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: 1 Date: 19 March 2008

Reviewer: Steven Simon

Reviewer's report:

This is a nicely written manuscript describing one hospital's efforts to increase adherence to guidelines for the treatment of community acquired pneumonia. The authors attempted to assess the effectiveness of academic detailing and a computerized decision support system. While the authors conclude that deployment of CDSS was associated with an early improvement in antibiotic prescribing practices, the design of the study and the observed data do not permit any conclusion regarding the effectiveness of either intervention. The apparent secular trend of increasing guideline adherence during the baseline period is the most likely explanation for the continued increasing rates of guideline adherence observed in the academic detailing period and, subsequently, in the CDSS periods. Even with the authors' statistical attempts to control for the baseline trend, the picture (Figure 1) reveals unequivocally that guideline adherence was increasing prior to any intervention and could have been predicted – by drawing a simple line through the data points in the baseline period – to continue to increase in a pattern exactly as was observed, even if there had been no interventions. Although the authors appropriately discussed the key limitation of this study (i.e., the lack of control or comparison group), this lack of a control or comparison group further hampers the ability to draw conclusions about the effectiveness of the study interventions.

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Is it essential that this manuscript be seen by an expert statistician?

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