Reviewer’s report

Title: Patterns of beta-blocker intensification in ambulatory heart failure patients and short-term association with hospitalization

Version: 2 Date: 12 March 2012

Reviewer: David Lanfear

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the authors examined BB usage via pharm claims and tests the association with HF admissions, finding that there it is rare that a HF hospitalization is preceded by uptitration of BB. Thus BB increase is generally safe. There are several important pieces of information in this report. the main finding above is one, but also interesting is what I would regard as a low rate of uptitration of BB among pts with HF. This is most relevant in low EF patients, but even they had an underwhelming rate of titration. overall this is a well written and well reasoned work, and the data supports the conclusions given. There are no compulsory revisions in my mind, but i do have a few minor revisions to suggest.

Minor Revisions:
1) the statistical approach is reasonable, but since the # of cases with BB uptitration is so low perhaps consider using a prop hazards model with a time-dependant variable. Related to this it is also of interest how many BB titrations there were that weren't associated with an admission (ie the risk of hosp given uptitration rather than the liklihood of uptitration given admission).

2) I disagree with the authors assertion that the rate of BB intensification is good. barely half of pts get intensified, and the average time to intensification was 6 months! In the setting where we are desperately trying to decrease HF hospitalizations it seems to me this illustrates a large quality gap that needs to be adressed. Quality measures generally mark whether a patient has been prescribed a BB at all, not whether they reached (or even attempted) target doses that were proven to be effective in clinical trials.

Discretionary Revisions:
1) page 9- type (', and') on line 2.
2) what proportion of LVSD patients were on guideline recomended agents?
3) what was the time to uptitration in the LVSD patients
4)the event # in the high dose vs low dose analysis are small. perhaps just dividing the subjects into high and low and testing time to rehosp or death? also, low dose should be the starting dose, so you could lose the median (ie 3.125 of carvedilol is the low dose, anything else as an initiating dose would be considered 'high').

5) page 13 typo- 4th line of second para- extra '8', maybe a missed reference?
6) can you report the mean dose achieved? this could be another important quality issue and obviously is closely related to intensification or lack there of.

7) page 14 - I know Kaiser Colorado is a very unique place, but i dont think you need to cite this as a limitation of the work!

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

**Quality of written English:** Acceptable

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