Reviewer's report

Title: A Systematic Review and Meta-Analysis of the effects of Clinical Pathways on length of stay, hospital costs and patient outcomes

Version: 1 Date: 27 July 2008

Reviewer: Diane E. Holland

Reviewer's report:

This paper details a systematic review and meta analysis regarding the effects of using clinical pathways on length of stay, hospital costs, and patient outcomes. There are a few revisions suggested that would make some of the investigators’ decisions more transparent to readers, providing greater utility to the results.

Major compulsory

Study selection criteria: Minimum ‘inclusion criteria’ to meeting Clinical Pathway (CP) definition – refer to Table 1. Please define the criteria in text. Difficult for reviewer to tell if the inclusion criteria are the 3 ‘characteristics’ listed in Table 1. If these are the minimum inclusion criteria, this reviewer would appreciate a discussion in the text as to why one criterion could be met with ‘not sure.’ This is in contrast to the discussion (page 13) where disagreements in meeting the definition of ‘clinical pathway’ were discussed with a 3rd reviewer.

An a priori value greater than 60% is considered substantial and statistical pooling not appropriate (page 7, line 1). Clarify if this value refers to the overall test. Briefly explain the heterogeneity of invasive clinical pathways: Effects on LOS (Figure 5) found in text page 9.

Results: Search Strategy. Further description in the text of how the 49 out of the 66 studies considered for exclusion failed the minimum inclusion criteria – especially in light of the 2 studies that may or may not have met the evidence-based criterion (listed as 'not sure').

Effects on LOS (page 9)

This reviewer would appreciate an explanation how the unit of measure between studies is handled (the N in Figure 2 represents both individual patients and hospitals)

Effects on patient outcomes

It is reported that 6 measures were comparable in terms of re-hospitalization, yet in Table 1 re-hospitalization is listed as a quality measure for 9 studies. Please explain what the comparability was that allowed for the analysis to include the 6 studies.

Minor Essential

The test for heterogeneity is available on all other figures except Figure 2. Please
provide.

Discretionary
Correct abstract, results section, page 2 line 3: ‘95%’
(correct comma placement page 8, last line.)
(please correct comma placement in line 1, page 7)

**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:**
I declare that I have no competing interests.