Reviewer's report

Title: The impact of adverse events in the intensive care unit on hospital mortality and length of stay

Version: 1 Date: 9 July 2008

Reviewer: Bill Runciman

Reviewer's report:

1/. The questions posed by the authors are well defined.
2/. The methods are appropriate and well described.
3/. The data are sound.
4/. Yes the manuscript adheres to the relevant standards for reporting and data deposition.
5/. The discussion and conclusions are well balanced and are adequately supported by the data.
6/. The limitations of the work are clearly and thoughtfully stated.
7/. The authors acknowledge and reference the work upon which they are building, although clearly no-one can be certain that they have discovered all unpublished work in the world.
8/. The title and abstract both accurately convey the nature of the study, although the title does not convey what has been found.
9/. The paper is very well written. There are a small number of revisions which the authors can most certainly be trusted to correct. These are:
   page 1, paragraph 3, line 4 - replace "to be most effective" with "for the most efficient use of resources". This is a suggestion.
   page 3, line 4 "infections" to become "infection"
   page 4, line 4 "ant" to become "and"
   page 4, lines 6 & 7 "including the nurse, the resident physician, and the attending intensivist physician" to become "the relevant nurse/s, resident physician/s, and attending intensivist physician/s" (This is a suggestion)
   page 4, second last line "All AEs were reviewed by the panel to determine if they were avoidable". I suggest "All AEs were reviewed by the panel to determine if they were avoidable with the available resources and currently accepted practices". This is a suggestion.
   page 9, line 3 I suggest that reference 5 be added to reference 11
   page 10, paragraph 2, line 2 delete the full stop after "stay"

I am not competent to make a judgement as to the adequacy of the statistical methods, and I suggest you use another reviewer with the appropriate statistical
I think this is an excellent piece of work with very interesting and new information which has important implications for the design of future research, and should therefore be published. It is coherent, scientifically sound, and does not duplicate the work others have published elsewhere.

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

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I have retired from active intensive care practice, and although I am active in the patient safety research area, I have no competing interests with this paper. I do have a financial interest in "Patient Safety International" (PSI), a commercial subsidiary of the "Australian Patient Safety Foundation" of which I am President. PSI markets incident reporting software. However, I doubt, except in the most indirect sense, that the publication of this paper would measurably benefit the use or dissemination of incident reporting systems, particularly the one marketed by PSI. I have no patents in relation to medical record review. I have no other financial or non-financial interest, in relation to this paper other than those outlined above.