Author's response to reviews

Title: An Observational Study of The Effectiveness of Practice Guideline Implementation Strategies Examined According to Physicians Cognitive Styles

Authors:

Lee A Green (greenla@umich.edu)
Leon Wyszewianski (leonw@umich.edu)
Julie C Lowery (julie.lowery@med.va.gov)
Christine P Kowalski (christine.kowalski@med.va.gov)
Sarah L Krein (sarah.krein@med.va.gov)

Version: 2 Date: 4 May 2007

Author's response to reviews:

Major revisions:

Both reviewers desired more information about the concordance score. Additional information about how it was created is now in the Analysis section of Methods, and the distribution of scores is in Results. Appendix 1 presents the scoring tables themselves. One reviewer questioned the use of the arithmetic sum of scores. We have added a brief explication to Methods, to the extent that a necessary - but necessarily arbitrary - choice can be explained.

We have added the range and standard deviation of the guideline adherence by site and by physician, and discuss the implications of variation in our findings, as requested.

Reviewer #1 asks why we used only one outcome, hypertension management for patients with diabetes, and suggests that having more dependent variables would be desirable. We certainly agree, and would like to have had several to measure. However, this was an observational study of a natural experiment as the VHA system implemented a hypertension guideline. Other guidelines could have been measured cross-sectionally but not longitudinally, and would not have provided a before-after comparison to analyze, as there was no natural experiment occurring on those other guidelines.

The issue of selection among physicians is now addressed in the Discussion.

We have added explanation to clarify the last section of the Analysis, as per Reviewer #1's 4th concern.

In regard to Reviewer #1’s 6th concern, we agree that while barrier reduction strategies typically require organizational change, they are not one and the same. Accordingly, we have removed reference to barrier reduction strategies as organizational change and simply describe them as barrier reduction.

Minor revisions:

In the abstract, Reviewer #1 recommends naming the instrument or dropping the phrase mentioning it. We agree and have chosen the latter.

We have rewritten the paragraphs on the interventions in the site level Results, to match the scheme laid out in Analysis and reduce the terminology confusion noted by Reviewer #1 (concern 2a).

In regards Reviewer #1's concern 2b, we have placed the typology-related material first followed by the more detailed scale-based material, in both Methods and Results. We hope that this makes clear to readers that the typology-based concordance score hypothesis was not supported, but a potentially useful result was found when the underlying scales were examined.

We have eliminated the opaque term "certain characteristics" in favor of more direct and simple description, to address Reviewer #1’s concern 2c.

In regards Reviewer #2's concern about replacing Figure 2 with a table of odds, we have considered...
showing those data each way, and find that some people prefer (as the reviewer does) tabular presentation
while others find the graph more suitable. Based on our experience in presenting an early form of this work
on a poster at the Society for Medical Decision Making we have elected to use the graph, in the belief that
while a substantial number of readers will share the reviewer's preference a greater number will prefer a
graph over a table of odds or odds ratios.