Reviewer's report

Title: Impact of Care Management Processes and Integration of Care on Blood Pressure Control in Diabetes

Version: 3 Date: 2 November 2012

Reviewer: Sarah C Shih

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The report is improved from the last version. There are a couple of major compulsory revisions and a few of minor essential revisions. From my third reading of this manuscript, the authors are claiming they are providing a more generalizable finding that practices with X and Y processes are more likely to be able to help control patients with diabetes and hypertension. This is not the best set of data to make that claim given the number of small observations, as low as 7 practices for some measures. However, the findings across the practices surveyed are of interest to larger medical organizations, especially if leaders of the organizations are planning on replicating or potentially investing in processes or organizational structures to improve the quality of health care delivered. I've attached an annotated PDF with specific locations of my comments. Below, I've summarized the suggested changes.

Major Compulsory Revisions

Methods

1) Page 8 – “identified based solely on site interest in study.” Please make as transparent as possible how the study recruited the 28 practices. Are they a convenience sample from a MGMA list? Did the researchers go to a list of large medical practices and sent invitation letters to all the organizations (how many total original?) with only 28 responding? Was recruitment a convenience sample of practices with a relationship to the researchers or a health plan or?? How did you identify the practices selected? Roster from MGMA? Need to disclose this. This version still does NOT explain how the researchers ended up with 28 practices out of the thousand across the country.

2) Please include the number of observations in the tables and in the legends of the figures. I'm concerned that some statistics are derived from 28 practices, whereas others are only 7. Though you may no longer be violating statistical assumptions, readers need to know what sample size you are drawing from. This manuscript is describing the results for a few voluntary practices and is more like a 'case' report. Readers need to know the final number of actual observations used to create the summary results. For example, if a medical director was to review the evidence of employing a case manager, results from 20% of 28 practices reporting vs. 20% of 7 practices reporting is important to know.

Minor Essential Revisions
Pages 2 and 13 - The phrasing “trended towards significance” throughout the document needs to be revised. It should be stated clearly that the associations are strong, e.g. greater than 30% but not statistically significant. Readers will infer for themselves whether the results “might” have been significant if the sample size was larger. With the current data, you don’t know. Having more practices may introduce more variation and reduce the association and you still may not have significance.

Page 7 – Please clarify what is meant by hypertension management but not control. How is this detected? Change in BP level but no to recommended levels, eg 130/80 for diabetics or 140/90 for non-diabetic population?

Please review sentences and clarify that patients have a diagnosis of hypertension and have a co-morbid diagnosis of diabetes. “All patients in this study were limited to those with a diagnosis of hypertension AND diabetes.”

Page 9, “New England Institutional Review Board” – please include the IRB number.

Page 12, “African-Americans (36.0% vs 26.6%), and diabetic African-American patients were more likely to have uncontrolled BP (47.1% vs 32.9%). Non-obese patients were more likely to have BP controlled as compared to obese patients (44.7% vs 36.6%).”

The results are not easy to understand as currently written, suggest reorganizing the sentences to have the percentages right after the group. For example: African Americans had higher prevalence of diabetes diagnosis (xx%) than white (xx%).

Page 15 – “Integration of services was more strongly correlated with BP control in our diabetic hypertensive population than the presence of care management processes, although a trend towards correlation with overall PPC score and a significant correlation between uncontrolled BP and the clinical information systems subscore was observed”

This is a confusing sentence. You have no statistical significance in the positive direction but statistical significance in the negative direction???

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

**Quality of written English:** Needs some language corrections before being published

**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 interest.