

Reviewer's report

Title: Ethnic disparities in the control of type 2 diabetes risk factors in southwestern American veterans: the Diabetes Outcomes in Veterans Study

Version: 1 **Date:** 27 January 2006

Reviewer: Michele Heisler

Reviewer's report:

General

This study addresses the important question of mechanisms for racial and ethnic differences in diabetes risk factor control among insulin-treated VA patients with diabetes. In particular, this is the first study I have seen that documents differences in treatment intensity (daily insulin doses) as a possible mechanism for worse glycemic control among African American patients with diabetes. This has been a hypothesis that has been raised in prior studies but not addressed. Overall, the study is well-written, methods are appropriate and well-described, and limitations are well-documented. As the authors note, the sample is small and may not be generalizable to other populations (even with VA), and the study is cross-sectional rather than longitudinal so can not establish causality. The authors also point out other limitations in the study design that warrant caution in interpreting the results. The findings, however, are suggestive, make a contribution to the field, and help point the way for more definitive research addressing this the important hypothesis of differences in treatment intensity contributing to racial disparities in diabetes control.

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

I do not find any major compulsory revisions in this clear account of the study and findings. While the study has significant limitations, the authors provide a good account of these limitations.

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

p. 5: Some comment on rationale for some of the eligibility criteria would be useful, e.g., what do 'living arrangements conducive to self-care' mean, what were considered 'co-morbidities that affect glucose homeostasis' and why was it a requirement that their diabetes medication regimen be 'stable' in the preceding two months?

p.6: What does it mean that 'psychological instruments were given in random order'? That sentence is not clear. They used an impressive range of well-validated instruments.

p.9: The description of how insulin doses were determined should be clearer here. As the authors note, VA electronic pharmacy records do not accurately record actual insulin doses. Were patient reports supplemented with medical record review? Please include some references about the validity of patient self-report for insulin doses.

p. 10: Their discussion of possible factors contributing to lower insulin doses (e.g., differences in

blood glucose self-monitoring, etc.) is excellent.

What next?: Accept after minor essential revisions

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

Quality of written English: Acceptable

Statistical review: No

Declaration of competing interests:

I declare I have no competing interests.