Reviewer's report

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

Version: 1 Date: 6 February 2012

Reviewer: Sarah C Shih

Reviewer's report:

The English in the manuscript is well written and for the most part, presents reasonable analytical approaches for assessing the correlation between practice systems and blood pressure control for patients with diabetes. The study has the potential to provide insight for which particular component of practice systems are needed or associated with higher quality of care for patients with hypertension and diabetes.

What isn't clear is how this expands on existing findings from prior studies cited by the authors. The authors detail results from several studies by L. Solberg et al and others attributing practice systems to quality of care but haven't further clarified how results of the study by Wong et al demonstrate either a stronger association with care management processes or issues for why care management or other components aren’t strongly associated with practices with higher BP control rates.

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Major Compulsory Revisions:

Provide a clearer focus on why this current study adds to the existing literature. It is unclear how this study provides new information. Authors mention the study includes 28 large practices across the US. What was the impetus for selecting these sites - were they participating in a special program to improve practices systems; contracted to improve hypertension care with diabetic patients; recently adopted health information systems; part of trial to improve diabetic care?

Revise the discussion to better explain the significance of the current study in addition to existing studies that find similar results. If the authors have data on general hypertensive patients, in addition to non-diabetic patients, it would be of interest to the audience if certain practices systems are needed to help drive improvements in blood pressure control (there is mention in the results section that there were 8,400 patients with hypertension and this study focused on 2,162 comorbid with diabetes). As the authors point out, the existing literature did not observed a strong correlation of practice systems with BP control, yet the results cited by the authors aren’t much stronger – “trend towards correlation” is not much stronger than previous findings.

The issue with the lack of significance may also be the low sample size for
correlation (Table 3). The authors present correlations with less than ten observations - which are of concern as it may violate statistical assumptions for using the Pearson’s correlation (e.g. underlying measure should have a roughly normal distribution). The authors should consider a different stratification of the practices in order to generate a more stable estimate of the BP control rates and for correlation with the practice systems scores.

It is difficult to interpret Figure 3. Is the take home message practices should consider strong integration of services to engage patients with hypertension, obesity, or smokers?

Minor Essential Revisions:

Background section: Spell out LTC – I assume this is long term care.

Results section: Third sentence, 2nd paragraph: “39.9% had controlled BP and 30.7% had uncontrolled BP” – these two numbers do not add to 100%, is this referencing a broader population or roughly 29% did not have a BP reading?

Discretionary Revisions: None

Level of interest: An article whose findings are important to those with closely related research interests

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

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

Declaration of competing interests:

I declare that I have no competing interests