Reviewer's report

Title: Preferences for active and aggressive interventions among patients with advanced cancer

Version: 2 Date: 1 May 2010

Reviewer: Benjamin D Sommers

Reviewer's report:

This is a well-written paper on an important topic, and the authors have assembled a novel and valuable dataset. I think this will make a useful contribution to the literature. My main concerns are threefold:

MAJOR COMPULSORY REVISIONS

1) The analyses are all univariate. This sort of dataset needs to be analyzed using multivariate models, to determine which of the factors (age, comorbidity, etc.) are independently associated with the treatment preferences. Many of these results are probably confounded by other observed variables.

2) The use of a single yes/no outcome variable, using a cutoff of 50%, sacrifices a lot of useful information (as does excluding the undecided data). Lumping everyone into AAMM or CPM, with a strict binary cutoff, seems counter to the spirit of patient-based preferences. Why not allow there to be a spectrum of preferences? In addition to the philosophical issue here, it also sacrifices a good bit of the data. Your current approach doesn’t distinguish between someone who wants 10% vs. 49% of the interventions.

An alternative approach that deals with both of the concerns above would be a linear regression using the percentage score of interventions desired, or a count model (like Poisson) for the number of items the patient wants – this would capitalize on the full variation in the data.

Furthermore, “Undecided” should not be considered blank; blank implies you have missing data or no information. Being undecided is clearly telling us something about the person’s preference (i.e. somewhere between yes and no). I would consider that an intermediate outcome. See my comment above – perhaps use a value of 0.5 in this calculation (with 0 for “no” and 1 for “yes”, for each intervention).

3) Organization:

The introduction, though well written, is too long. It should focus on the directly relevant background for this study, but doesn’t need to be so wide ranging in covering so much ground on palliative care, patient preferences, SUPPORT, approaches to decision making, etc.

p. 6 – Is this really the “first” paper to explore end of life preferences in cancer patients? Almost certainly not the case…
The discussion section describes several papers with similar findings as this one. These are the papers that should be in the introduction, instead of much of the very broad background.

MINOR ESSENTIAL REVISIONS

-- The abstract does not convey any information about the statistical approach/testing that the paper uses.

--too many abbreviations (some non at all familiar to me) for the reader to keep track of. I would continue to write out CCI and SDM, and possibly some others, to make this more reader-friendly.

p. 7 – While the palliative care approach certainly favors an open-ended conversational manner, it does raise concerns about how standardized this was. Who administered the questionnaire? What were their instructions in doing so? If there were multiple interviewers, did you adjust for the identity of the interviewer?

Readers may not be familiar with the PPSv2 – more explanation of how it is measured, and whether it’s been validated, are necessary.

p. 8 – Was Charlson score calculated based on data/diseases at the time of referral, I’m assuming (as opposed to later in their disease, or near death)? The text doesn’t specify.

Tables 2- 6 are all unadjusted analyses. I am much more interested in knowing if these apparent associations persist in the multivariate model (of the kind discussed above).

P. 16 – “This study exemplifies shared decision making.” I disagree – the study talks about eliciting preferences, but doesn’t tell us what actually happened to the patients (which may be beyond the scope of the paper). But assessing preferences at the time of referral isn’t necessarily the same thing as actually making decisions; was this questionnaire used to guide treatments thereafter? How many patients/SDM’s actually stuck to their answers in choosing treatments as their disease progressed?

DISCRETIONARY REVISIONS

p. 9 – I think it should be “refused,” not “refuted.”

I would be interested in seeing one table that simply lists the mean % for the whole sample who want each type of intervention – this would convey which interventions are seen by patients as the most invasive an

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