Reviewer's report

Title: Adherence to evidence based practices for childbirth before and after a quality improvement intervention in health facilities of Rajasthan, India

Version: 5 Date: 5 April 2014

Reviewer: Subha Sri Balakrishnan

Reviewer's report:

Major Compulsory Revisions

1. In the section on results, the authors use the number of facilities in which changes occurred as the unit of analysis rather than the number of deliveries. This is understandable as what is possible from the way the intervention and its evaluation are designed. However, it is not clear how the authors conclude that a change has taken place in routine practice in any particular facility. For eg. when the authors say “During the baseline period, the augmentation of labour was common in 93% of facilities, and episiotomy for primigravidas was a routine in 77% facilities. After the intervention, only 48% facilities were providing routine augmentation of labour, and 57% were providing routine episiotomy to primigravidas”, it is not clear how they define what routine practice is – is it based on just observation during the bi monthly visits (which can then lead to good practices being influenced just by the presence of an observer), is it when the practice is followed in more than a specific proportion of deliveries – this needs to be stated explicitly and clearly.

2. Also, when defining something as routine practice, how is heterogeneity amongst practices in a facility – by individual providers, level of providers, time of day – accounted for? This needs to be stated clearly.

Minor Essential Revisions

1. Some sentences in the results section give the impression that the number of deliveries is the unit of analysis – for eg. “the practice to monitor foetal heart sounds during labour increased from 9% to 48%”. This needs to be changed to reflect that the unit of analysis is the facility.

2. Similar changes as in Point No. 2 above need to be made in the titles of Tables 4, 5 and 6.

3. In the references section, there are some errors eg. in the date of publication, eg. in ref no. 8. Also, some references are cited more than once. This needs to be corrected.

Discretionary Revisions

1. It would be useful for future policy and programme to analyze the data by level of facility – was the change more in district hospitals vis a vis CHCs or vice versa? Also, some data on what level of providers – doctors, specialists, nurses,
nurse midwives – were more amenable to change would be useful to formulate further interventions.

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

**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:**

The authors and the organization they belong to, and this reviewer, are both part of a national level coalition that works on issues related to maternal and neonatal health and have worked together in the past on activities of the coalition.