



## LETTER TO THE EDITOR

# Response to “Wearable Remote Monitoring and COVID-19”

Dear Editor,

It is our pleasure to reply to the letter by Mungmumpuntipantip and Wiwanitkit. The authors raise important general points concerning the use of remote monitoring tools worldwide, let alone in the context of the coronavirus disease 2019 (COVID-19) pandemic. We agree that successful deployment of remote monitoring tools is complex and requires careful consideration to disease context, technology availability, and local and regional environmental conditions, including healthcare systems, regulations, and resources, as well as cultural context, and the individual needs.<sup>1</sup>

What the COVID-19 pandemic has taught us is that these tools can be of significant importance to the care of patients. For example, the deployment of telemedicine in India during the early days of the pandemic demonstrated that it is feasible but not without challenges.<sup>2</sup> Nevertheless, the concept of remote monitoring must be customized to meet the needs of the context. This is true within countries as it is true between countries and regions.

In our article, we proposed a selection of tools amenable to remote monitoring of lung conditions in one of these contexts. We believe that these tools in community-based studies will enable creation of comprehensive datasets to characterize pulmonary function in patients who experience long term effects of COVID-19. This will help to bring an understanding of the natural history of the disease, the measurement properties of these tools, and help guide a choice of tools and monitoring paradigms in future clinical research and clinical care customizable for many environments. As an example of this potential, local customization of formulations and treatment paradigms has been achieved in the area of therapeutics, as demonstrated in the case of HIV treatment.<sup>3</sup>

Finally, the importance of collecting the natural history of morbidity and mortality cannot be sufficiently emphasized. Successful patient monitoring during the acute phase of infection has been shown to reduce the morbidity rates.<sup>4</sup> The remote monitoring of such patients across many environments provides the potential for an improved management of patient conditions and therefore improved clinical outcomes.

## FUNDING INFORMATION

No funding was received for this work.

## CONFLICT OF INTEREST

E.S.I. is an employee of Koneksa Health and may own company stock. T.F.R. is on the Advisory Board of Koneksa Health, and received stock options from the company. He is a member of the Board of Directors of the American Thoracic Society, the FDA Science Board, and has been an advisor to other pre-commercial biopharma companies. He was previously employed by Merck Research Labs, Novartis, Celgene, Covance, and Vanderbilt University.

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