Reviewer's report

Title: Shared decision making when patients consider surgery for lumbar herniated disc: Development and test of a patient decision aid

Version: 0 Date: 26 May 2019

Reviewer: Tim Benson

Reviewer's report:

This is a useful paper. I liked the way that this paper shows that introducing SDM is by no means simple.

Major Points

The discussion on page 12 is about differences between CollaboRATE and DQW-HD. DCS is not mentioned at all in the Discussion, but it should be.

Table 1 is confusing, especially the use of commas. For example, on line 3, does 85,7 mean 85.7? If so, it would be better to round up to 86, given relatively low n. It is not clear from Table 1, taken in isolation whether this refers to Before or After use of the PtDA. It is clear from the text that Table 1 refers to Before. However, I had confidently expected to see a comparable After table. Why is it not here?

I appreciated the supplemental material. I think that the references should be repeated in the supplemental material. It was good to see the copyright notes included too.

Collaborate is really about the patient's view of their doctor at a specific encounter. DCS is about the patient. DQC-HD is also about the patient but is more like a knowledge test.

Minor points

P5 L120 I think DCS is "Decisional Conflict Scale", not "Decision Conflict Scale"

P6 L130 The PtDA is generic, not specific to LHD. It may be useful to say that the adaptation is discussed below. The references (22-24) do not appear to cover a full description of the generic PtDA. It might be useful to clarify that reference 25 does this and to move it above 22-24.

P6 L133 I am not sure that a paper leaflet can consist of a frame and a set of cards. Please clarify.
It would be good to know how long each interview took.

It would be useful to include both a word count and reading age calculation in the results. For reading age, the Flesch-Kincaid Grade might be used to measure reading age as it is a core part of Microsoft Word. It is not clear how health literacy has affected the results.

**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?**
If not, please explain in your comments to the authors.

Yes

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I am able to assess the statistics

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I have been involved in the development of a shared decision-making measure with Public Health Wales, but I do not think that this has influenced my review.

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