Reviewer’s report

Title: Identifying Keys to Success in Reducing Readmissions Using the Ideal Transitions in Care Framework

Version: 3 Date: 20 August 2014

Reviewer: Bronagh Walsh

Reviewer’s report:

Major Compulsory Revisions
1. The title and abstract need to be explicit about methods/design. Rather than describing the methods as ‘review and categorisation of reports’ perhaps it would be more accurate to say ‘review of literature and secondary analysis of outcomes based on categorisation into ITC domains’?

2. In the final paragraph of the Background section, the authors note that the study aimed to address three main themes. These would be better phrased as research questions in order to aid clarity. The overarching aim or research questions should also be included in the abstract.

3. The methods for the literature search and review are clearly described. The section on the categorisation into ITC domains was less clear. In the first paragraph of this section, was the discussion by the reviewers around selection/exclusion of studies or the categorisation into domains? The authors should indicate which of these was done at this stage.

4. The analysis of ITC domains component of the study suggests that this paper is a meta-analysis or secondary analysis and this is not clear in the abstract, title or methods. The use of new variables derived from the study descriptions suggests that secondary analysis may be a more accurate description, but meta-analysis is not my field of expertise and a statistical reviewer may have another view. In either case, the paper needs to be more explicit about the approach taken.

5. The authors need to be clearer about the studies which were included in the analysis. In the methods section, they indicate that interventions requiring disease-specific approaches were excluded from the review. However, in the findings, they indicate that 41% ‘were disease-specific interventions’. This raises two questions: why were these disease-specific intervention studies not excluded from the review/analysis (or were they studies with a specific disease population but a generic intervention?); and, is it 41% of interventions, or 41% of studies, as it states in the next sentence?

6. What proportion of the 41% of studies with a significant reduction in readmissions were disease-specific populations? This information needs to be added as it will aid in interpretation of this analysis; interventions in disease-specific groups (particularly heart failure) are known to be more effective in admission reduction than those in generic groups.
7. The quality assessment stage was based purely on the description of study design due to lack of information in the study papers, but this needs to be acknowledged further in the limitations section. The authors should reiterate here that their quality assessment was simply a classification based on a design hierarchy and did not address quality in terms of size of study, conduct, appropriateness of sampling, intervention, data collection or analysis. Generalisability was not addressed. This is a limitation of this analysis given that the multivariate analysis controlled for, among other factors, study size and quality score.

Minor Essential Revisions

1. In the results section of the abstract, the domains associated with admission reduction should be placed in order of effect size, as they are within the main text.

2. In the section on analysis of the ITC domains, the approach seems to be sound, but the method used to obtain odds ratios (end of the penultimate paragraph of this section) was not clear. The first line of the following paragraph indicates that this may have been via the simple logistic regression. This need to be stated explicitly.

3. The secondary analysis of the data appears sound. In the sentence describing median study size, the authors mention that an outlier was excluded. Was this study excluded from calculation of the median study size or excluded from the whole analysis? This should be clarified and the reason for exclusion should be added.

Discretionary Revisions

1. Where specific health policy is referenced, it would be useful to indicate the country.

Level of interest: An article of importance in its field

Quality of written English: Acceptable

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

I declare that I have no competing interests