Reviewer's report

Title: Comparison of Resident and Glaucoma Faculty Practice Patterns in the Care of Open-Angle Glaucoma

Version: 1  Date: 11 August 2014

Reviewer: Simon Skalicky

Reviewer's report:

This is a well-written and interesting paper addressing an important topic.

There are a few points I wish to raise:

Major Compulsory Revisions

Introduction

1. The study is based on the AAO PPP for glaucoma from 2005, however this has since been updated to the 2010 edition. I think it is preferable to use the most current PPP in the analysis.

Methods

2. What is meant by “Waivers of consent were obtained for all patients whose charts were examined and for resident participants”? Does this mean consent was or was not given by the participants – could you please specify.

3. “Twenty charts were analyzed for each glaucoma faculty member, while 8 patient charts were analyzed for each resident physician.” How were these chosen? Presumably each resident saw more than 8 patients in this period. It is important to specify the selection criteria as without it there may be some unexplained selection bias.

4. “The seventh criterion was the presence of photographic or digital glaucoma imaging in the 5 years prior to the study visit.” What is meant by this? A disc photo (was it stereoscopic or not?) or NFL imaging (eg HRT)? Please be specific. I do not think they can be lumped together into the same criterion as they are not the same thing.

5. With so many p values, should there not there be a Bonferroni or equivalent adjustment?

Results/Discussion

6. “Patients cared for by residents were more likely to be African American (85% vs. 26%, p < 0.001).” This is a striking difference. Perhaps the authors could mention why this difference occurred, and whether it has any bearings on their results? Of note, I address the authors’ attention to the following paragraph on page 8:

“In both faculty and resident patient groups, we separately assessed the effect of several patient parameters on documentation of care measures using univariable...
analyses (Table 3). Among faculty patients, those with more advanced VF loss in the better eye at last testing were more likely to have had VF testing in the last year (odds of missed VF testing = 0.3 per 5 dB worse VF mean deviation, 95% CI = 0.2 to 0.7, p=0.003). In addition, female patients were less likely to have had glaucoma imaging in the past 5 years (OR = 3.9 when compared to male patients, 95% CI = 1.0 to 15.2, p=0.049).”

Based on the striking difference in ethnic profile between resident and faculty groups, would it not be wise to assess that parameter here? This may in fact be a significant confounding factor for this paper, and should be addressed in the discussion.

7. “In addition, female patients were less likely to have had glaucoma imaging in the past 5 years (OR = 3.9 when compared to male patients, 95% CI = 1.0 to 15.2, p=0.049).” This is also a surprising finding and is on the borderline of significance. It warrants some discussion.

Discretionary revisions

In table 3, please provide 2 decimal places for the odds ratio

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**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 interests