Reviewer's report

Title: Medical Practices Display Power Law Behaviors Similar to Spoken Languages

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Reviewer: Bruno Gaume

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This paper analyse population level patterns of patient derangement combined with practitioner intervention word usage.

The question is well defined and methods are appropriate.

"Word-Symbol" are created by concatenating each patient derangement symbol with the practitioner response symbol.

However, it is not described in this paper how the data are constructed, there is only a reference to a previous paper ([7] which I was not able to have access to the web). Some lines describing how are built these "Word-Symbol" with some examples would help the reader.

The authors studied the frequency distribution of these "Word-Symbol" on two unrelated domains of medical care.

They show that frequency distribution of these "Word-Symbol" display power law relationships identical to those of natural languages.

They conclude that this result suggest that patterns of medical care can be approached using quantitative linguistic techniques what could have implications for the assessment of expertise, machine learning identification of optimal practices, and construction of bedside decision support tools.

Note: all figures are double?

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 have no conflicts of interest to report.