Reviewer's report

Title: Implementing change in primary care practices using electronic medical records: a conceptual framework

Version: Date: 11 May 2007

Reviewer: Elizabeth Yano

Reviewer's report:

General

This paper is generally improved over the previous draft as the authors have worked to grapple with the integration of the conceptual framework they propose in the context of those others have put forward in the field of quality improvement and implementation science. The argument for the value added of their work is generally better made and overall, this is an interesting subject and approach. The methods are better described and the data seem reasonable.

Major Compulsory Revisions (that the author must respond to before a decision on publication can be reached)

1. While the authors have added the Microsystems framework up front, as well as created a table placing their conceptual framework in line with the work of others, the table is hard to follow since there are constructs that overlap in different ways. More work is needed to take this to the level where it will demonstrate the added value and educate readers to the context of these models that are all trying to do the same thing in terms of informing our thinking, research and practice along lines of quality improvement and organizational change. In the discussion, the translation of the Microsystems framework's 4 concepts to the 7 of their framework should be made more clear.

2. While the issue about the fundamental nature of EMR in organizational change was taken to heart, the degree to which "assimilating the EMR to maximize clinical effectiveness" is adequately present in the domains and then results underlying each domain (e.g., vision with clear goals, taking small steps) is variable. The EMR issue does not appear to penetrate all domains and when it does, its focus is on template use. This unequal application is problematic.

Minor Essential Revisions (such as missing labels on figures, or the wrong use of a term, which the author can be trusted to correct)

1. More information on the practices was requested so that the external validity of the conceptual framework, domains and lessons drawn from this work could better be placed in context for readers working with or within other types of practices. The authors suggest this is a "topic for future investigation" in their response. A sentence that deals with the external validity of their findings based on the nature of these practices and the implications for practices outside PPRNet should be added. Also, the only information provided so far is regional representation and a notion that these are small practices. Knowing something about the #s of providers in each and #s of patients seen would also be helpful.

2. Abstract's background 1st sentence should be revised insofar as the paper does not discuss clinical practice guideline adoption per se and EMR adoption as the organizational changes under study (especially since all the PPRNet practices have EMRs).

3. Pg 12, under Enhance Communication Systems, 2nd sentence not clear.

Discretionary Revisions (which the author can choose to ignore)

What next?: Unable to decide on acceptance or rejection until the authors have responded to the major compulsory revisions

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.