Reviewer's report

Title: Using routine data to monitor inequalities in an acute trust: a retrospective study

Version: 1 Date: 13 October 2011

Reviewer: Boika Rechel

Reviewer's report:

Major revisions

The main limitation of the study is that it is under-powered to detect differences in the health outcomes it sets to explore. Power calculations have been performed retrospectively only for the surgical procedure for which the largest set of observations was available in the original dataset (coronary angioplasty), and even for this procedure the sample size was too small. It is not clear why sample size calculations have not been performed at the conceptual stage of the study. As the authors suggest, pooling data from multiple trusts (e.g. from a county, or neighbouring boroughs in London) may be able to result in a more meaningful analysis. Furthermore, considering the socio-economic profile of the sample, it appears that the majority of the patients belong to deprivation quintile 4-5, and fewer patients are from quintiles 1-3, which raises the question whether the sample is representative of the diversity of the population, or in other words is this particular acute trust serving a predominantly deprived population, thus little variation could be detected. This limits further the external validity of the study.

Minor revisions

Page 3. It is stated that the “study focuses on inequalities in the care provided by an acute trust, rather than access to services”. Waiting time, which is considered in this paper, can be an indicator of access to care.

Page 3. “The evidence of waiting times is inconsistent…” it is not clear what evidence has been considered: UK, Europe or worldwide.

Page 4. “For example, in a study of total knee replacements, those from more socio-economically deprived areas were found to stay longer without morbidity” What is meant by without morbidity? (co-morbidities or differences in clinical status)

Page 6. “transfers to other hospitals were also linked to avoid multiple coding”. This part is not clear. What proportions of patients were transferred to other hospitals? Was their stay at another hospital after transfer considered to be part of the same admission episode for the purposes of length of stay, readmissions etc?
Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

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

Declaration of competing interests:

I declare that I have no competing interests.