Reviewer's report

Title: On Designing of a Low Leakage Patient-Centric Provider Network

Version: 0 Date: 31 Oct 2017

Reviewer: Uma Srinivasan

Reviewer's report:

The paper describes an approach to detect 'service leakage' by using a data driven approach to identify naturally occurring provider networks, which is different from established provider networks to service diabetic patients in a particular geography.

The data used in the analysis and the techniques to detect communities, and the use of export/import analysis to analyse patient leakage are explained well.

However, the paper is a bit cumbersome to read for a non-American reader, as the paper has too many acronyms and abbreviations, some of which have not been explained. For example, FFI, NPI, are acronyms that ahve not been explained and once has to deduce what they mean. Suggest have a table of all acronyms.

Also there are several terminology definitions that are similar, but not the same. Definitions of all terms used in the paper have to be clearly specified right in the beginning. For example, provider network, patient-centric network, data driven community, etc.

A few other points need clarification: Abstract - line 5 . What do you mean by 'patient quality' ? needs a formal definition.

In METHOD section - line 6 you talk of products -- give a couple of examples to clarify what you mean by products.

Some grammar and typos:
In the Results section - Para 5 - line 1 Line(59 on page) - "The RCA analysis surfaces........ effectively ----. Change 'effectively' to 'effective in importing....

In the Method section - line 3 ...enrolled in 'any one of' .....CDPHP

The limitation of the paper is the relatively small sample size of patients , so it is difficult to generalise the findings.
Are the methods appropriate and well described?
If not, please specify what is required in your comments to the authors.

Yes

Does the work include the necessary controls?
If not, please specify which controls are required in your comments to the authors.

Unable to assess

Are the conclusions drawn adequately supported by the data shown?
If not, please explain in your comments to the authors.

Yes

Are you able to assess any statistics in the manuscript or would you recommend an additional statistical review?
If an additional statistical review is recommended, please specify what aspects require further assessment in your comments to the editors.

I am able to assess the statistics

Quality of written English
Please indicate the quality of language in the manuscript:

Acceptable

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