Reviewer's report

Title: Contribution of respiratory tract infections to child deaths: a data linkage study

Version: 3  Date: 23 September 2014

Reviewer: Alex Dregan

Reviewer's report:

Thank you for the opportunity to review an interesting research. The authors explored RTI-mortality rates in a large population of children. Strengths of the work include large sample size, data linkages for validation purposes, and use of administrative data for clinical diagnosis. As the authors acknowledge, the limited agreement between hospital records and death certificate data regarding RTI-related death definition represents a major weakness of the current manuscript. I have several minor comments that the authors may wish to address.

Abstract

Methods section: you may wish to mention data source for analysis

Methods:

The classification of winter and summer periods is questionable, and the authors may wish to use a different term (difficult to see how April or May or September can be considered winter months).

Did the authors have information on other children's characteristics, ie birthweight, pre-term birth, parents social class, BMI? These factors may be of relevance to the estimation models

The source of hospital admissions data is not made clear ie HES? Data cleaning procedures?

What about antibiotics prescribing?

Results

The second paragraphs of the results section is confusing different % of children with RTI on death certificates or hospital records up to 30 days before death are mentioned. What is the correct figure?

The authors may wish to quantify the agreement score in the text

Discussion

The authors may wish to discuss how antibiotics prescribing may influence
RTI-death in children. Could chronic condition therapy influence RTI onset and progression?

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

**Quality of written English:** Acceptable

**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