Reviewer’s report

Title: Decision support systems for incurable non-small cell lung cancer: a systematic review

Version: 1 Date: 30 Jul 2017

Reviewer: Jos Aarts

Reviewer's report:

The authors conducted a systematic review of decision support systems (DSSs) for persons with incurable non-small cell lung cancer (NSCLC). The review has been well conducted, yet the terminology is a bit confusing. DSS refers generally to any system that supports decision making in clinical practice. This study appears to look at primarily computerized prognostic models for decision making for patients with incurable NSCLC. A discussion how DSS can be used in clinical practice and what evidence the literature review presents is lacking. The authors take the Mahar et al. review study as a starting point and point out that this study did not use a comprehensive literature search strategy. The authors find 39 DSSs; apparently Mahar et al. missed 7, unless they were reported after the conclusion of that study. The authors appear to have used a wide range of MeSH headings (they indicate that Mahar et al. did not). It would be helpful if the authors added a table with the headings they used and the research question and research model (theory) that guided this search. The authors present lot of detail and map the DSSs against a number of scoring systems. They simplified one scoring system in order to better assess the prognostic models. The authors are advised to discuss what their study conceptually adds to that of Mahar et al, beyond that they found more DSSs that met the search model. As mentioned previously, it would be helpful if the authors could elaborate on the context of use of DSSs and what the literature is reporting. I am thinking of tools that are available for physicians (and perhaps patients) on the web. Given the fact that they found that DSSs do not incorporate recent research and focus mainly on benefits, the author may want to discuss the limitations and feasibility of use in practice. In the light of this review, the may consider that after all using computerized prognostic tool as a concept may be better than DSS for this paper.Basically the paper is well written.

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

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
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Not relevant to this manuscript

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