Reviewer's report

**Title:** A proposal of indicators to measure coordination of clinical information and management across care levels

**Version:** 1
**Date:** 19 May 2015

**Reviewer:** Nicholas N Goodwin

**Reviewer's report:**

**OVERALL COMMENTS**

This paper has sought undertake a systematic literature review, with applications for their effective use in the field, to develop 'a set of indicators to comprehensively evaluate clinical coordination across care levels'

The paper argues that it produces 'rigorous and scientifically sound measures of care coordination ... that comprehensively addresses the different attributes of care coordination in main transitions across care levels'

However, the authors do not do this in any shape or form and their claims are wholly out of line with their findings - as such, the paper cannot be published in its current form but might be considered if significant revisions to the way the results are presented and argued are undertaken

**Major Compulsory Revisions**

1. The authors conflate the term 'clinical coordination' (which they define as transfer of clinical and management coordination across care levels) with 'care coordination' which has a separate definition and meaning (i.e. it is about care and management around people's needs through pro-active care co-ordinators). To overcome this problem the authors need to better state in their background section the limitations in the scope of their thinking (i.e. that they are not looking at care co-ordination as experienced by patients and service users; that they are not looking at care co-ordination by professionals and teams that is undertaken to support people's needs; that they are not looking at the patient as a partner in the care process who pro-actively co-ordinates care in a co-productive partnership with care professionals) and to then recognise that what they are seeking to examine is only a limited set of aspects of what care co-ordination represents in the wider literature. Hence, the term 'clinical coordination' must be used throughout in line with the definition provided in the background

2. As with the above statement, the authors further need to clarify that they are only considering people with single diseases (so not multiple morbidity/needs) and that they are similarly ruling out care coordination in care provided in other settings (e.g. social care or from community volunteers etc).
3. The issues in 1 and 2 need to be addressed as they significantly limit the articles intention to develop 'comprehensiveness' measures between levels - it's really only focusing on specific diseases, so has significant limitations that must be discussed and justified.

4. The methodology for the literature review is sound, but I would like to see the full list of search terms provided (191-194).

Also, paragraph 1 of the 'results' section (294-302) should be moved to the end of the methods section - otherwise the methodological process in identifying the indicators is not provided.

I would also like to see here an understanding of the nature of the studies included - my feeling is that they are probably skewed by country (USA?) and by disease condition - so the actual set of evidence comes from a very limited source. In other words, an argument has to be made against the observation that the evidence base itself does not have the depth of information within it through which to legitimately develop a comprehensive set of measures and indicators to judge clinical coordination.

5. Application of indicator set (from line 237) - the purpose of this needs to be better explained. Is it about validating the measures for feasibility of collection? for validation of use? to assess degree of clinical coordination between case sites?

6. The section line 265-270 is unclear - sample size of what? why the expectation and what does the figure of 0.50 represent? what do you mean by precision? why was a sample size of 42 required - more details here, and again related to what purpose this work was being done (see 5 above)

7. data analysis (line 279-285) - unclear what this is measuring

8. results - the literature review and process of selecting indicators is well done, BUT what the authors are left with is a highly incomplete (not comprehensive) set of possibilities as some refer to heart failure, others COPD, others cancer - and by the authors own admission there is no way of effectively knowing whether any effective communication of the information between settings has been achieved - rather, the indicator set gives a partial picture, at best, of the nuances required in clinical coordination.

I see this as a hugely significant limitation of the work - whilst the indicators have been developed in a sound scientific manner, what they say to me is that we have significant problems in assessing clinical coordination - both in how clinical information is sent, received and used, and in how management information can support this analysis.

9. discussion - Linked to what I reflect upon in points 1-3 above, I see this problem of lack of data and information as the major finding of this work - that we really lack the sophistication to measure clinical co-ordination effectively (briefly mentioned in 389-391) but requiring greater elaboration on what this means for
health care policy and practice that is investing heavily in systems that ought to improve care coordination to improve care experiences, costs and outcomes. So an agenda to examine weaknesses important

10. am wondering to what extent there is more information on this that was not reviewed - for example, contained in clinical care pathway developments in these disease areas, may of which will have put key criteria in place on the steps in the care process by different partners. I think this is a missing set of 'evidence' since additional information to inform the indicator domains and indicators would have been helpful here

11. The study overstates its impact and the use of its indicators and it certainly does not represent what is claimed in lines 398-401. Similarly, whilst contributions are indeed made, they are limited to disease specific areas and the full pathways of care are incomplete, so paragraphs 405-417 need reconsideration. Also, whilst some limitations are portrayed, I am not sure that the claims in line 445-447 can really be substantiated by this research - also it is a bit of stretch to claim what is in lines 451-453 - the conclusions also need a re-think

Minor Essential Revisions

12. Line 148/149 - add ‘and policy’

13. Line 153-155 - I would dispute this - there is plenty of evidence in other work that making sensible assessments of care coordination can only be done at an aggregate level because it is not possible to attribute values to the intricate complexities of the care coordination process - see major revision points above

14. Line 184-185 - the conceptual framework needs reasserting at this point

Discretionary Revisions

15. Line 156-7 - add information here to illustrate point - such as ....

16. Line 158-160 - - add information here to illustrate point - such as ....

17. Line 239 - use of the word 'calculation' of indicators (repeated elsewhere) is confusing - perhaps 'generation' or 'development of' is more appropriate

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Declaration of competing interests:

No competing interests