Reporting on outcomes of regular medical physics journal club meetings

Scott Crowe
Journal club

• Journal clubs have participants discussing merits of publications
  • Assisting health practitioners to stay up-to-date with developments in their respective disciplines
  • Reported as valuable in clinical environments by numerous studies
  • Reviews on running effective reviews have been published - a consistent recommendation is assessment of performance

• The aim of this study was to evaluate the success of a departmental radiation oncology medical physics journal club, by seeking feedback from its participants, per published recommendations

Deenadayalan et al. (2008)
How to run an effective journal club: a systematic review.
Royal Brisbane model

- RBWH has weekly physics meetings (discussing, e.g., service delivery issues, ongoing service development, latest gossip)
- Prior to September 2015, one of these meetings each month nominally included a 30 minute presentation on a publication by a physicist (selected on a rotating schedule)
- This model was similar to journal club organised by radiation oncologists
- Some staff had previously attended journal clubs with this model in other centres; though frequency varied (e.g. ‘as-needed’ with new AAPM task group reports)
Royal Brisbane model

- This model was replaced with a monthly hour-long journal club in which a (sole) facilitator selected 3-5 recently published papers for discussion, distributed 2 weeks prior to the meeting (to allow pre-reading)
  - Priority was given to articles recommended by participants (uncommon), or authored by physicists known to staff (i.e. we had many Australian papers)
- Attendance was recorded, but not mandatory
  - 1-3 QUT students were usually invited (though often did not contribute)
  - Average of 10 people (of 12 staff members, and students) attended each month
- 10 participants were surveyed on the success of this format 20 months after its introduction (and results categorised as positive, neutral or negative)
### Journal club survey

- 15 questions covering attendance, reading habits and satisfaction.

<table>
<thead>
<tr>
<th>How many journal clubs have you attended?</th>
<th>Has journal club improved your reading habits? (i.e. # papers read)</th>
<th>Has the journal club had an impact on critical appraise skills?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Would you describe the forum as convivial?</td>
<td>Which format of journal club do you prefer? (past or current)</td>
<td>Are you interested in continuing without a major change to format?</td>
</tr>
<tr>
<td>Are you happy with how papers are identified for discussion?</td>
<td>Are you happy with a monthly format?</td>
<td>Do you think attendance should be mandatory?</td>
</tr>
<tr>
<td>Do you maintain written notes on any articles discussed?</td>
<td>Are you reporting your attendance, as CPD activity or TEAP learning?</td>
<td>Are you happy with attendance of local students?</td>
</tr>
<tr>
<td>Do you look forward to journal club?</td>
<td>Have you attended them in other departments?</td>
<td>Any other comments?</td>
</tr>
</tbody>
</table>
Royal Brisbane model

• Number of attendances of respondents varied from 6 (24%) to 20 (100%), with mean of 15 (75%)
• All felt the meeting was friendly
• Most (n=8) were happy with the monthly frequency
• Most (n=7) preferred the current format to the previous
• A majority (n=6) reported an increase in reading habits (exceptions included 2 clinical staff were currently enrolled in PhDs) and ability to critically appraise a manuscript
• A majority (n=6) were happy with identification of papers
Royal Brisbane model

• A majority reported (n=6) only looking forward to journal club *conditionally* - when they had time to read the papers or where papers were of particular interest to them
• (People frequently attended despite not having read the papers)
• Most (n=8) attendees weren’t reporting their attendance in terms of CPD or TEAP learning outcomes (n=8)
• Most (n=9) attendees didn’t keep any written notes
• Only 50% were interested in continuing without a major change
  • This surprised me, given attendance
• The most frequent complaint was the number of papers, with majority agreement that this prevented everyone from reading all of them
• This was identified as limiting both contributions to- and the depth of- discussion
• Other suggestions included having attendees suggest papers and selecting papers with greater local context
• Benefits of journal club were identified, suggesting it’s worthwhile
Revised Royal Brisbane model

• Since conducting the survey, some changes were made
• A volunteer is asked to select 1 paper to present on and lead discussion surrounding - we haven’t run short of volunteers so far
  • This has resulted in some productive meetings (e.g. conversation of TG100)
• The presentation allows a productive discussion even if attendees have not read that particular paper
• Each month 3 papers are discussed, and 1 editorial/debate
  • Facilitator has prioritised inclusion of short clinical papers, which are quicker to read and simpler to appraise
  • This is perhaps still too many sometimes (depending on clinical load)
Other departments

• PMCC (current): Once a month, attendance is encouraged but not everyone attends. Attendees present on a paper they’ve read.
• PMCC (historical): Each physicist was responsible for a journal (i.e. PMB, IJROBP), and updated group on recent publications.
• COBLH: Infrequent formal meetings with mandatory attendance, with 2-3 presentations (own choice); and frequent informal ad-hoc chats (when interesting papers are published).
• Genesis: No formal journal club, just informal ad-hoc discussion.
• CMN: Journal club held every 2 weeks, with desktop sharing to other centres. People present on things they’ve read.
• USyd: Comprehensive meetings held weekly, with focus on particular journal issues.
Other departments

• PAH: Monthly journal clubs, as part of formal CPD program; with one person presenting two papers. Attendance is mandatory.
• MNCCI: Monthly journal club, performed as part of CPD program.
• ICON: Fortnightly national meetings, with teleconferencing, delivered as part of a formal CPD program.
• Saiful Huq & Peter Dunscombe: Frequent journal clubs (e.g. monthly), with mandatory attendance for residents.

• What about yours?