

Intensive Care Response to the Commonwealth Government COVID-19 Response Inquiry 15th December 2023

The Australian and New Zealand Intensive Care Society (ANZICS)

About Us

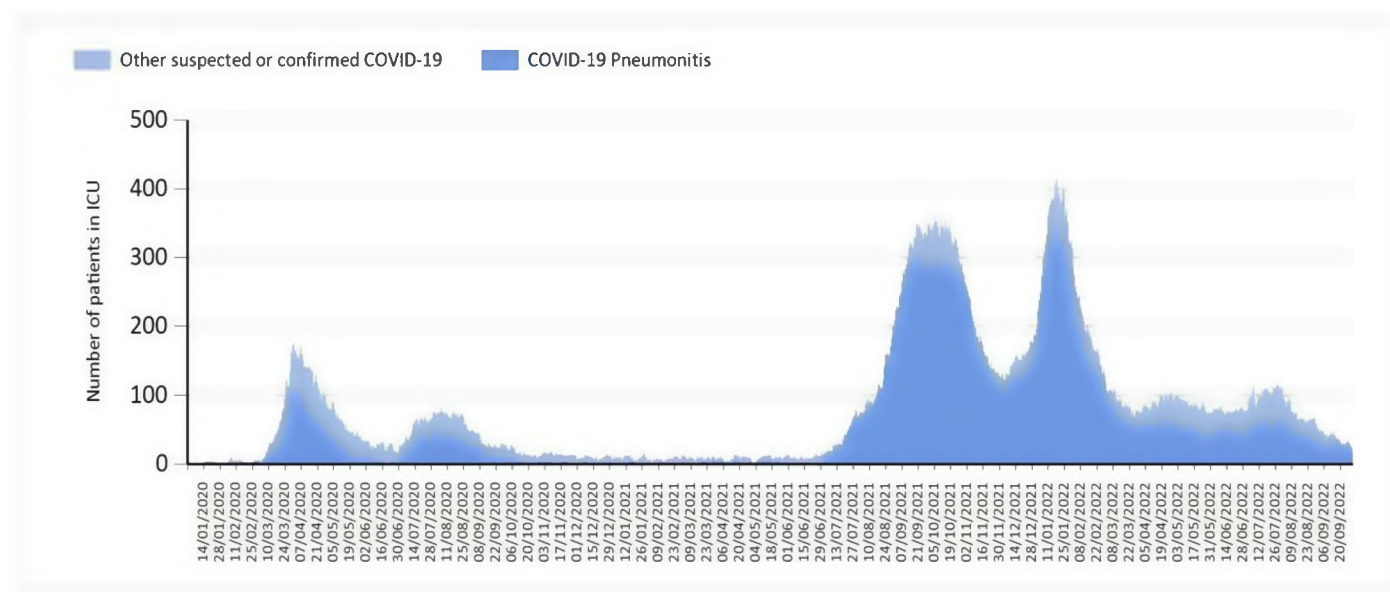
The Australian and New Zealand Intensive Care Society is a member-based, bi-national organisation and a leading advocate for the intensive care sector. The Society's diverse service portfolios include clinical quality registries, clinical research, professional advocacy and facilitation of health initiatives in resource-limited locations.

ANZICS is appropriate to represent the interests of clinicians providing care for critically ill patients in Australia and provide the following recommendations based on collective lessons learned from the COVID-19 pandemic.

It was apparent in early 2020, based on observations from international experience, that intensive care capacity and capability in Australia would be vital to the health of the Australian community throughout the COVID pandemic. This proved correct, with significant strain placed on intensive care services and clinical staff. ANZICS was a key stakeholder in the early development of COVID-19 guidelines, recognising the lack of capacity and the potential for vulnerable populations, in particular how Indigenous Australians were to be affected.

Despite this, due to effective public health measures and the quality of intensive care services in Australia, the clinical outcomes for critically ill COVID-19 patients were world-leading. However, the effect on the system was significant, decreasing capacity to care for patients with other acute conditions or awaiting major elective surgery. For some non-COVID-19 patient groups, clinical outcomes were worse during the COVID-19 pandemic.

Daily census of ICU Patients in Australia with suspected or confirmed COVID-19 in Australia



KEY LESSONS LEARNED

1. Australia had excellent outcomes for COVID patients.

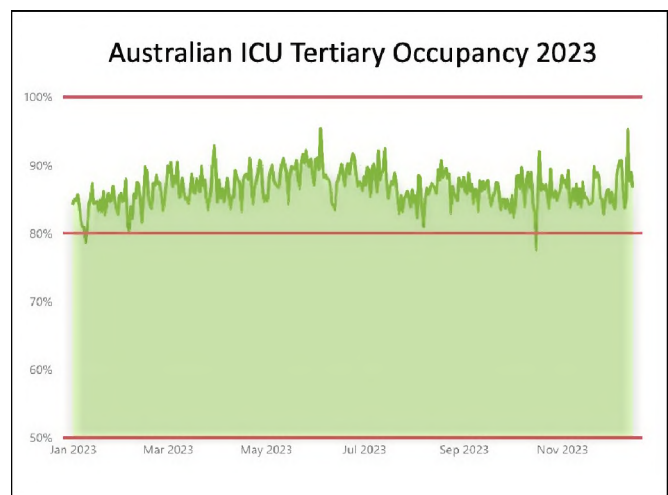
The quality of intensive care services in Australia has long been recognised as world-leading, particularly in terms of clinical training, workforce capability and patient outcomes, and this was demonstrated during the COVID-19 pandemic.

2. Collaboration between the federal government and the intensive care clinical teams was vital to the success of the Intensive Care Response.

During the pandemic, an ad-hoc collaboration between the federal government and the intensive care community was formed, specifically via meetings with the deputy CMO and intensive care clinical leads. This enabled effective shared understanding of the issues facing both the clinicians and the federal government. This committee has been disbanded, and there is currently no equivalent in place moving forward to advise the federal government on issues relating to intensive care, particularly as it relates to pandemic preparedness.

3. There was extreme strain placed on the intensive care workforce, particularly in NSW and Victoria.

High levels of burnout and stress were reported by intensive care staff both during and after the COVID-19 pandemic. The cause of this strain was predominately the lack of capacity in the intensive care system, which operates at close to 100% capacity continuously in Australia. Therefore, when expanded intensive care services were required to meet the COVID demand, the workforce demands on skilled staff were unsustainable. Workforce strain for intensive care is a national problem but is most severe in regional and rural ICUs, which are often reliant on fly-in and fly-out intensivists who also work in metropolitan and tertiary centres.



4. The lack of capacity in the intensive care system meant that with the impact of COVID-19 there were worse outcomes for non-COVID19 critically ill patients.

Evidence suggests there was a rise in-hospital mortality among people admitted to Australian ICUs with conditions other than COVID19 from March 2021, which reversed the improvement of the preceding five years. Specific changes that may have contributed to increased mortality include system-level factors, such as the withdrawal of strain mitigation strategies (e.g., staff redeployment), increased demand for ICU services, and changes in the availability of experienced staff following losses to burnout or leave. <https://doi.org/10.56>

5. Inconsistency in advice for infection prevention denied staff a safe working environment.

Particularly in the early stages of the pandemic, there was a lack of clarity in the national infection control advice for COVID19, and this problem was replicated at a state level. Therefore, the ICU community released its own infection control guidelines for COVID19. This was published in March 2020 and was highly valued by clinicians. There were four iterations of the guideline over the course of the pandemic.

6. Implementation of a national ICU data platform (CHRIS), as funded by the federal government, was key to enabling safe ICU provision, as was the use of existing intensive care data platforms.

Existing intensive care data platforms and systems enabled the collection of data to allow real-time visibility of activity and resources. Examples of these include the ANZICS CORE database and the CHRIS platform.

ANZICS CORE: The **ANZICS Centre for Outcome and Resource Evaluation (CORE)** Clinical Registry proved to be pivotal early in the pandemic. The registry was identified as the most reliable source of information to inform national ICU planning and gain a clear understanding of intensive care resources and constraints. The responsive and collaborative nature of the ICU community was reflected in the ability of ANZICS to meet the request of the Australian Government Department of Health to measure intensive care surge capacity.

Over the COVID19 pandemic, ANZICS collaborated closely with Jurisdictional and Commonwealth Health Departments and other data agencies to provide accurate insights about the activity and outcomes not only of patients with COVID-19 (surveillance, levels of vaccination, ICU demand) but also the overall impact on all critically ill patients and on the health care system more broadly. Summary highlights of the [ANZICS COVID Report January 2020 to September 2022](#) are:

- Between 01/01/2020 and 30/09/2022, there were 9,928 patients who had 10,340 admissions to 140 out of 173 ICUs in Australia with suspected or confirmed COVID-19.
- These patients accounted for 72,141 ICU bed days. This is equivalent to almost 200 ICU beds filled with COVID-19 patients for a whole year!
- Amongst those admitted with confirmed COVID-19 pneumonitis, in-hospital mortality was 20.0% and 30.2% in those who needed invasive mechanical ventilation. These are some of the best survival statistics in the world.
- Duration of stay in ICU was Mean 9.1 days, with Median 4.8 days (IQR 2.1 - 10.5), and a Mean 17.8 days; Median 12.1 days (IQR 6.9 - 21.6) in those who needed invasive mechanical ventilation.

CHRIS (Critical Health Resource Information System): A nationwide dashboard of ICU activity, CHRIS was rapidly developed as a collaboration between ANZICS, Ambulance Victoria, Telstra Purple and the Australian Government Department of Health. Providing real-time data on ICU activity and capacity, CHRIS facilitated the transfer of critically ill patients and enabled early diversion of ambulance presentations to emergency departments at hospitals where ICUs had capacity. This assisted in providing real-time system planning, maintained optimum standards of care and provided overall visibility of the ICU sector.

RECOMMENDATIONS

1. **Implementation of a national intensive care advisory committee** that ensures formal links between the Intensive care clinical community and the federal government to maintain communication, national intensive care capability planning and pandemic preparedness.
2. **The CHRIS data platform is provided with secure ongoing federal funding** and is optimised to enable the monitoring of available intensive care resources and operational capacity.
3. **The soon-to-be-enacted Australian CDC functions** as an independent, trusted source of public health advice, enabling safe and consistent infection prevention practices across Australia. The CDC should also have direct consultative links to intensive care physicians.
4. To ensure the availability of intensive care services for critically ill patients, particularly during times of strain, **a national target of 80% intensive care occupancy is mandated and supported at a federal level.**
5. **Federal government-led initiatives, partnered with states and the intensive care workforce, are developed to improve the current workforce shortfall in intensive care across all disciplines**, including medical, nursing and allied health, with a particular focus on developing sustainable staffing of intensive care units in regional Australia.