Reviewer's report

Title: Improving antibiotic prescribing for adults with community acquired pneumonia: does a computerised decision support system achieve more than academic detailing alone? a time series analysis

Version: 2 Date: 3 July 2008

Reviewer: Bryony Dean Franklin

Reviewer's report:

General comments

This revised paper is now much improved and I felt that it was much clearer in terms of what was done. As a result, I have a small number of outstanding points, most of which are minor.

Major compulsory revisions

There are none

Minor essential revisions

1. Abstract – I think this needs to make it clear that the baseline period was followed by the academic detailing period which was followed by the CDSS period. Perhaps just the word “successive” in the phrase “... three successive time periods...” would make this clearer. If you take out the word “period” after “baseline” then this would be neutral on word count!

2. Abstract – the methods section refers only to the time series analysis, but the results section mainly presents the data from the separate pre-post analysis. The sections should correspond.

3. Objectives section (page 5) – there are various spelling mistakes in the newly inserted section

4. Intervention (page 6) – during the CDSS period, was the academic detailing continued or stopped?

5. Data collection (page 9) – the paragraph describing the ceftriaxone restriction system should be in the setting and not in data collection, in my view

6. Statistical analysis (page 12) – need to state number of time periods included in the time series analysis

7. Results (page 15) – it is stated that the rate of prescription of cephalosporins empirically was 38.2%.... 38.2% of what? I couldn’t work out what this sentence meant.

8. Results (page 15) – it is stated that very little change occurred in the pricing of the relevant drugs over the study period – however elsewhere in the paper it is stated that no change occurred. The two statements are contradictory, and I
suspect only one statement is needed.

9. Discussion (page 19) – last para – I think this should be before the inserted section on multiple testing

Discretionary revisions

1. For tables 1 and 2, I appreciate that the authors have included the tests used in the text of the paper. However it is good practice that tables and figures should be capable of “standing alone” without reference to the main text - it would be good practice to include the statistical tests used in a footnote.

2. In relation to the issue of statistical significance – I completely agree with the authors' assertion that the usual cut off of a p value of 0.05 is somewhat arbitrary. However the authors used an alpha value of 0.05 in their sample size calculation, which suggests that there was an implicit assumption that this value was the a priori level of significance. It is usual practice to state an a priori level of significance in the statistical methods section. If the authors choose not to do this, then I feel it would be good practice to include an explicit statement to this effect in the statistical methods section.

Professor Bryony Dean Franklin
3 July 2008

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:

I declare that I have no competing interests