

Dear Editor and Reviewers

We greatly appreciate your review of the manuscript titled 'Digital Phenotyping in Depression Diagnostics: Integrating Psychiatric and Engineering Perspectives'. Please see below our responses to your comments and questions

Reviewer's comments:

-First of all, I would like to thank the authors for their excellent efforts in preparing the manuscript. As this a review article, why is there a discussion part? Regarding tables and figures, it is not clearly stated if they are made by the authors or copied from other references. It should be clearly identified to avoid future third party conflicts. The authors did not focus on the reactions of patients with depression, as such patients may not well cooperate with treating staff.

-This review paper is to integrate, evaluate, and synthesize evidence-informed literature from both clinical and engineering perspectives. The goal is to present a clinically-relevant, evidence informed review beneficial to clinicians, engineers, and researchers from diverse disciplines, and to help advance multidisciplinary collaborations with clear clinical objectives. On the whole, the information contained in the paper is very rich and comprehensive, showing great value. However, the whole paper is comprehensive, but the focus is not obvious. I think the depression prediction system, DepWatch mentioned by the author in the paper is very interesting. The application of machine learning or artificial intelligence in the diagnosis of depression is very promising. I suggest that the author describe this part in more detail.

Our responses and related revisions:

- We have added references to tables and figures where necessary to clearly indicate if they were copied/adapted from other sources. All other figures and tables are created by our team
- We have added a 'Machine Learning' section just prior to the 'conclusion section to delineate clinical relevance of machine learning and its future in digital phenotyping
- About 'reaction of patients'- Unfortunately, we did not collect this data in any of our studies and could not find specific literature addressing this issue. We plan to gather this data in our ongoing mHealth study for depression

Kind Regards,

Jayesh Kamath & Co-authors