Author's response to reviews

Title: Influences of local data collection and indicator computation on reported Dutch hospital performance indicator scores

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Author's response to reviews:

Utrecht, May 1st 2013
Dear editor,

Hereby we send you the revision of the manuscript “Influences of local data collection and indicator computation on reported Dutch hospital performance indicator scores”, manuscript number 1457070387323439.

We are very grateful for the useful comments of the reviewers and we are confident that the manuscript benefitted a great deal from them. Below we listed our reply to the reviewers’ comments and the changes we made in the manuscript. Linguistic changes and changes we made for clarification of the manuscript are not included in the reply document, however, they are highlighted in the manuscript. We hope that the changes we have made are satisfying for you and the reviewers.

Kind regards,

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Reviewer's report

Title: Influences of local data collection and indicator computation on reported Dutch hospital performance indicator scores
Version: 3 Date: 17 December 2012
Reviewer: Sabina Nuti
Reviewer’s report:
The article is of high interest for management health service research. I would suggest some minor revisions:

1. Explanation of figures legend: what does the number 0,1,2 … mean?

As can be seen from the x-axis label, these numbers represent the variable numbers that are combined to compute the indicators. However, for matters of clarification we now added an explanation of these numbers in the figure legends.

“Reported data infrastructure of the orthopedic and oncology sets. AUT = fully automatic accessible, Partly = partly automatic, partly manually accessible, Man = manually accessible, NOT = not available; HR = Hip replacement, KR = Knee replacement, BC = Mammacarcinoma; Numbers 1, 2, 3 etc. = numbers that indicate the indicator variable which is part of the indicator set; 2b 4b 5b etc. = the unique number of the indicator.”

2. Explanation of the method (page 12, paragraph 1);

Reply: In accordance to the comments of the second reviewer we clarified the text of the entire manuscript. Therefore we made changes (highlighted) where necessary throughout the entire methods section.

3. Some article parts seem to be repeated and could be summarized in order to highlight more managerial implications (for instance in the conclusions the distinction between knee, breast cancer);

Reply: Thank you for this suggestion, we now omitted some of the repetitions and summarized the important conclusions.
1) For instance we omitted the part about data sources in paragraph 2.1 and added details where necessary in paragraph 2.3.
2) We merged paragraphs 5.1 and 5.2

4. Some interesting comments that could be added may concern the following issues:
a. Underline the problems coming out from mixing indicators based on administrative data, that can be easily calculated, with those based on other specific internal sources that may be easily manipulated. Can such difference in data sources mine the system credibility?

Reply: This is a good point, we now added this additional drawback of combining indicators that originate from different sources (Page 17)

“Such a system solves the problem which arises when combining different data sources such as administrative data that can be easily calculated, with those
based on other specific internal sources that can be easily manipulated.”

b. Systematic peer review and consensus conference among clinicians could be a valid strategy to cope with gaming and with avoiding implausible results.

Reply: Again this is a powerful tool to both implement the performance indicators within the clinical work, as well as to improve the reliability of the performance data. We now added this in the discussion section (Page 16).

“Clinicians could for example set up a systematic peer review and consensus conference to discuss the PI scores before submitting them to the public database.”

c. Performance indicators could be used by policy makers for different issues (accreditation, continuous improvement management system…). Government should clarify what is the goal of such system: self reported data should have limited use at least for accreditation system.

Reply: Indeed, as part of the publication of the performance indicators (annual report), the Dutch government already advises the stakeholders for what goals a certain performance indicator can be used. We now added the importance in the discussion (Page 17).

“Finally, the consensus approach entails that the indicators are used for several goals: benchmarking performance, pay for performance schemes, selective contracting by insurance companies, and decision making processes of patients looking for a healthcare provider. Particularly in the case of self-reported data, it should be made clear which indicators can be used for which specific goal.”

d. Public disclosure and data benchmarking may play an important role that could be emphasized.

Reply: Public disclosure and data benchmarking of performance indicators is indeed one of the main goals of our government to (see introduction page 5).

“All Dutch hospitals are required to report these PIs to the government on a yearly basis, to pursue public disclosure of performance, data benchmarking, selective contracting by insurance companies, and decision making processes of patients looking for a healthcare provider. “

Reply: The question is however whether the available data is reliable enough for any comparisons between hospitals, or comparison of a hospital’s score with a national average. See also comment 4.d.

Reviewer: Maria Pia Fantini
Reviewer's report:
Major Compulsary Revisions:
After the first revision the article has been substantially improved. However, it is important to write in a more synthetic manner the second paragraph of “Background” (from reference 4-5 to reference 8-9), which is very unclear. Generally it is suggested a linguistic review of all the manuscript.

Reply: We have rewritten the second paragraph of “Background” and clarified other sentences and paragraphs in the manuscript, where necessary.

It would be important to include in appendix the PI (specifying numerators and denominators), so the readers may know which kind of structure, process or outcome indicators are considered.

Reply: We now added the specific numerators and denominators in the appendix; table A1.

In the “Methods” at the point 2.2. “Study population”, the difference between teaching hospital and university hospital should be clarified.

Reply: This is now clarified (see page 7).

“A teaching hospital is a large hospital that is approved of training medical doctors, without being affiliated to a university”.

Level of interest: An article of importance in its field
Quality of written English: Needs some language corrections before being published
Statistical review: No, the manuscript does not need to be seen by a statistician.