Reviewer’s report

Title: Process Quality of Decision-Making in Multidisciplinary Cancer Team Meetings: A Structured Observational Study

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Reviewer: Alastair Munro

Reviewer's report:

This is a well-presented paper that adds usefully to literature on the quality of process in MDT meetings. The main limitation of the study is that the non-participant observers were from non-medical backgrounds and, as a result of this, could not fully assess the MDT process. In particular, they were unable to assess "point in treatment" and "pathological information". Somewhat paradoxically, they did seem to be confident in assessing the quality of the radiologists' input. It is a pity that they could not have recruited a disinterested clinician to the team: this might have allowed them to use an unmodified version of the MDT assessment tool.

There was evidence of a learning curve for the observers, which is just as well as some of the early measures of inter-rater agreement were worryingly poor.

The quantitative data (presented on p9 of the manuscript) is likely to be highly skewed and medians, interquartile ranges (or, better still, box and whisker plots) should be used rather than ranges and means.

The fact that in over one third of all cases no single recommendation could be made should be highlighted.

The implications of Table 4 (discussed on p11 of the text) are scarcely surprising: difficult decisions will be difficult, no matter what mechanism is employed to make them. The point they make on page 12 is a very good one: by ignoring psychosocial factors clinicians in MDTs are making the process easier for themselves - but almost certainly at the expense of the relevance of the decision to the management of the individual patient.
The authors mention patient-centred approaches and shared decision-making (p13) but then rather duck the issue. I agree that presenting more than one MDT recommendation to a patient involves them, to a very limited extent, in the process. But the fundamental problem is, as shown again in this paper, that the patient is not adequately represented in the original MDT discussion. Any decision that is restricted by what an MDT meeting has considered to be reasonable cannot be defined as fully shared: any sharing is strictly and asymmetrically limited. Patients are only told what we choose (in the light of a committee's deliberations) to tell them.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

Yes

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Yes

**Are the conclusions drawn adequately supported by the data shown?**
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Yes

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