Reviewer's report

Title: The influence of population characteristics on variation in general practice based morbidity estimations

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Reviewer: Daiki Kobayashi

Reviewer's report:

This study is about influence of population characteristics, such as socio-economic status and urbanization, on variation in general practice based morbidity estimations. It is very interesting at the aspect that how these characteristics affect on variation. And it may be useful to compare each general practice and networks more correctly.

However, there are a few points which need more explanation as follows.

1. In Page5, the authors used six GPRNs to analyze. Did these six databases represent general Dutch population? More explanation, such as how many databases are there in Dutch, how different these databases from all databases, and why these six databases were elected, may be needed.

2. In Page 12-13, the authors concluded that this study showed that one of the factors could not explain these differences. However, some of diseases seemed different after adjusted in Table3, such as Gastrointestinal tract infection. Although I know that it may be difficult to compare models before adjusted with those after adjusted statistically, it may need the definition that the factors could not explain these differences.

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.