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Patient-reported outcomes: central to the management of COVID-19

Patient-reported outcomes—self-assessments of patient health status—are central to COVID-19 response, recovery, and resilience.

Symptom reporting using patient-reported outcomes can facilitate diagnosis of the disease, identify those who require tests, and initiate track and trace procedures. Additionally, remote monitoring of symptoms with the use of electronic patient-reported outcomes can help identify those with severe COVID-19 who are in need of urgent care and those with mild-to-moderate symptoms that

can be managed at home. The use of electronic patient-reported outcome systems is especially important because rapid deterioration can occur in patients with mild symptoms. Remote monitoring could also facilitate the triage of patients with chronic conditions ensuring that inperson hospital appointments are reserved for those with potentially life-threatening issues. Individuals with lower risk could be supported virtually and monitored for signs of deterioration. This approach can relieve the strain on health-care systems and prevent unnecessary exposures to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2).1

We are just beginning to understand the long-term effects of SARS-CoV-2 infection. The symptoms have returned in some patients a few months post-recovery, and others have developed serious conditions such as Kawasaki-like disease. Patient-reported outcomes could be used for long-term follow-up to assess the effect of the disease on a patient's quality of life and to alert physicians to the development of potentially life-threatening complications.

Work has begun in earnest to develop effective drugs and vaccines to stem the spread of SARS-CoV-2 and prevent future outbreaks. Nevertheless, some unknowns such as potency, side-effects, and adverse events might only come to light during human trials. The first in-human COVID-19 vaccine trial used diary cards completed by trial participants to monitor adverse events.2 Although it was encouraging that participant views were sought, we recommend the use of validated patient-reported outcome instruments such as the patient-reported outcomes version of the National Cancer Institute's Common Terminology Criteria for Adverse Events (CTCAE).3 Use of this instrument in COVID-19 trials could complement the clinical CTCAE and facilitate cross-trial comparisons of results. Evidence suggests that patient-reported outcomes can detect adverse events in patients even before clinical parameters.⁴ Thus, patient-reported outcome data could alert clinical teams to the occurrence of adverse events during COVID-19 trials and provide valuable evidence on safety and tolerability from the patient perspective.

Furthermore, as there have been suggestions that vaccine hesitancy could derail vaccination initiatives,⁵ publication of patient-reported outcome data from vaccine trials could help to combat this hesitancy.

Responding to the crisis and building a resilient health-care system that will allow an efficient and effective response to future pandemics is crucial. To this end, patient-reported outcomes could provide a key tool in our defence system.

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