Reviewer’s report

Title: Adverse events and in-hospital mortality: An analysis of all deaths in a Norwegian Health Trust during 2011

Version: 0 Date: 25 Jun 2016

Reviewer: Joseph Ibrahim

Reviewer's report:

A great deal of effort has been expended in the field work for this paper and the subject matter is of general interest. Essentially a retrospective cohort study where the outcome is death in hospital.

However, the manuscript does not describe the research method in sufficient detail that would allow it to be replicated.

In particular, the decision-making around the classification of the cases is inadequately described and potentially a source of significant bias. Although this limitation is acknowledged in the discussion it does not negate the impact on the study results.

The term 'unexpected' is prone to variation in interpretation, especially in a retrospective review. The potential for outcome, hindsight, self-reporting biases are present. In addition there is no standardisation in the judgements of the reviewers.

The results are incompletely described. The subcategories of age, gender, comorbidity, speciality areas are not reported for the different mortality groupings—there is no information about deaths that occurred post discharge or on admission to the emergency department. Are all the deaths in-hospital following admission as an inpatient?

The discussion is extensive with insufficient attention to the results and implication of results to the region, country and international practice.

The introduction does not place the reader in contemporary practice of mortality reviews, quality of care. There have been substantial research in this area since 2000 and the citations do not reflect most of this work.
Finally, there is a wealth of literature on the use of implicit, explicit medical record review which should be incorporated not the discussion.

I would encourage the investigators to review their manuscript with the STOBE guidelines [http://www.strobe-statement.org] and or the guidelines for reporting on quality improvement studies available at [http://qualitysafety.bmj.com/content/17/Suppl_1/i13.full]

A more extensive and detailed literature review is also required.

**Are the methods appropriate and well described?**
If not, please specify what is required in your comments to the authors.

No

**Does the work include the necessary controls?**
If not, please specify which controls are required in your comments to the authors.

Unable to assess

**Are the conclusions drawn adequately supported by the data shown?**
If not, please explain in your comments to the authors.

Unable to assess

**Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?**
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

Not relevant to this manuscript

**Quality of written English**
Please indicate the quality of language in the manuscript:

Needs some language corrections before being published
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