Reviewer's report

Title: Socio-demographic and clinical characteristics of re-presentation to an Australian inner-city emergency department: implications for service delivery.

Version: 2 Date: 10 July 2007

Reviewer: Lehana Thabane

Reviewer's report:

General

This is a report of a retrospective observational study to determine the predictors of representation within 28 days at the emergency department (ED) based on patients who visited an ED of an Australian inner-city hospital.

This is a statistical review of the study focusing primarily on the design, methods and analytic strategies of the study.

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

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

1. Abstract, Background: Provide a brief background of the problem and its significance for service delivery.

2. Abstract, Methods: State the statistical methods used to analyze the data, including the criteria for statistical significance.

3. Abstract, Results:
   a. Indicate the denominator for the 14% (n = 5,718) patients who represented at the ED.
   b. Consider reporting the median time to representation instead of the mean. This variable is likely to have a skewed distribution.
   c. Consider providing the key demographic and clinical characteristics of the sample.
   d. Report the results in absolute numbers, indicating both the numerator and denominator used for percentages.

4. Methods, page 5: Study design: Provide the rationale for the choice of a 28-day interval for defining the primary outcome.

5. Primary Data Analysis, page 10, line 10: Replace “range” with “min-max” where min = minimum and max = maximum values.
6. Results:
   a. Page 12, line 15 from bottom: Replace “ranged” with “varied”.
   b. Page 12, line 13 from bottom: Replace “proportion” with “percentage”.
   c. See commend 3d.

7. References: Indicate the last date of access for all web references (e.g. references 8, 26, 37, 39, 40, 46, 47, 49).

8. Table 1:
   a. Consider reporting mean (standard deviation) or median (Q1, Q3). Reporting the mean or median without the corresponding measure of spread is not helpful.
   b. In the Table caption, replace “N =…” with “n =…” N is usually used to denote a population size while n is for sample size.
   c. Consider providing the descriptive statistics of the demographics by group (i.e. those who presented at least twice within 28 days vs the rest).

9. Table 2:
   a. See comment 8b.
   b. See comment 8c.

10. Table 3:
    a. Consider reporting OR (95% CI) and associated p-values. All p-values should be reported to the same number of decimal places.
    b. Indicate below the table what variables were adjusted for in the multivariable model.
    c. Indicate the goodness-of-fit statistics of the multivariable model at the bottom of the table. This should also be discussed in the text.

11. Tables 4 and 5: See comments for Table 3.

12. Other comment: Consider using a flow-diagram to summarize the selection process of patients for inclusion in the analysis.

Discretionary Revisions (which the author can choose to ignore)

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: 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 declare that I have no competing interests.