Radiotherapy Board

UK Imaging and Oncology Congress 2019

Implementing Peer Review: What will be the impact of the new Radiotherapy Networks?

At the 2019 UK Imaging and Oncology Congress, held in Liverpool from 10-12 June, the Radiotherapy Board hosted a workshop entitled *Implementing Peer Review: What will be the impact of the new Radiotherapy Networks?* This session provided an opportunity for the radiotherapy community to review progress towards embedding peer review into routine clinical practice and to discuss the opportunities and challenges that come with the new Radiotherapy Networks. Below is a summary of the issues discussed.

1. What is the aim of the peer review process?

To ensure quality

- Quality assurance and quality control – generally the only part of the radiotherapy pathway that is not routinely independently checked. Why?
    - Lack of manpower and resources
    - Lack of appropriate skills
- Standardisation of volumes

To ensure safety / governance

- Improve patient safety and outcomes
- Provide assurances to patients
- Protection for the lone operator
- Fundamental sense check

To enhance training (new and ongoing Continuing Professional Development)

- Training
- Obtaining external opinion when there are queries in practice
- Constant monitoring of practice
- Mentoring and sharing expertise

Other points discussed:

- Peer review is already being done in many respects but not necessarily recorded – a planner will review target and OAR volumes prior to commencing planning and should discuss with the clinician if they have queries over the volumes. This “challenge” may be difficult for some and peer review could avoid putting that responsibility onto individual staff, doing this through a MDT approach instead.
- Peer review should be competency based – if an individual is competent to outline certain volumes then they should also be competent to peer review another regardless of job role.

2. Prospective or retrospective – what should be peer reviewed and when?

- Individualised volumes for IMRT/VMAT should be prospective – that is, before planning (this is detailed in the RCR guidance *Radiotherapy target volume definition and peer review*[i])
  - Head and neck
  - Pelvic nodes
  - Breast boosts
  - Lung
  - Upper GI
- Tumour sites where there are low case numbers should have volumes prospectively reviewed
- If prospective review cannot be achieved in all cases, then a retrospective review should be done within an agreed timeframe, ideally before treatment starts
- Prospective may be difficult to incorporate in pathway unless teams adopt flexible approach
- Simple prostate only cases could be retrospectively reviewed and potentially audited on a random basis – say 10% of cases. May only require minimal input from doctor
- Palliative cases – specific palliative MDT, palliative checklist.

Other points discussed:

- Peer review can be done as MDT approach (good learning opportunities for multi-disciplinary team) or on a one-to-one basis (good for individual mentoring).
- Should individuals who actually did the contours be present? (Yes)
- Should define what is being reviewed as part of the process – GTV / CTV, OARs, volume growing? (Where national, international or clinical trial guidelines exist, these should form the standard of care for comparison)
- Should audit the outcome of the process – how often were volumes changed as a result of peer review? (Yes, this should be reviewed at least annually if not quarterly in RT QA groups and fed back to the MDT)
- How do you define minor changes or major changes? (As per RCR document – minor change is considered unlikely to alter the clinical outcome for patient, but may improve toxicity profile. Major change suggests clinical outcome for patient (loco-regional cancer control, survival) could be affected).

3. Peer review and IR(ME)R – what needs to be considered?

- Entitlement?
- The Practitioner should agree to any changes in volume as they are ultimately justifying the exposure
- Should identify the individuals involved in target volume / OAR delineation and review – are they Operators and by definition should they be entitled by Trust A if they are employed by Trust B?
- Peer review processes and procedures should clearly document who is acting as the "appropriately trained and experienced" peer professional for particular tumour sites
- Clearly define whether one-to-one approach is used or MDT approach
- Any changes should be clearly documented with who was responsible for the change.

4. What are the barriers to implementing effective peer review and how can they be overcome?

- Time – could auto-segmentation packages help? Maybe in the future but not validated as yet. In future the time saved by using auto-segmentation could create time for peer review
- Some clinicians behaviours need to be challenged – team-based approaches will empower

radiographers and physicists to challenge when necessary and also help role development which will be vital moving forward to help mitigate the shortage of clinical oncologists
- IT infrastructure – Taunton / Torbay / Exeter have shown Skype for Business screen sharing is secure using an N3 network and enables real time review. No data remain on the guest PC after the link is broken – mitigates some issues with data sharing
- Potential issues with different planning systems – can be seen as educational opportunity – familiarity with different systems.

Other points discussed:

- There will be a Rad Magazine article on remote radiotherapy planning and practical pathway steps (September 2019 edition).

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[i] *Radiotherapy target volume definition and peer review – RCR guidance*. London: The Royal College of Radiologists, 2017. Ref: BFCO(17)2