Reviewer's report

Title: Effectiveness of management models for facilitating self-management and patient outcomes in people with diabetes and chronic kidney disease

Version: 1 Date: 2 April 2015

Reviewer: Bernd Richter

Reviewer's report:

Major Compulsory Revisions:
1. Because authors investigate a complex intervention they should establish a conceptual framework or logic model.
2. Methods, population: "Adult patients (above 18 years) with diabetes and/or CKD". If authors want to evaluate diabetes and/or CKD the title must be changed (which would be contrary to the PROSPERO registration). Also, it is suggested to include 'adults' in the title (instead of people).
3. Primary outcomes: a maximum of three outcome measures should be specified here; also, there are too many laboratory surrogate markers of unclear patient-importance (e.g. phosphate levels, fasting blood glucose); what about diabetes complications and adverse events?
4. RCTs: EPOC criteria go beyond RCTs, for example investigate interrupted time series. RCTs as an experimental design do not need to be defined. If authors want to go beyond the RCT design they should clearly say so (see search strategy).
5. Inclusion of studies: at least two review authors should perform the initial literature scan.
6. Overall quality assessment: the GRADE instrument should be used, especially if authors want to include non-RCTs (before-after trials, interrupted time-series etc).

Minor Essential Revisions:
1. Please adhere to consistent terminology (self management model or self management programme?).
2. Abstract: instad of 'all EBM' better use 'Cochrane Library'.
4. Objectives: authors mention efficacy but title states effectiveness.
5. Methods: "Only studies whose chronic disease management models have included one or more of the above components will be eligible for inclusion." So, if for example a study just provides materials to patients ('patient education') this would be called a chronic disease management programme?
7. Search methods: 'all EBM' should just be called Cochrane Library.
8. Appendix 1: just a few comments focusing on MEDLINE:
   - Line 16 should be constructed as line 12.
   - Line 22 should read: eliminate one self monitor*
   - Line 23, 29, 30 and 41 appear to narrow (adjacent operator may be used)
   - Line 72: should be deleted because already established in line 61
   - Line 51-57: if authors really want to include RCTs only the validated Cochrane
     strategy should be used
   - Line 41: should this not be part of block lines (1-3)?
9. No search strategy for systematic reviews, meta-analyses, HTA-reports.
10. Will authors search trial registers?
11. Figure 1: no information in blue rectangles (figure 1 is shown on page 9 and
    17).
12. Assessment of methodological quality: the MCHRI template is a template for
    a general critical appraisal of an RCT (see template title) and not just a tool to
    assess methodological quality/risk of bias.
13. Data analysis: anticipated use of a statistical meta-analytic model should not
    depend on the level of heterogeneity but should be established by thorough
    reasoning whether e.g. the assumptions of a fixed-effect model apply.
14. Funnel plots investigate small study effects (not only publication bias) and
    should only be employed if 10 studies or more investigate a particular outcome
    Recommendations for examining and interpreting funnel plot asymmetry in

**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.