Reviewer’s report

Title: Cancer diagnosed by emergency admission in England: an observational study using the General Practice Research Database

Version: 3 Date: 4 June 2013

Reviewer: David Goldsbury

Reviewer’s report:

Thank you for this revised version, well done to the authors. The manuscript is generally very clear now and only a few minor changes are recommended.

Major Compulsory Revisions

None.

Minor Essential Revisions

1. Results, page 11 paragraph 2: The age comparison is confusing. Either leave out “Compared with patients aged between 15 and 44 years old and between 45 and 64 years old” and start the sentence with “The most marked decline in new …”, or say “Compared with patients aged between 15 and 64 years old there was a marked decline in new …”.

2. Results, page 12 paragraph 1: The geographical comparison made is Yorkshire & The Humber against each other category. Either replace “other regions of England” in the fourth sentence with “Yorkshire & The Humber”, or put it into the quoting of the first results as “East of England (RR 1.31 vs Yorkshire & The Humber, 95% CI …”.

3. Results, page 12 paragraph 1: The reporting of comorbidity comparisons needs to be tidied up to show that the comparison was against score 0 only, with “… score of 1 were most at higher risk compared with patients who had a score of 0 or at least 2 (RR …”). The same applies to the adjusted results on the following page – take out “at least 2”.

Discretionary Revisions

4. Abstract: The wording of the third sentence of the results needs some minor adjustment, something like “people who were of older age … or who had a total Charlson …”.

5. Methods, page 8 paragraph 2: “… we tracked back to the patient’s first record in the dataset” – please specify the dataset.

6. Methods, page 9 paragraph 1: Specify the three bands of Charlson Index scores.

7. The sentence regarding diagnosis codes recorded in emergency and non-emergency routes is a little confusing. Is it saying that 540 cancers were in both datasets or that there were 540 cancers that met the criteria of being a
cancer that was possible to record in both? Not sure it adds anything.

8. Results, page 13 paragraph 1: The two reference categories that are in brackets in the first sentence do not need to be listed.

9. Discussion, page 15 paragraph 2: The sample size is very high by sex, so perhaps the findings for sex “may again be due to the small sample size or the cancer types included in the study”.

10. Is there any information about the completeness of comorbidity recording in the data sets? The numbers of people with a comorbidity seem very low. This could be included at the top of page 18 regarding missing data “such as ethnicity, and social deprivation and comorbidities, although…”

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

**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.