Reviewer's report

Title: Is theatre utilization a valid performance indicator for NHS operating theatres?

Version: 1 Date: 27 June 2007

Reviewer: Mark J Koelemay

Reviewer's report:

General

The authors have performed an original study to analyse the reliability of utilization rates as indicator for theatre performance. Several variables with possible influence on utilization were entered in a multivariate analysis. Size of operating list, overruns and late starts were independent predictors of utilization. The discussion is convincing in that utilization may not be an appropriate indicator for performance.

I have only a few comments as I think that this is a well written and methodologically sound paper.

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Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

In the discussion the authors state that bed capacity is probably the most influential factor on utilization. This is speculative and not supported by the data as this variable was not included in the analysis and is brought up as a proxy for operating list size. Did the authors have the opportunity to test this assumption? I realize that it is virtually impossible to retrieve data on bed capacity during a seven years period, but it would be interesting to find further support for this statement.

When utilization is not an appropriate indicator for performance, can the authors offer an alternative?

Can you speculate a little bit more on the generalizability of the findings to other trusts? Did you encounter specific problems for the particular hospital that was used for the current analysis?

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Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

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Discretionary Revisions (which the author can choose to ignore)
Table 2
For session type, only the reference category (AM) is reported. Is this because no significance was reached for session type in the model? Otherwise include PM sessions and its beta-coefficient.

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:
I declare that I have no competing interests