Author's response to reviews

Title: The impact of ICU format change on the outcome of high risk surgical patients: a cohort analysis

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Author's response to reviews: see over
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Dr Andreas Tzakis, Editor, BMC Surgery
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Ms. No.: 4063437234011717 “The impact of ICU format change on the outcome of high risk surgical patients: a cohort analysis”

September 30, 2010

Dear Dr Andreas Tzakis:

In response to the email we received from Jack Cochrane on September 16, 2010, I am sending you the revised version of the above manuscript. Enclosed with this letter we have provided details about how we have addressed the comments of each reviewer.

Two copies of the manuscript were sent electronically. One copy is a clean copy of the manuscript. In the second copy we have indicated with marginal notes where changes have been made.

We hope you agree with our changes and that the revised manuscript is now suitable for publication in BMC Surgery. Please let us know if any further adjustments are necessary.

On behalf of the authors,

Yours sincerely,

Fabian van der Sluis
Reviewer: Maurizia Capuzzo

Major compulsory revisions:
1 The authors agree with the reviewer’s comment that information with regard to the ICU characteristics is useful. We have therefore provided additional information on the number of ICU beds, nurse to patient ratios and number of admissions per year in the methods section.

2 The authors agree with the reviewer’s comment that the Standardized Mortality Ratio provides important information. We have therefore added the SMRs to our result section. Furthermore an explanatory sentence was added to the methods section and the difference in SMR between the two groups was mentioned in the discussion.

3 The authors agree with the reviewers comment that the current study does not asses the value of the IRIS score in screening patients for more elaborate therapy. Therefore we removed this statement from our discussion.

Discretionary Revisions:
We improved the discussion by combining the 3rd and 6th paragraph. Extra studies on the positive effects of having daily rounds by intensivists were added.
The authors disagreed with the editor’s last comment: whether the effect of mortality could also be due to admission policy. This we think is highly unlikely since patients admitted in the closed format group had higher mean APACHE II and IRIS scores.

Reviewer: Berhard Frey

Minor essential revisions:
1 In response to the first comment we added an additional table listing the complications that were scored and their definitions.

2 In response to the second comment we provided additional information on nurse to patient ratios (see response 1 reviewer Maurizia Capuzzo). Furthermore, in the discussion section we provided more detailed information on the organizational changes that were made.

3 In response to the third comment we illustrated the nationwide decrease in observed mortality with numbers (the nationwide SMR in 1999 and 2004).

4 An explanatory section on the IRIS score and the severity of surgery classification was added to the discussion

5 The SMR was calculated and added to the results and discussion section (see response to comment 2 of Editor Maurizia Capuzzo).
Further minor essential revisions: The authors agreed on all further minor comments and have corrected them accordingly.

Reviewer: Judith Jacobi

We agree with the reviewer’s notion on the shortcomings of our study. Unfortunately these shortcomings are inherent to the studies design. We emphasize these shortcomings in the discussion section of the manuscript.

Specific comments:

1 In response to the first comment: the name of the hospital is: Zaandam Medical Centre. We adjusted this accordingly.

2 An extra table was added in which all recorded complications and their definitions are mentioned (see response 1 reviewer Berhard Frey).

3 We agree with the reviewers comment that this statement is not supported by this study and have therefore removed it from the discussion.

Reviewer: Charles Vincent

The authors agree with the reviewers comment in that our results are biased by the interval between the periods of data collection. This is a shortcoming that is inherent to the design of our study. We emphasize this shortcoming in our discussion. Furthermore we specified the organizational changes that were made after format change (shifting responsibilities, daily rounds by intensivist, off-hours presence of intensivist). We also provided nurse to patient ratios and ICU characteristics. To put our results in a nationwide perspective we added nationwide SMRs.

We re-wrote the discussion section in order to make it more fluent and comprehensible (see response to last comments editor Maurizia Capuzzo).

Other changes made:

Because of the work associated with the requested revisions we changed the sequence of the authors.