Reviewer’s report

Title: Community-level determinants of obesity: harnessing the power of electronic health records for retrospective data analysis

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Reviewer: Jose Alberto A Maldonado

Reviewer’s report:

The overall scope of the paper is relevant since it is aligned with one current hot topic in (bio)medical informatics: the reuse of EHR data in research. The paper is well written, the structured is adequate and the level of detail is sufficient. Nevertheless and in my opinion, the paper is not suitable for publication in a medical informatics journal such as BMC Medical Informatics & Decision Making. My main concern is that the “informatics” part is missed. The paper fits in a medical/public health/epidemiology/… journal rather than in a medical informatics one. Actually only 3 out of 43 references in the paper are from medical informatics journals. The paper describes a use case and it seems than data was collected and integrated manually and then analyzed. There is no reference to any informatics tool or methodology used to seamlessly integrate and augment EHR with community-level data. The reuse of EHR in clinical research is a difficult topic. An important problem is the heterogeneity of clinical data sources, which may differ in data models, schemas, naming conventions, semantics, and degree of detail used to represent similar data. Furthermore, clinical research very often require data at a level of abstraction higher than raw clinical data, a problem known as the “impedance mismatch”. Any paper about this topic to be published in a medical informatics journal should give some insights or solutions about the aforementioned problems.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

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 interest