Reviewer's report

Title: Building a learning community of Australian clinical genomics: a social network study of the Australian Genomic Health Alliance

Version: 0 Date: 12 Nov 2018

Reviewer: Geoffrey S. Ginsburg

Reviewer's report:

This is an interesting report that uses social networking analysis to study the impact of the Australian Genomic Health Alliance on both relationship development and learning within the genomic medicine community. The results show that compared with pre AGHA, 2 years post there was a significant increase in collaborations both inside and outside Australia with several key influential nodes. The use of the network analysis is innovative, but I suggest some aspects of the results and conclusions be addressed as follows:

(full disclosure, I am not a social scientist and not completely familiar with the methods).

1. how do the network statistics compare with other networks either in country or outside? This goes to the question of what is the appropriate control for this study - for example is a density of 0.043 good or bad? can this issue of controls be addressed?

2. how has funding from the AGHA influenced the network ties? could the identification of the Australian Genomics Manager as a 'key player' be related to whether that role was a source of either funding or funding announcements, or other sources of knowledge that would drive the ties to that player? Can the authors states something about the financial investment in and resources provided by the AGHA to the collaborative community? what would the authors expect without any resources to drive Flagship projects, for example?

3. what were the key drivers of new ties?

4. the last sentence of the paper is something that should be elaborated on - what are the implications for implementation? what are some of the best practices that the AGHA can provide to other networks such that they learn from one another? I think ending the paper with a short section on these take-a-ways will make this a more impactful paper.
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?
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