



## **Supporting Information**

### **Supplementary tables**

**This appendix was part of the submitted manuscript and has been peer reviewed.  
It is posted as supplied by the authors.**

Appendix to: Litton E, Huckson S, Chavan S, et al. Increasing ICU capacity to accommodate higher demand during the COVID-19 pandemic. *Med J Aust* 2021; doi: 10.5694/mja2.51318.

**Table 1. Surge survey questions**

<b>In your <u>hospital</u> today, how many of the following are there?</b>	
<b>ICU bed capacity</b>	
1	Available staffed, equipped and presently open ICU beds
2	Physical ICU bed spaces (i.e., total physical bed spaces within your ICU) N.B. Physical beds cannot be less than Available beds.
3	Bed spaces outside of your present ICU capable of looking after invasively ventilated patients (with piped gas outlets and monitoring) e.g., 'surge ICU' in OT recovery area
<b>Isolation</b>	
4	N-class (negative pressure) rooms inside your present ICU
5	S-class (single) rooms inside your present ICU
6	6. Does your hospital contain an area/pod which can be isolated as a high air exchange or negative pressure environment, and which has already been identified as having capability to care for COVID-19 ICU patients?
7	Total physical ICU bed spaces for COVID-19 patients in areas referred to in question 6
<b>Equipment - ventilators, dialysis machine and ECMO</b>	
8	Standard 'ICU-style' ventilators capable of providing invasive mechanical ventilation
9	Other ventilators (e.g., for transports) capable of providing invasive mechanical ventilation
10	Anaesthetic machine ventilators (throughout the whole hospital)
11	Non-invasive ventilators capable of delivering invasive ventilation (throughout the whole hospital)
12	Haemofilters/dialysis machines available for use in your ICU
13	ECMO machines available for use in your ICU
<b>Staffing - available to staff a surge ICU for one month</b>	
14	Additional senior medical staff FTE (critical care capable)
15	Additional junior medical staff FTE
16	Additional critical care nursing staff FTE

**Table 2. Contributing ICUs**

Albury Wodonga Health, Alfred Hospital, Alice Springs Hospital, Angliss Hospital, Armadale Health Service, Ashford Community Hospital, Austin Hospital, Ballarat Health Services, Bankstown-Lidcombe Hospital, Bathurst Base Hospital, Bendigo Health Care Group, Blacktown Hospital, Bowral Hospital HDU, Box Hill Hospital, Brisbane Private Hospital, Broken Hill Base Hospital & Health Services, Buderim Private Hospital, Bunbury Regional Hospital, Bundaberg Base Hospital, Caboolture Hospital, Cabrini Hospital, Cairns Hospital, Calvary Adelaide Hospital, Calvary Bruce Private Hospital HDU, Calvary Health Care Riverina (Wagga), Calvary Hospital (Canberra), Calvary Hospital (Lenah Valley), Calvary John James Hospital, Calvary Mater Newcastle, Calvary North Adelaide Hospital, Campbelltown Hospital, Canberra Hospital, Canterbury Hospital, Casey Hospital, Central Gippsland Health Service (Sale, Coffs Harbour Health Campus, Concord Hospital (Sydney), Dandenong Hospital, Dubbo Base Hospital, Echuca Regional Hospital HDU, Epworth Eastern Private Hospital, Epworth Freemasons Hospital, Epworth Geelong, Epworth Hospital (Richmond), Fairfield Hospital, Fiona Stanley Hospital, Flinders Medical Centre, Flinders Private Hospital, Footscray Hospital, Frankston Hospital, Gold Coast Private Hospital, Gold Coast University Hospital, Gold Coast University Hospital ICU-paeds, Gosford Hospital, Gosford Private Hospital, Goulburn Base Hospital, Goulburn Valley Health, Grafton Base Hospital, Greenslopes Private Hospital, Griffith Base Hospital, Hawkesbury District Health Service, Hervey Bay Hospital, Hollywood Private Hospital, Holmesglen Private Hospital, Hornsby Ku-ring-gai Hospital, Hurstville Private Hospital, Ipswich Hospital, John Fawkner Hospital, John Flynn Private Hospital, John Hunter Children's Hospital, John Hunter Hospital, Joondalup Health Campus, Kareena Private Hospital, Knox Private Hospital, Lake Macquarie Private Hospital, Latrobe Regional Hospital, Launceston General Hospital, Lingard Private Hospital, Lismore Base Hospital, Liverpool Hospital, Logan Hospital, Lyell McEwin Hospital, Mackay Base Hospital, Macquarie University Private Hospital, Maitland Hospital, Maitland Private Hospital, Manning Rural Referral Hospital, Maroondah Hospital, Mater Adults Hospital (Brisbane), Mater Health Services North Queensland, Mater Private Hospital (Brisbane), Mater Private Hospital (Sydney), Melbourne Private Hospital, Mildura Base Hospital, Monash Children's Hospital, Monash Medical Centre-Clayton Campus, Mount Hospital, Mount Isa Hospital, Mulgrave Private Hospital, National Capital Private Hospital, Nepean Hospital, Nepean Private Hospital, Newcastle Private Hospital, Noosa Hospital, North Shore Private Hospital, North West Private Hospital, North West Regional Hospital (Burnie), Northeast Health Wangaratta, Northern Beaches Hospital, Norwest Private Hospital, Orange Base Hospital, Peninsula Private Hospital, Perth Children's Hospital, Pindara Private Hospital, Port Macquarie Base Hospital, Prince of Wales Hospital (Sydney), Prince of Wales Private Hospital (Sydney), Princess Alexandra Hospital, Queen Elizabeth II Jubilee Hospital Queensland Children's Hospital, Redcliffe Hospital, Robina Hospital, Rockhampton Hospital, Rockingham General Hospital, Royal Adelaide Hospital, Royal Brisbane and Women's Hospital, Royal Children's Hospital (Melbourne), Royal Darwin Hospital, Royal Hobart Hospital, Royal Hobart Hospital NICU/PICU, Royal Melbourne Hospital, Royal North Shore Hospital, Royal Perth Hospital, Royal Prince Alfred Hospital, Ryde Hospital and Community Health Services, Shoalhaven Hospital, Sir Charles Gairdner Hospital, South East Regional Hospital, South West Healthcare (Warrnambool), St Andrew's Hospital (Adelaide), St Andrew's Hospital Toowoomba, St Andrew's Private Hospital (Ipswich), St Andrew's War Memorial Hospital, St George Hospital (Sydney), St George Private Hospital (Sydney), St John of God (Berwick), St John Of God Health Care (Subiaco), St John Of God Hospital (Ballarat), St John of God Hospital (Bendigo), St John Of God Hospital (Geelong), St John Of God Hospital (Murdoch), St John of God Midland Public & Private, St Vincent's Private Hospital Northside, St Vincent's Hospital (Melbourne), St Vincent's Hospital (Sydney), St Vincent's Hospital (Toowoomba), St Vincent's Private Hospital (Sydney), St Vincent's Private Hospital Fitzroy, Strathfield Private Hospital, Sunnybank Hospital, Sunshine Coast University Hospital, Sunshine Coast University Hospital ICU-paeds, Sunshine Coast University Private Hospital, Sunshine Hospital, Sutherland Hospital & Community Health Services, Sydney Adventist Hospital, Sydney Children's Hospital, Sydney Southwest Private Hospital, Tamworth Base Hospital, The Bays Hospital, The Children's Hospital at Westmead, The Chris O'Brien Lifehouse, The Memorial Hospital (Adelaide), The Northern Hospital, The Prince Charles Hospital, The Queen Elizabeth (Adelaide), The Wesley Hospital, Toowoomba Hospital, Townsville University Hospital, Townsville University Hospital ICU-paeds, Tweed Heads District Hospital, University Hospital Geelong, Wagga Wagga Base Hospital & District Health, Warringal Private Hospital, Werribee Mercy Hospital, Western District Health Service (Hamilton), Western Hospital (SA), Westmead Hospital, Westmead Private Hospital, Wimmera Health Care Group (Horsham), Wollongong Hospital, Wollongong Private Hospital, Women's and Children's Hospital, Wyong Hospital

**Table 3 Contributing ICUs, by classification and jurisdiction**

<b>Invited</b>	<b>Tertiary</b>	<b>PICU</b>	<b>Metropolitan</b>	<b>Rural / Regional</b>	<b>Private</b>	<b>Total</b>
ACT	1	-	1	-	3	5
NSW	11	3	11	20	22	67
NT	-	-	1	1	-	2
QLD	10	1	6	7	18	42
SA	3	1	1	-	7	12
TAS	1	1	1	1	1	5
VIC	6	2	10	12	18	48
WA	3	1	3	2	4	13
<b>Australia</b>	<b>35</b>	<b>9</b>	<b>34</b>	<b>43</b>	<b>73</b>	<b>194</b>

PICU Paediatric intensive care unit, ACT Australian Capital Territory, NSW New South Wales, NT Northern Territory, QLD Queensland, SA South Australia, TAS Tasmania, VIC Victoria, WA Western Australia

**Table 4 Response rate, by question**

<b>Question</b>	<b>Tertiary %</b>	<b>PICU %</b>	<b>Metropolitan %</b>	<b>Rural / Regional %</b>	<b>Private %</b>	<b>Total %</b>
1	100	100	100	100	100	100
2	100	100	100	100	100	100
3	100	100	100	100	100	100
4	100	100	10	100	100	100
5	100	100	100	100	100	100
6	100	100	100	100	100	100
7	97	78	91	95	95	94
8	100	100	100	100	100	100
9	100	100	10	100	100	100
10	91	67	100	95	97	95
11	94	67	97	95	99	95
12	100	10	100	100	100	100
13	100	100	100	100	99	99
14	97	89	100	95	97	97
15	94	89	100	98	97	97
16	97	89	100	95	97	97

PICU Paediatric ICU

**Table 5. Staffing: baseline capacity (Source data: CCR 2019-20)**

	<b>Senior medical staff FTE*</b>	<b>SMO per available bed</b>	<b>Nursing staff FTE*</b>	<b>RN per available bed</b>
<b>Jurisdiction</b>				
ACT	15.5	0.55	233.5	5.56
NSW	268.3	0.35	3534.7	4.10
NT	12.5	0.52	119.0	4.96
QLD	176.3	0.47	1998.1	5.64
SA	58.75	0.37	940.1	5.56
TAS	17.3	0.49	292.8	6.77
VIC	192.5	0.43	2594.9	5.37
WA	65.45	0.43	761.7	5.01
<b>Australia</b>	<b>806.6</b>	<b>0.41</b>	<b>10474.7</b>	<b>4.91</b>

CCR Critical Care Resources, FTE Full Time Equivalent, SMO Senior Medical Officer, RN Registered Nurse, ACT Australian Capital Territory, NSW New South Wales, NT Northern Territory, QLD Queensland, SA South Australia, TAS Tasmania, VIC Victoria, WA Western Australia

\*CCR data on SMO and Nursing staff FTE from 146 and 162 respondent ICUs respectively