Rapid Reviews COVID-19

Review 2: "Assessment of physiological signs associated with COVID-19 measured using wearable devices"

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RR:C19 Evidence Scale rating by reviewer:

- **Reliable.** The main study claims are generally justified by its methods and data. The results and conclusions are likely to be similar to the hypothetical ideal study. There are some minor caveats or limitations, but they would/do not change the major claims of the study. The study provides sufficient strength of evidence on its own that its main claims should be considered actionable, with some room for future revision.

Review:*General comments:*

This manuscript does an excellent job in demonstrating two approaches to assessing COVID-19, a symptom-based approach and a physiological signs-based technique. 1,181 active Fitbit users in the USA and Canada were invited to participate in a survey of whether they have experienced COVID-19 or similar infections. The physiological data of each user was calculated daily using the data recorded from their Fitbit device. The authors concluded that hospitalization risk can be calculated from self-reported symptoms, and that predictive physiological signs related to COVID-19 may be detected by consumer wearable devices.

I was pleased to see that the main study claims are generally well-justified by its approaches and data analytic methods used. The manuscript cites recent related literature work and discusses several limitations which may confound some of its findings.

To sum up, I think that this paper is well written and is an important addition to the literature, particularly to enhance response to COVID-19 or similar influenza pandemics. I would recommend that the author of the manuscript should be given the opportunity to publish with the RR:C19 Journal.

Other comments:

- I would kindly recommend more clearly and specifically mentioning the use of a Fitbit device in this study in the abstract section as well as in the last paragraph of the introduction.
- In line 10 of the abstract, please remove one "and."