

Outcomes for patients with COVID-19 admitted to Australian intensive care units during the first four months of the pandemic

IN REPLY: We thank Wynne and colleagues¹ for highlighting the vital role that critical care nurses played in the Australian response during the first four months of the coronavirus disease 2019 (COVID-19) pandemic. We agree that a central driver of the outcomes reported was the adequate, and at times increased, levels of staffing of intensive care units (ICUs) by experienced and highly trained critical care nurses.²

The relatively low peak occupancy of ICU beds by patients with COVID-19 (14%; interquartile range, 9–16%)² meant that ICUs across Australia maintained normal 1:1 nurse to patient ratios for all high acuity patients (usually invasively ventilated, but not exclusively), and 1:2 for those needing less intensive care.³ Furthermore, in 7.5% of ICU days (171/2270), it was possible to increase the nursing to patient ratio even further to 2:1. This increased ratio reflected the many additional roles performed by critical

care nurses throughout the pandemic, such as monitoring the application of personal protective equipment, education, leadership, and maintenance of safety and clinical standards, all of which were essential in delivering high quality care. It is interesting to speculate that the relatively low rate of health care worker admissions (8% of total ICU admissions) may have reflected the effectiveness of this additional nursing capacity and expertise.

Importantly, there was no requirement to move the care of critically ill patients into non-ICU settings or use non-critical care trained staff, as has been seen in other more overwhelmed systems around the world.⁴ These practices have been associated with worse outcomes in non-COVID-19 settings.⁵ The Australian ICU system, staffed by highly trained, adaptable, critical care nurses, delivered the highest quality of care possible, ensuring better than expected outcomes.

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