinical auditing process

**2010:**

- Selection of auditors (Dutch/French speaking; University vs non-university departments):
  - Radiation oncologists, medical physicists and RTTs
- 14 auditors
- Training of the auditors by QUATRO auditors



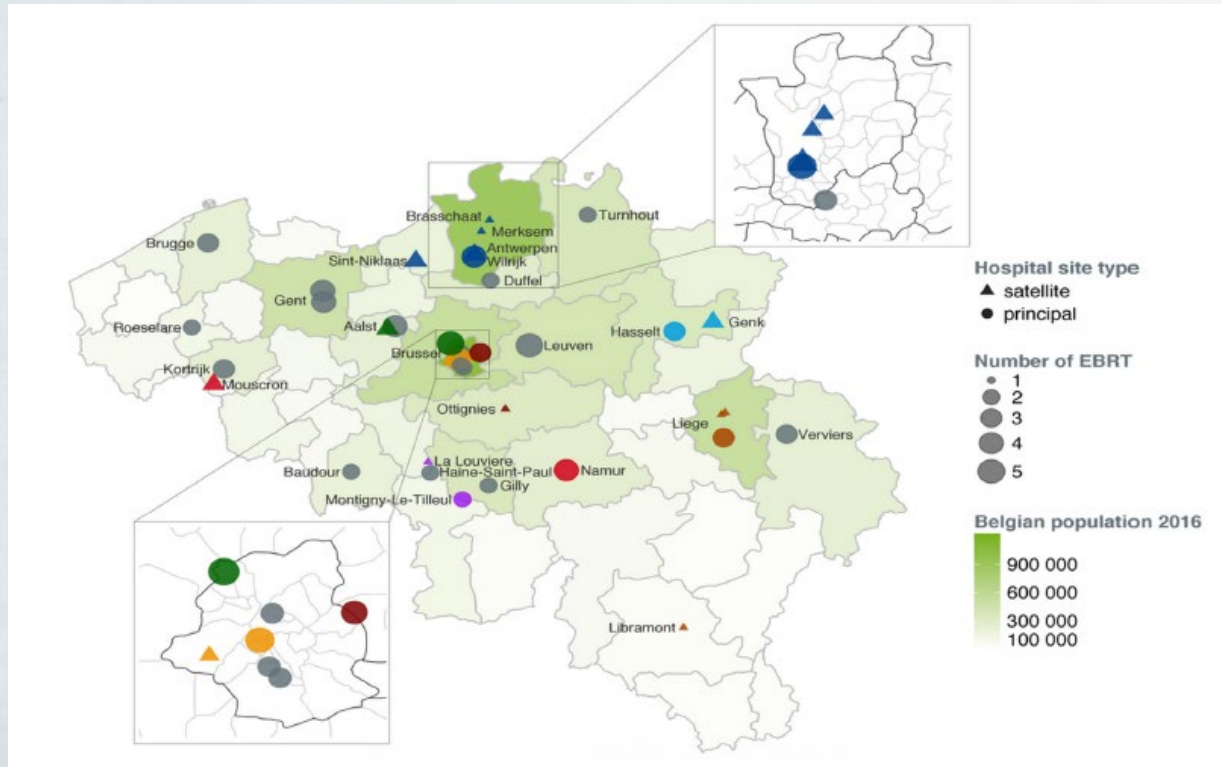
# Status of clinical audits in **radiotherapy** in Belgium

	Different phases		
	Self-assessment	Internal clinical audit	External clinical audit
Level	Department	Hospital	Nationwide
Who carries out?	Personnel of the department	Auditors from other departments within the hospital/institution	Auditors from other hospitals/institutions
Result	Self-assessment report	Internal audit report	External audit report

**Identify areas for improvement → Actions for improvement**

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# QUATRO audits in Belgium



**2011-2015:**

**QUATRO audits of the 25\* RT departments**

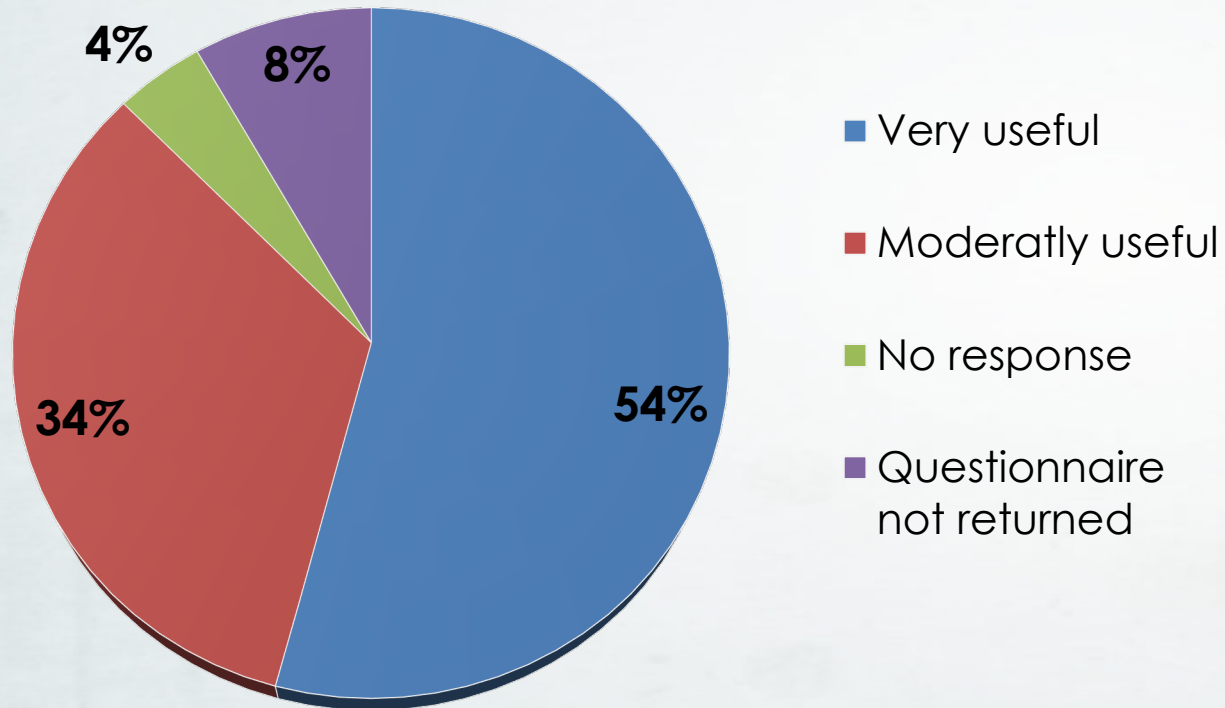
- 3 audit days/department
- No dosimetric audits
- Excluding brachytherapy

*\*Excluding satellite sites*



# How useful were the recommendations?

Departments' evaluation of the emitted recommendations



→ 42,7% of the recommendations were evaluated as being very relevant

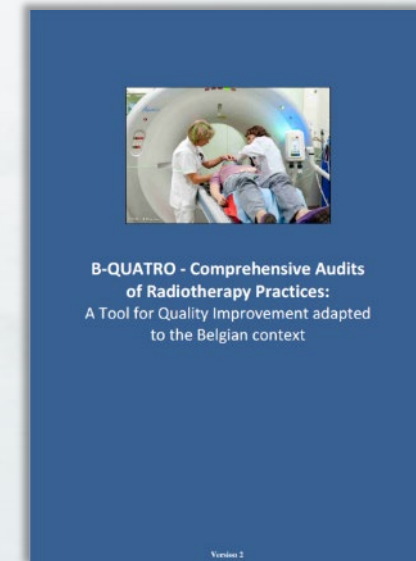
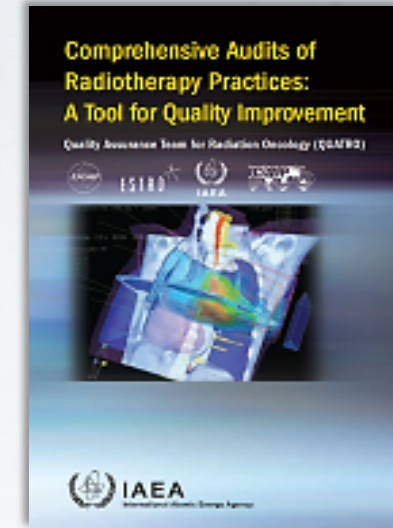
→ 23.5% of the recommendations were deemed to have an important impact, the majority having a moderate impact (30.6%)

# From QUATRO to B-QUATRO

- **QUATRO: Comprehensive peer review clinical audits (2011-2015)**

Belgian contextualization / new technologies/ QMS auditing/ checklist reformatting/ data analysis tools

- **B-QUATRO: Belgian - Comprehensive peer review clinical audits (2017-2021)**



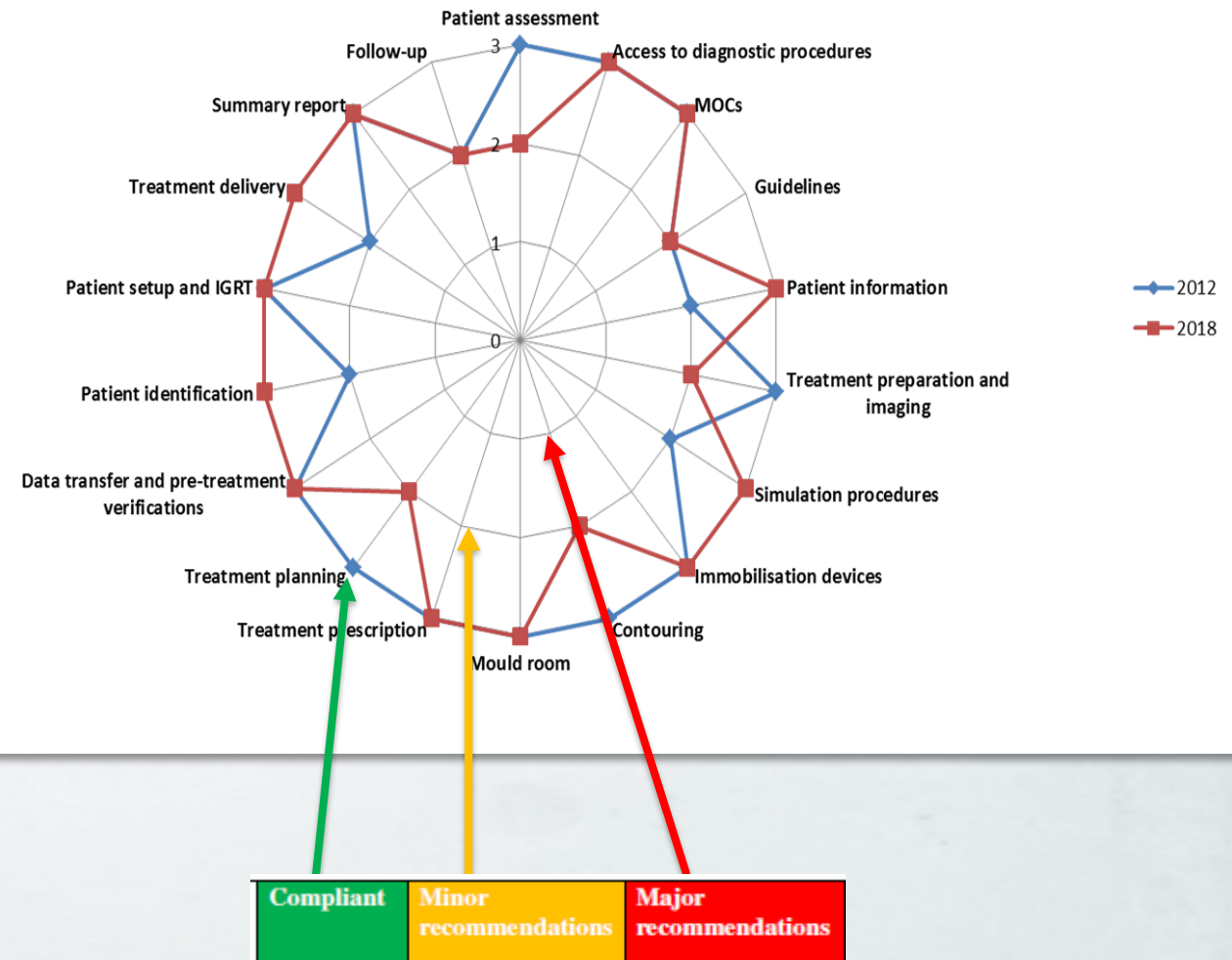
# B-QUATRO

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"/>

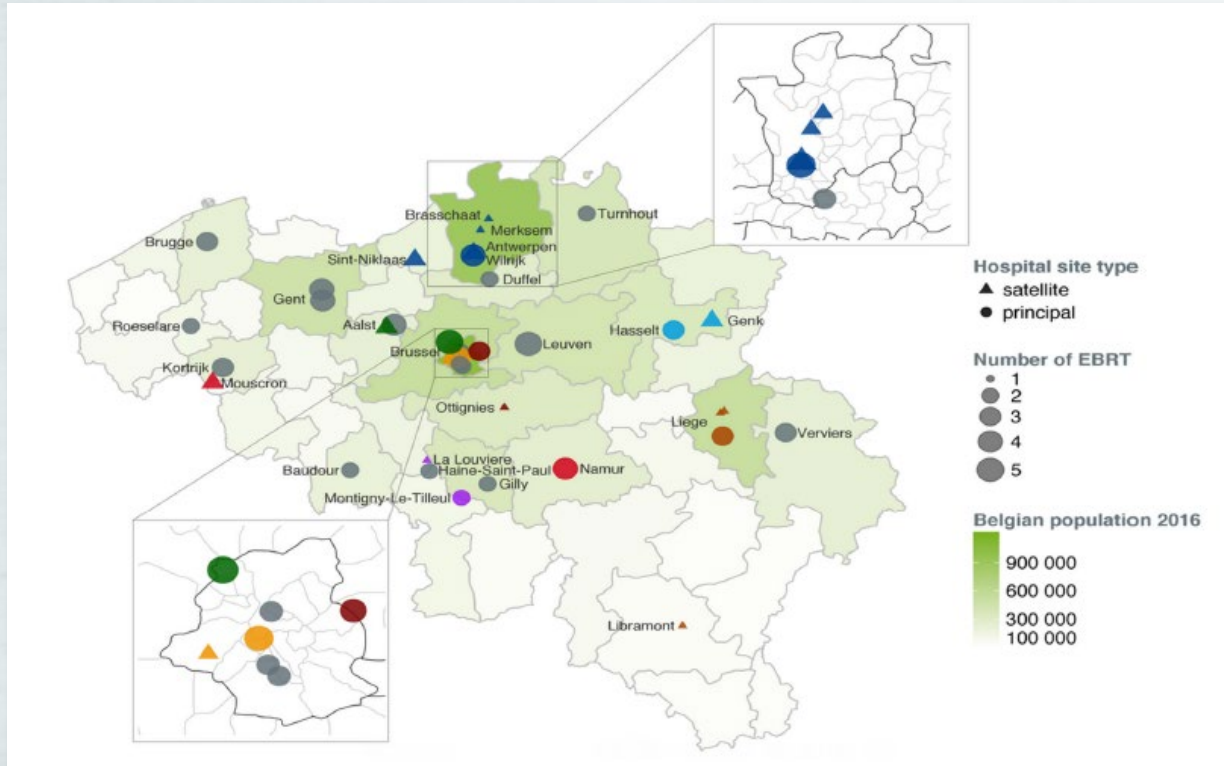
Overall Score	Compliant	Minor recommendations	Major recommendations
Is patient assessment properly carried out by the radiotherapy department?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Commendations/Recommendations			

## Patient related procedures





# B-QUATRO audits in Belgium



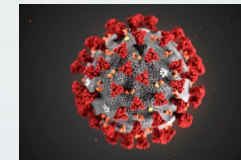
## 2017-2021: “second cycle of audits”

B-QUATRO audits of the 24 RT departments  
(+ 16 satellite sites)

- 2½- 3½ audit days/department
- No dosimetric audits
- Excluding brachytherapy
- Including quality managers

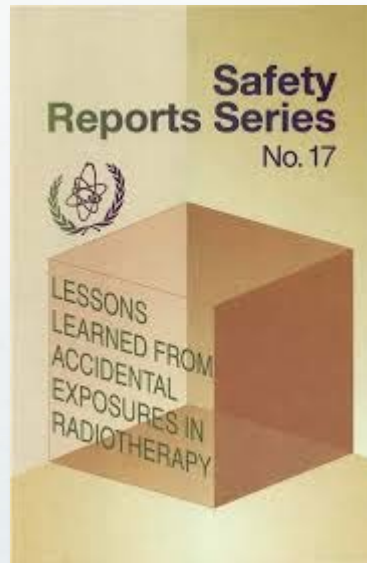


12 departments audited so far...



# Clinical audits in radiotherapy

Incentives <i>(what helped us?)</i>	
We had QUATRO document and the experts	
Quality and safety Culture in radiotherapy	
Limited number of RT departments	
Multidisciplinary equity and respect	



# Clinical audits in radiotherapy

Incentives <i>(what helped us?)</i>	Challenges <i>(what do we need to foresee?)</i>
We had QUATRO document and the experts	Maintaining the experts and the expertise
Quality and safety Culture in radiotherapy	Need for the regular update of the B-QUATRO manual
Limited number of RT departments	Hospital accreditations (ACI, JCI...)
Multidisciplinary equity and respect	
Budget (10,000 euros/year (reimbursement of costs incurred))	







Questions?

