

Prolonged SARS-CoV-2 positivity: a challenge for Australian clinicians

TO THE EDITOR: The New South Wales Department of Health has taken necessarily stringent steps to reduce the risk of workplace outbreaks during the coronavirus disease 2019 (COVID-19) pandemic. Currently, two nasopharyngeal samples, analysed by polymerase chain reaction (PCR), negative for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) are required before asymptomatic individuals can return to high risk workplaces (eg, hospitals, schools and prisons) or close proximity living arrangements (eg, residential aged care facilities, military barracks, and group homes).¹⁻³

In Newcastle, existent hospital in the home services have been redeployed as part of a tiered pandemic response under the banner "COVID Care at Home". COVID Care at Home offers daily telehealth monitoring and efficient clearance certification for patients in isolation or excluded from workplaces. In our experience with 45 patients with

COVID-19 admitted to COVID Care at Home, increased PCR surveillance also uncovered cases of prolonged RNA detection. One passenger from the vessel *Ruby Princess* tested positive for COVID-19 52 days after the initial swab and more than 60 days after the first day of symptoms.

A review of international data showed that PCR positivity usually persists for 20–30 days regardless of symptomology.⁴ Cases of SARS-CoV-2 RNA detection persisting for 60 or even 80 days have been recorded in the literature.^{5,6} In the case of our patient, the ongoing exclusion from the workplace created significant psychological and financial burden due to lack of leave entitlement. Similar policies in countries with less worker security are likely to have even greater workforce impact. To tackle the issue of prolonged positivity, we have convened a panel of clinicians in the disciplines of infectious diseases, population health, and microbiology to make informed decisions about patients with prolonged viral RNA detection in regard to their ongoing need for isolation and exclusion from high risk environments.

PCR positivity is not synonymous with infectivity.^{7,8} Regardless, to maintain the good results Australia has enjoyed thus far, we will need to persevere with a high level of vigilance. Making informed and safe decisions about clearance for high risk environments and supporting patients with prolonged exclusions from their workplace will be an ongoing challenge for Australian clinicians during the COVID-19 pandemic.

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