Reviewer’s report

Title: Organisational development, sustainability, and diffusion of innovations within hospitals participating in a multilevel quality collaborative

Version: 2 Date: 7 April 2010

Reviewer: Lori Melichar

Reviewer’s report:

1. Is the question posed by the authors new and well defined?
The questions posed by the authors are not new, but have not been adequately addressed by the literature—to my (admittedly probably out of date by now) knowledge. Care should be taken when categorizing this paper in terms of contributions to the QI literature. The paper describes how MQC hospitals sought to sustain and disseminate improvements made and quality methods used. Though there was training in “quality methods and change ideas” and seemed to have been some efforts by the staff at the hospitals’ to truly understand their key quality challenges, it was not clear to me that the teams did any innovating (sometimes called “deep diving”) prior to their “Plan” step. Improvements were made by sharing, adopting and spreading simple and complicated best practices, but not complex systems changes. In some cases, the projects that were spread were “selected.” I would like to know how this impacted their choice of success relative to the innovations that were generated as a result of a goal. It is still a valuable evaluation of the process of implementation and spread and the lessons, particularly related to the (what many perceive to be burdensome) measurement are useful to the field. A manager seeking to discover how to structure and support his/her organizations quality improvement initiatives to minimize expenditure and maximize impact would learn from this paper.

2. Are the methods appropriate and well described, and are sufficient details provided to replicate the work?
The methods are well described and are appropriate to the first stated task: to describe how the hospitals sustained and disseminated their improvements made.

I may have missed it, but saw no description of the fixed effects analysis and its implications for the findings.

I think a fatal flaw of the quantitative analysis (as is noted in the authors’ limitations section) is the fact that they are not able to rule out that their results may be explained by the fact that QI projects that are easier to implement are simply easier to disseminate and spread as well.

3. Are the data sound and well controlled?
The qualitative data are very interesting. I especially appreciate that the authors’ captured and relayed the challenges with implementation. For the quantitative
work, it would have been helpful to have been able to have controlled for level of difficulty of QI project. the sample size is too small for the quantitative work to produce definitive causal results. I would suggest that the authors divide this paper into two. One that addresses the question of which methods worked well to sustain and disseminate improvements and one to examine the link between early successes and future spread. I would further recommend only seeking to publish the qualitative results, using the quantitative data for hypothesis generation for future study. I am curious to know how the authors measured “level of ambition”

4. Does the manuscript adhere to the relevant standards for reporting and data deposition?
Not sure.

5. Are the discussion and conclusions well balanced and adequately supported by the data?
The results accurately reflect the findings: first year qic projects with at least a 10% improvement were disseminated more often than those without 10% improvement…the results cannot say whether the impact was causal or if this is a correlation associated with ease of implementation..

6. Do the title and abstract accurately convey what has been found?
The conclusion doesn’t fully reflect all the (quantitative) results.

7. Is the writing acceptable?
Yes.

Major Compulsory Revisions (which the author must respond to before a decision on publication can be reached) discussion of fixed effects and results of hausman test

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, and I have assessed the statistics in my report.

**Declaration of competing interests:**
'I declare that I have no competing interests'