Reviewer's report

Title: Disparities in Diabetes Care by socio-demographic characteristics: From analysis to an organizational action plan

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Reviewer: Amal N Trivedi

Reviewer's report:

This study assessed socioeconomic and ethnic disparities in diabetes prevalence, processes of care and intermediate outcomes in an Israeli HMO. The authors find that the prevalence of diabetes is higher and control of diabetes is worse among lower socioeconomic groups and among Arabs compared with non Arabs.

Major comments:

1) Patients entered in the diabetes registry may be a selected group given that the registry would miss patients who did not visit a primary care physician or receive an a1c test. How many of the HMOs enrollees did not see a primary care physician in two years? Also, how do persons in Israel acquire insurance coverage and select an HMO?

2) ‘Adequate a1c control should be removed from the list of outcome measures. There is little evidence to suggest attaining a1c levels of <7% in all patients. Poor a1c control should be sufficient as a measure of appropriate intermediate outcomes. Also, the proportion of persons without an a1c test was >10%. What would be the effect of putting these individuals in the denominator and classifying them as ‘uncontrolled’ – given that we do not know where their a1c level is?

3) In the study, disparities are expressed as relative differences – which can be misleading when performance rates are close to 0 or 100%. I would advise the authors to consider expressing the disparities as absolute differences – which would also convey the population impact of the observed disparities.

4) The use of 4 tables to show age adjusted, sex-stratified rates by ser, ethnicity, and svhi status is confusing. The authors should use a multivariate regression model which would show the impact of all of these factors on the relevant outcomes.

5) The ‘organizational action plan’ should not appear in the title or abstract. The authors do not examine the impact of the action plan on quality and disparities. Therefore, the paper should be largely limited to the research question addressed. The description of the action plan should not take up a page of the discussion.

Other comments:

1) The authors should include more comment about how each district is ranked
in terms of socio-economic status. How many variables go into the ranking? And how are these variables correlated?

2) The study period is listed as the date of data extraction, which is not relevant. The period should instead be described as the years in which the patients were diagnosed/treated.

3) Does the SVHI include greater coverage of diabetes medications, or less cost sharing for physician services and lab tests?

4) Do the authors have any data about the accuracy of using geographic proxies for socioeconomic status and ethnicity?

5) Table 2 has varying numbers of significant digits.

**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:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I have no competing interests