Reviewer’s report

Title: Different patient subgroup, different ranking? Which quality indicators are important for patients choosing a hospital for hip- or knee arthroplasty?

Version: 1 Date: 22 May 2011

Reviewer: Jonathan Benn

Reviewer’s report:

Please note that in accordance with reviewer guidance, I have marked my comments as either Discretionary Revisions [DR]; Minor Essential Revisions [MER] or Major Compulsory Revisions [MCR].

1. Is the question posed by the authors well defined?

The topic area chosen for study is relevant to the health services research community and important to a range of stakeholder groups represented by interests in the design of public-facing health information systems, selection and development of quality of care indicators and discussions regarding informed patient choice.

The question posed by the authors is largely well-defined. There is however a potential conceptual issue with use of the term “importance” in relation to quality indicators, both in the title and elsewhere in the article. One interpretation of “importance” or “relevance” is validity of the metric as a quality indicator for care at a specific centre. The focus of study in this article is the “perceived (relative) importance” of a metric, i.e. the perception of salience or priority by a patient; a judgement subject to a range of subjective processes and biases. I suggest the phrase “perceived importance”/”perceived relevance” is used in the title, statement of research question and elsewhere in the article in place of the terms "importance" and "relevance" [MER].

2. Are the methods appropriate and well described?

The research methods and method of data collection are appropriate and clearly described. Statistical procedures are adequately described, though with a minimum of information reported concerning the parameters of the models fitted, effect sizes and details of the hierarchical linear model, such as extent and significant intra-class variance observed at level 2 [DR].

The exploratory nature of the study has led to multiple tests of significance which may increase the family-wise error rate. Some adjustment to alpha level is usually appropriate (e.g. bonferroni correction), or setting alpha at a more stringent .01 (rather than .05) level. This latter solution is perhaps most appropriate in this case [MER].

In order for the reader to understand the construct measured, it would be useful
to include further details concerning search and selection behaviour in the methods (e.g. what were the six sub-scales?). [MER]

3. Are the data sound?

The sampling process, data collection process and measures used are reasonably robust and supported by validating evidence.

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?

As mentioned above, some further details concerning the parameters of the fitted statistical models may be useful. [DR]

I think it would improve the flow of argument in the article (and perhaps adhere more with conventional report structure) for the discussion of strengths and limitations of the study to follow the discussion of the results. [DR]

5. Are the discussion and conclusions well balanced and adequately supported by the data?

In balance, the study raises important issues for the selection of appropriate quality indicators to support patient choice. It would be useful, however, to acknowledge in the discussion that there is an extent to which the "one size fits all" approach should be challenged and to the degree to which subjective perception of relative importance of different facets of health care quality by different patient sub-groups should drive selection of indicators for inclusion [MER]. Preference for various softer patient satisfaction indicators (e.g. conduct of doctors and nurses) may indicate differing expectations of care by different patient groups and therefore tailored data profiles for these experiential aspects may be warranted. The reliability and validity of other clinical quality indicators (such as post-op complications and wound infection rates) is more objectively testable through correlation with outcomes and hence it should be possible to determine a common model of high relevance predictors of quality of care and positive outcomes. Some indicators are more proximal to quality of care and clinical outcomes (e.g. complications) than others (e.g. number of orthopaedists) and again some objective assessment of which indicators should take priority in influencing patient choice may be possible. We should perhaps be cautious in concluding that significant inter-group variation in preferences should lead to unconstrained tailoring of available categories of information.

6. Are limitations of the work clearly stated?

Further consideration of the methodological limitations of this study is warranted in the discussion [MCP]. The work is presented as an exploratory analysis and as such is guided by broad research questions rather than specific hypotheses concerning predictor-response relationships. This is fine providing: 1) the usual limitations for this type of work are acknowledged in terms of potential for spurious relationships, 2) some statement urging caution in interpretation and generalisation of the results is made, and 3) the requirement for future
replication/extended study is specified.

The description of indicators offered to respondents is often very literal and does not make any attempt to inform patients of the relevance of the indicator to outcomes (e.g. no. of procedures; no. of orthopaedists). Perhaps patient ordering of preferences for the indicators would have been clearer if further indication of why each were relevant performance indicators was provided. [DR]

Inclusion of some further suggestions for productive future work would be useful [DR]. Data presentation format is an interesting variable, in addition to indicator selection. The introduction alludes to variation in user preferences for what are essentially a range of user interface/data presentation functions and these may be usefully explored through further study. Future work might usefully employ qualitative investigation to compare end-user experiences of interacting with the system and identify requirements for effective quality indicator presentation beyond simple metric selection. Qualitative insight into the reasons underlying patient prioritisation of different indicators would additionally be illuminating and future studies might productively use mixed methods study designs.

7. Do the authors clearly acknowledge any work upon which they are building, both published and unpublished?

Yes

8. Do the title and abstract accurately convey what has been found?

Yes

9. Is the writing acceptable?

Yes.

Not for publication: Please note type error in Discussion of the results; paragraph 4: "significantly" should read "significant".

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, and I have assessed the statistics in my report.

Declaration of competing interests:

I declare that I have no competing interests.