Reviewer's report

Title: Assessment of medicines utilisation in neonates: comparison of a unit level medicines usage survey and individual level point prevalence survey

Version: 1 Date: 10 March 2014

Reviewer: Mike Sharland

Reviewer's report:

thank you for inviting me to review this paper.

major

the paper overall is useful and raises an important issue. the core of the paper is the comparability of two alternative methods of determining exposures to medicines. overall the paper is not very clearly written and some of the core issues of each method are slightly confusingly described.

specifically -

the paper compare a PPS with a SES which is really a short incidence survey - this should be made more clear in the methods. to determine overall exposure drug days per total patient days would be an alternative design and again this should also be discussed. it would for example have been a theoretical possibility to have conducted a more detailed exposure assessment in a fewer centres. the advantage of the broader and simpler approach in terms of cost and feasibility needs to be more explicit.

As the authors discuss a further option would have been to nest the PPS within the short incidence survey. This would have caused less problems than running the two surveys a different times in overlapping countries and centres. the reasons why this was not done need to be clearer. the short incidence approach could also be adjusted to provide excipient exposure days/100 patient days. this may be planned in a further paper, but again an explanation about why this was not done would be helpful.

overall i think this is a useful analysis of the two methods, but the paper could be much clearer about its core conclusions.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Needs some language corrections before being published

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

Declaration of competing interests:
i declare i have no competing interests