Reviewer’s report

Title: Quality in perinatal care: applying performance measurement using Joint Commission on Accreditation of Healthcare Organizations indicators in Italy

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Reviewer: Joseph Restuccia

Reviewer’s report:

This is a study of the application of perinatal quality indicators with potential utility for other institutions to improve quality of perinatal care. It is generally well written but has a little room for grammatical improvements and is not clear in a few places, as specified below. The following are my specific comments.

In their conclusion the authors correctly point out that lack of reliability among quality measures between institutions and countries is a barrier to comparison of quality performance. They further state:

However, to ensure the improvement of hospital performance it is essential to increase efforts to implement evaluation processes that reflect the healthcare quality current evidence and related practice guidelines.

It would be useful to provide specific ways that these efforts could be implemented. For example, despite the difficulty of comparing performance with other institutions an institution can ensure that performance metrics are measured reliability within that institution thus enabling comparison of performance over time. Moreover, the utility of the study would be enhanced if this were done after a quality improvement intervention so that the research design were a pre/post treatment study.

In the introduction the authors state there are sparse and often non-standardized data for perinatal indicators in Italy. They would know this better than I would, but I am a bit surprised at this statement given the work of Sabina Nuti and colleagues for the past several years developing performance indicators across many medical conditions including maternal and child health.

The following statement is not clearly written:

Moreover, as reported by Clark et al.,[16] the calculation of this indicator is prone to errors related to data extraction, carelessness in clinical records documentation, such as presence of indication for delivery, but with ICD9CM code not approved on the JC exclusion list, or presence of valid indication for early term delivery which do not have an assigned ICD9CM code.
This statement also is not clearly written. Do the authors mean to say "limitations" rather than "criticisms"?

The significantly lower adherence to PC-05 of <2500 g birth weight newborns as well as in women with previous cesarean section, AROM and, as previous mentioned, with cesarean delivery, are important criticisms of our results. These findings suggest the involvement of several non-clinical factor that would seem to be attributable to the overly cautious attitude of the physician concerning patients' management, suggesting the need of healthcare professionals training improvement.

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

Yes

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

Yes

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

Yes

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.

I am able to assess the statistics

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

Needs some language corrections before being published

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