Australian, State and Territory Governments

National Cabinet Memorandum

Title	Health System Capacity
Sponsoring Department	Professor Brendan Murphy, Department of Health

Summary

Proposed Action

To provide an update on health system capacity planning to support transition through the various phases under the *National Plan to transition Australia's National COVID-19 Response* (the National Plan). Updated Doherty modelling at jurisdiction-level provides daily demand scenarios for Intensive Care and hospital wards and can be compared with planned capacities for these in each jurisdiction. Assessments and advice on current surge planning arrangements, and work being progressed in building health system capacity focused on enhancing hospital, workforce and early indications of primary care capacity is provided. This work is iterative, ongoing, and will be monitored and adjusted through the transition phases.

Key reasons

The health system must be supported to provide adequate capacity and capability to sustain health care delivery during increased demand associated with 'Living with COVID-19' (LWC). Demands from COVID-19 must be effectively managed, whilst minimising the impact on delivery of non-COVID-19 health care services. Plans must also be in place in the event of localised COVID-19 outbreaks requiring a surge in capacity beyond LWC and which may temporarily impact non-COVID health care services.

Key risks and sensitivities

Ensuring sufficient health system capacity to respond to anticipated increased demand during LWC (illustrated by various scenarios in the Doherty modelling) and to have plans in place for effectively managing localised surge in demand during localised outbreaks across the hospital sector and primary care is essential to maintain access to health care across the country, as well as providing assurance to all Australians of the National Cabinet's commitment to a safe re-opening of Australia.

1 Proposed Actions

I recommend the National Cabinet:

1. Note the updated jurisdictional level Doherty modelling on anticipated daily demand for ICU beds and ward beds, under various combinations of vaccination coverage, daily COVID-19 infection case seeding, Public Health and Social Measures (PHSM), and Test Trace Isolate and Quarantine (TTIQ) settings (Attachment A1 refers).

2. Note data by jurisdictions including observed demand over time, current vaccination coverage by Local Government Area and planned capacity data (Attachment A2 refers).

3. Agree to the recording of adjustable capacity arrangements via the Australian Institute of Health and Welfare Capacity & Activity System (AIHW Cap & ACT), in addition to systematic monitoring of observed demand to trigger cross-jurisdictional surge discussions and arrangements as required.

4. Note the status of cross-jurisdictional work being progressed separately to examine opportunities to enhance public hospital capacity in Living With Covid (LWC), with specific focus on improving discharge arrangements for aged care and disability patients.

5. Note that each jurisdiction has confirmed that they have a robust plan to support the operationalisation of surge responses in critical and acute tertiary care services for when LWC capacity is exceeded (Attachment A3 refers).

6. Agree the national principles developed from jurisdictional surge plans (Attachment A3 refers), noting response strategies are likely to be tailored as appropriate to apply to various jurisdictional differences.

7. Agree the Health System Capacity Cross-Jurisdictional Working Group continue to operate to support continual improvement of jurisdictional surge planning.

8. Note the National Health Emergency Management Standing Committee (NHEMS), a subgroup of the Australian Health Protection Principal Committee (AHPPC), has commenced work to update the 'AUSTRAUMA' plan to address COVID-19 cross-jurisdictional surge responses (Attachment A6 refers).

9. Agree a range of activities focused on improving primary care responses including:

    (a) collaborative work by Local Health Networks (LHNs) and Primary Health Networks (PHNs) to agree regional care pathways, escalation points, and workforce support for their region; and
    (b) Healthdirect to provide a dedicated phoneline and support for Public Health Units (PHUs) in contacting people who have tested positive, triaging symptoms and referring to appropriate care pathway.

10. Note the Commonwealth will undertake further work across the primary care sector including development of regional COVID-19 community care pathways, a LWC plan for remote communities and updating of guidelines to support management of COVID-19 patients by general practice and Aboriginal Community Controlled Health Services (ACCHSs).

11. Note AHPPC has agreed to the mandatory vaccination of health care workers (Attachment A8 refers), however mandatory vaccination of disability care workers requires further work to progress consideration by AHPPC.

12. Note the AHPPC has endorsed a COVID-19 work permissions and restrictions framework for workers in health care settings, which provides updated guidance on furlough of health and aged care workers (Attachment A7 refers) for publication following the National Cabinet meeting.

13. Note the Commonwealth is working with the jurisdictions on optimal models of care for contact tracing, testing, vaccination and managing COVID-19 in the home, with a National Guideline being developed to provide a framework to reduce the reliance on highly skilled clinical staff in non-clinical roles while maintaining safety and clinical governance.

14. Note the Commonwealth is also working closely with Australian and New Zealand Intensive Care Society (ANZICS) and the Australian College of Critical Care Nurses (ACCCN) on enhanced Intensive Care Unit (ICU) capacity and if necessary, surge capacity whilst maintaining safe and effective care, noting ANZICS and the ACCCN have provided input to a proposed model of care for ICU.

15. Agree that I come back to the National Cabinet at its next meeting with initial regional reports of the LHN/PHN collaborative care pathways, a revised draft AUSTRAUMAPLAN to an all hazards approach, an example of forecasting (including health system capacity) and progress on improvements in data timeliness and quality in AIHW Cap & ACT.

2 Detail of Proposal

Responding to the additional demands of COVID-19

2.1 The COVID-19 pandemic will continue to place pressure on Australia's health system

2.1.1. As jurisdictions progressively reopen in line with the phases of the National Plan, health systems will need to be ready to meet the long-term additional demands from sustained COVID-19 cases (LWC), while also being prepared to respond with shorter-term additional capacity required to effectively manage local outbreaks (surge).

2.1.2. It is expected that most jurisdictions will generally sustain a LWC state when adequate capacity, including workforce, is established and enhanced and models of care are refined and embedded. However as indicated by the modelling in the previous Nat Cab paper, the level of daily infections is a material driver of epidemic behavioural difference, generally showing greater concurrent demand on the health system earlier on a per capita basis in smaller jurisdiction sizes.

2.1.3. It is anticipated the relative intensity of required surge responses will diminish over time as immunity and vaccination coverage continue to increase and forecasting to predict surges improves enabling timely and effective short-term TTIQ and PHSM responses.

2.2 Health system demand and capacity modelling

2.2.1. Preliminary assessment of jurisdictional capacities for LWC and Surge scenarios was presented to the National Cabinet on 3 September 2021 and 17 September 2021 and, at the later meeting, compared to national-level scenario modelling by the Doherty Institute. Whilst useful to visualise demand and capacity at a national level, these scenarios masked variations in demand and capacity between jurisdictions. Smaller jurisdictions are inherently more at risk of exceeding clinical capacity because early epidemic dynamics do not scale with population size, while clinical capacity (ward and ICU beds) does.

2.2.2. Additional modelling has been undertaken by the Doherty Institute to develop scenarios specific to each jurisdiction's population size, allowing more granular comparison of capacities against demand scenarios (Attachment A1).

2.2.3. Jurisdictions continue to revise their Surge and Living with COVID capacities, and some updates may have occurred since the capacity data presented in this submission was confirmed.

2.2.4. The scenarios do not adjust for a number of other important factors including:

2.2.4.1. demography and the associated age-distribution of vaccine coverage at the time of achieving the threshold coverage (70 or 80%); and

2.2.4.2. anticipated differences in the initial transmission potential by jurisdiction; and

2.2.4.3. anticipated difference in the achievable reduction in transmission potential of the suite of PHSMs that may be enacted in response to transmission.

2.2.5. Key messages from the modelling are:

2.2.5.1. As anticipated, smaller jurisdictions are more likely to experience acute clinical load stress, including periods of time where surge capacity may be exceeded. These challenges are exacerbated when transition (at either 70 or 80%) occurs at higher initial case numbers.

2.2.5.2. Larger jurisdictions may also exceed "living with COVID" capacity at the height epidemic activity, particularly when initial case numbers are higher, although surge capacity is unlikely to be challenged.

2.2.6. All jurisdictions will benefit from continuing to increase vaccination coverage beyond 80% to help preserve health system capacity into the future and being prepared with plans for adaptive PHSM if required.

2.2.7. Attachment A2 includes the current assessment of jurisdictional capacity in a Surge and a LWC scenario, based on information provided by jurisdiction Health Departments on 14 September 2021, and reconfirmed or updated as at 24 September 2021.

2.2.8. Jurisdictional planned capacities for these scenarios continue to be refined as surge and LWC strategies are tuned and adjusted. Cross-jurisdictional working groups have improved consistency in approach, learned from shared experiences, and continue to take specific jurisdictional circumstances into account.

2.2.9. Scenario modelling currently provides guidance on possible hospital and ICU occupancy load under alternative policy settings and also indicate that maintenance of PHSMs and TTIQ will be required to avoid exceeding clinical loads. However, other factors not accounted for in the modelling and outlined above are only able to be accounted for through continued situational assessment and real-time epidemiological surveillance. An adaptive response based on current and forecast epidemiology is required.

2.2.10. The weekly situational assessment report tabled at Communicable Diseases Network Australia (CDNA) and AHPPC provides estimates by jurisdiction for a number of metrics described in the National Surveillance Plan. In particular, estimates for the transmission potential and, where there is epidemic activity, the effective reproduction number are provided. These estimates are publicised through the Common Operating Picture. Situational assessment reports also provide month-ahead forecasts by jurisdiction of case incidence.

2.2.11. Forecasts for ward admissions, ward occupancy and ICU occupancy are currently in development, enabling reporting as per the National Surveillance Plan, and are contingent to the provision of suitable data.

2.2.12. As jurisdictions collectively transition through the National Plan, the refinement of planned health system capacities will be more accurately informed by monitored experience, short term rolling forecasts, and periodic reviews for the tuning and adjustment of capacities.

2.2.13. As agreed by the National Cabinet on 17 September 2021, the Australian Institute of Health & Welfare (AIHW) Capacity & Activity System (Cap&Act) will be used for implementation of the systematic monitoring of observed demand, and the recording of iteratively adjusted capacity arrangements.

2.2.14. The Cap&Act system will be an important evidence base to identify where cross-jurisdictional support arrangements may be required for surge scenarios. Cap&Act has the potential to be enhanced for additional data point capture such as updatable Surge and Living with COVID capacities by hospital. Consistent and granular forecasting of demand against capacities with these data points in the system. The Cap&Act system may form an enduring real-time data system, with other data and insights requested by jurisdictions based on learnings being added over time.

2.2.15. In addition to the updated Doherty modelling and assessment of jurisdictional capacity, an updated series of jurisdictional snapshots is provided for the information of the National Cabinet (Attachment A5). The snapshots include the following data:

   i) Active COVID-19 case data
   ii) COVID-19 vaccination coverage data including heatmaps and public hospital locations
   iii) Capacity data for Surge and 'Living with COVID' scenarios as provided by jurisdictions; and
   iv) Observations of COVID-19 demand on Hospital wards and ICU's since 1 June 2021

2.3 Mapping of surge planning

2.3.1. Significant work has been undertaken by all jurisdictions in establishing surge plans for their health systems, which when examined in conjunction with modelling and forecasting of demand scenarios, provide confidence that health systems will be able to meet the challenges associated with transitioning through the National Plan.

2.3.2. While the specific activities and responses identified in these plans vary to reflect local planning approaches each jurisdiction has confirmed that they have a robust plan to support the operationalisation of surge responses in the critical and acute tertiary care in place.

2.3.3. The Cross-Jurisdictional working group has mapped these jurisdictional plans and has identified a series of nationally consistent principles to support ongoing collaborative and iterative surge planning. These principles, and a summary of current jurisdictional planning approaches, is provided at Attachment A3.

2.3.4. The working group has committed to continue to work collaboratively in supporting review and update of jurisdictional surge plans. In particular the working group seek to provide a consistent approach to how more granular modelling and forecasting of demand is applied to planning, as well as providing a mechanism for continuous improvement through sharing and reflecting the real-time experiences of jurisdictions with managing Delta variant outbreaks.

2.3.5. Both LWC and surge planning responses will be supported through other system developments, including activity to improve workforce capacity, enhance public hospital capacity and more effectively integrating primary care within COVID-19 models of care (discussed further in this submission and at Attachment A4).

Improving workforce availability to meet current and future demand

2.4 Reducing the impact of furloughing on workforce availability

2.4.1. Requirements to furlough workers in health care settings (including residential, disability, primary and community care) following exposure to COVID-19, based on current risk assessment guidelines, can result in significant impacts on health system capacity. Existing national guidance regarding furlough and contingency capacity strategies has not yet considered the reduced risk associated with vaccinated workers. Experiences from current outbreaks in New South Wales and Victoria have highlighted that the current risk assessment guidelines are no longer fit-for-purpose in a LWC context.

2.4.2. The Australian Health Protection Principal Committee (AHPPC) has endorsed a COVID-19 work permissions and restriction framework for

workers in health care settings (the Framework). The Framework provides a nationally consistent approach to risk assessment and management of workers following exposure, to provide timely mitigation measures that optimise workforce capacity and thereby ensure the continued safe delivery of health care. The National Cabinet is asked to note the endorsed Framework will be published following National Cabinet (Attachment A7).

2.4.3. The Framework applies to all workers in health care settings per the AHPPC's endorsed definition of a health care setting, which includes public, private and primary care settings. This also includes workers in residential care settings and disability care workers, and associated students within these settings.

Making best use of public hospital capacity

2.5 Reserving hospital capacity for those patients who need it most

2.5.1. In order to ensure hospital resources are not overwhelmed providing COVID-19 related care, and therefore significant disruption to other health services, it is important that COVID-19 patients should be triaged based on clinical need and associated risk, with patients streamed into care pathways accordingly.

2.5.2. Under both LWC and surge scenarios it is preferable for patients to be managed outside of the hospital setting where this is safe to do so according to their clinical status and risk profile.

2.5.3. Many jurisdictions are already utilising and supporting home care pathways, remote monitoring and care models, and enhancing Hospital In The Home (HITH).

2.6 Freeing up existing capacity

2.6.1. Several jurisdictions have identified delays in discharge of patients with disabilities, including chronic mental illness, and some patients waiting for aged care, as creating challenges to current public hospital capacity.

2.6.2. The Commonwealth has initiated discussions with jurisdictions to identify issues and supporting data in relation to discharge delays and blocks relating to aged care patients. This work will continue multilaterally and bilaterally as required.

2.6.3. A separate multijurisdictional stream of work is being undertaken by health and disability departments to examine short, medium and long-term strategies to reduce these discharge delays with further advice to be provided to the National Cabinet as it progresses.

2.7 Private Hospitals

2.7.1.   While private hospitals continue to support state and territory COVID-19 responses, particularly in surge, there is an ongoing need to maintain regular and elective activity in the public and private sector. State and territories recognise private hospital capacity and workforce is an important stop guard in respond to surge demand. However, where private hospitals are supporting the COVID-19 response a balance between delivering rescheduled and additional elective surgery and health services and COVID critical care is needed.

2.7.2.   Following the national shut-down of elective surgery in April 2020 and the subsequent move to localised outbreak management approaches, Australian Government support under the Private Hospital Viability Guarantee has become more targeted. The Guarantee supports each jurisdiction to access capacity from particular hospitals to meet their hospital system needs. Increasingly, these arrangements have been supported through direct contracting of private hospitals for workforce and capacity through the National Partnership on COVID-19 Response (the Partnership). While both Victoria and NSW have more recently needed to engage a larger number of private hospitals, they continue to maintain a more targeted approach, contracting only COVID-19 critical private hospitals, many with ICU capacity. Private hospitals not required in the COVID-19 response continue to deliver regular hospital activity.

2.7.3.   As we move into LWC, it is likely that the approach will become even more targeted – making use of selected private hospitals in local areas for limited periods as part of surge response. The Australian Government Department of Health is engaging with the private hospital sector and jurisdictions about options to better support this more targeted approach.

2.7.4.   Early engagement between jurisdictions and private hospitals to identify relevant capacity and plan local surge responses will support their effectiveness. Recent experiences in NSW and Victoria have shown that access to patient transport is a limiting factor in the redirection of patients into private hospitals. Movement of suitable patients into private hospitals is most effective if patients can be identified before admission. Private hospitals with ICU and emergency department capabilities will continue to be particularly useful for surge responses, but smaller private hospitals are also able to take suitable categories of patients, particularly those needing elective surgery. While diversion of private hospital staff has proven effective in supportive testing and vaccination clinics, public and private collaborations should also be considered. Where business as usual public hospital activity is diverted to private hospitals, movement of public hospital workforce supports continuity of care.

2.8 Physical Capacity

2.8.1. Some jurisdictions may have already made decisions to invest in additional physical capacity, or have brought forward planned investments to enhance capacity for LWC. Planning and investment in capital infrastructure for the public health and hospital system is the responsibility of the states and territories and is not systematically funded through the National Health Reform Agreement. The Partnership does offer support for minor capital investment, such as where any jurisdiction needs to expand or adapt ICU or ward facilities to better support patients with COVID-19 or facilitate streaming approach.

Improving COVID-19 Models of Care

2.9 Primary Health Care

2.9.1. Primary health care services in Australia – including general practice, ACCHS, pharmacy, private allied health services, dentists and community health services – provide a significant proportion of health care to the population. Working effectively, primary care services can manage people's health needs in the community, preserving hospitals for the most unwell and people needing specialised care.

2.9.2. During the COVID-19 pandemic, significant investments have been made in primary care to support effective management of health in the community. Of note:

2.9.2.1. The national introduction of MBS telehealth since March 2020 has helped support the safe continued provision of specialist, general practice and allied health services where face to face attendance is not required;

2.9.2.2. Practice Incentive Payments were increased temporarily in 2020 to support general practices to remain open for face to face services;

2.9.2.3. A network of up to 150 General Practitioner-led Respiratory Clinics (GPRCs) was rolled out from March 2020 to provide safe assessment of respiratory patients, to help take the pressure off hospitals and other general practices;

2.9.2.4. Electronic prescribing and medicines home delivery services were expanded in 2020 to support safer pharmacy services;

2.9.2.5. A national coronavirus helpline was established through healthdirect;

2.9.2.6. Aerial medical and aeroretrieval arrangements have been reinforced to support outbreak management in remote communities;

2.9.2.7. Personal protective equipment (PPE) from the National Medical Stockpile has been distributed to general practice, ACCHS, community

pharmacies and allied health practices through Primary Health Networks (PHNs), and in some cases to dentists, to help support effective infection prevention and control and the continued provision of face to face services; and

2.9.2.8. General practices, ACCHS, GPRCs (as Commonwealth Vaccination Clinics) and community pharmacies have played a significant role in the COVID-19 vaccine rollout.

2.9.3. As envisaged under the National Health Reform Agreement, PHNs have played a vital role in supporting primary care services at regional level and coordinating with Local Hospital Networks to help manage care in the community.

2.9.4. The National Cabinet on 17 September 2021 agreed that "recommendations for action be developed to facilitate community based models of care, including the use of hospital in the home, general practice and GP Respiratory Clinics (GPRCs) to increase management of COVID-19-positive patients in the community where appropriate, and minimising impacts on primary care settings to support continued delivery of the full range of services for non-COVID-19 patients."

2.9.5. This submission identifies the following work be progressed in line with previous decision of the National Cabinet:

2.9.5.1. The Primary Health Networks (PHNs) and Local Hospital Networks (LHNs) be tasked to work together, and with state/territory and Commonwealth health departments and community health services:

2.9.5.1.1. to develop or update agreed regional community care pathways for COVID-19 cases, drawing on early examples attached to this paper, with a view to safely managing cases outside hospital settings where clinically indicated, with each region providing an initial joint report on this work to the National Cabinet at its meeting on 15 October. This should include efficient arrangements for pathology collection and case assessment in the after-hours period. The plans should also address the needs of at-risk populations including people in residential aged care facilities, older people, people from culturally and linguistically diverse backgrounds, people with disability, Aboriginal and Torres Strait Islander people, people in socioeconomically disadvantaged circumstances;

2.9.5.1.2. work with Rural Workforce Agencies to develop or update plans for maintaining and surging rural health workforce in COVID-19 outbreaks, including in the after-hours period, particularly the supply of doctors and nurses for rural hospitals, general practices and Aboriginal Community Controlled Health Services (ACCHS), with an initial plan for each relevant region to be developed or updated by no later than 31 October 2021.

2.9.5.2. The Commonwealth, in consultation with the COVID-19 Aboriginal and Torres Strait Islander Health Advisory Committee, develop a 'Living with COVID' plan for remote communities, building on existing preparedness and retrieval plans, by 31 October 2021 and that this be adapted by each jurisdiction for their local circumstances;

2.9.5.3. The AHPPC finalise and apply the risk-based "COVID-19 work permissions and restrictions framework for workers in health care settings" to primary care settings (general practice, ACHHS, allied health, pharmacy, dental, community health) so as to avoid closing down primary care practices/furloughing workers for all but the briefest periods in response to COVID 19 outbreaks/contacts in those settings; and

2.9.5.4. The Commonwealth work with the Royal Australian College of General Practitioners (RACGP) urgently to update the "Home-care guidelines for adult patients with mild COVID 19" to extend them to younger patients and to patients with moderate COVID-19, to provide overarching national guidance for the management of COVID-19 patients by general practice and ACCHS.

2.10 Primary Care supporting transition to LWC

2.10.1. In jurisdictions with small outbreaks and low numbers of cases, every positive case is contacted, assessed and closely monitored by the relevant public health units. In some jurisdictions, every case is managed in hospital. As Australia transitions to a Living with COVID environment, with more than 70 or 80 per cent of people vaccinated and with that protection, larger numbers of COVID-positive people remaining in the community, this level of management by public health units and hospitals will not be sustainable.

2.10.2. In the jurisdictions currently with large outbreaks, work has occurred in partnership between LHNs, PHNs, State Ministries and community health providers to develop community-based models of care for COVID-19 positive patients to support the management of only higher-risk cases in hospital with lower-risk patients managed in the community under hospital in the home or GP-supervised care. Examples of those COVID+ pathways models are at Attachment A4.

2.10.3. It is recommended that similar COVID-19+ community care pathways, adapted for local circumstances, be developed or updated urgently by each of the 31 PHNs across Australia working in partnership with the relevant LHNs, community health providers and State departments of health as appropriate. Noting variability in after-hours GP availability and pressures on emergency departments across Australia, these pathways should include efficient arrangements for pathology collection and case assessment in the after-hours period.

2.10.3.1. The plans should also address the needs of at-risk populations including people in residential aged care facilities, older people, people from culturally and linguistically diverse backgrounds, people with disability, Aboriginal and Torres Strait Islander people and people in socioeconomically disadvantaged circumstances.

2.10.3.2. The specific processes and requirements needed to support appropriate care pathways for these populations will be developed, inclusive of care pathways for aged care residents and recipients.

2.10.4. For rural regions where the hospital and primary care systems draw on the same workforce, the collaborative work outlined above should also include renewed workforce contingency planning, with the relevant Rural Workforce Agency also involved.

2.10.5. For remote communities with limited and fragile health services, including remote Aboriginal and Torres Strait Islander communities, the risks of COVID outbreaks remain significant even if the 70/80 per cent targets are reached in those communities. The National Cabinet may wish to ask the Commonwealth, working with the COVID-19 Aboriginal and Torres Strait Islander Health Advisory Committee, to lead the development of a 'Living with COVID' plan for remote communities, building on existing preparedness and retrieval plans and which includes ongoing efforts to increase vaccination coverage, by 31 October 2021 and that this be adapted by each jurisdiction for their local circumstances.

2.10.6. A potential bottleneck exists in COVID positive pathways at the point at which, in current models, a State-operated community health centre receives positive results from mass testing and contacts the positive patients to ensure that they are isolating, have sufficient supports and have a GP or hospital in the home arrangement looking after their care. This could lead to delays in positive patients self-isolating, with implications for spread, and/or accessing necessary care.

2.10.6.1. Jurisdictions may wish to consider the national provider of health call services, healthdirect, as an existing asset which may be able to quickly scale up capacity to assist with more timely patient contact and follow-up functions. This would be in scope for 50/50 funding under the National Partnership on COVID-19 Response.

2.10.7. An additional potential bottleneck in the COVID+ pathways relates to the availability of health professionals to visit people at home for assessment and monitoring purposes, or in response to an escalation of symptoms. While this is envisaged to be managed through hospital in the home processes, to maximise flexibility of use of the available workforce, the Commonwealth will consider financial supports for practice nurses to visit COVID-positive patients at home.

2.10.8. Currently, some general practices and ACCHS choose not to see respiratory cases as they cannot (because of premises constraints) or do not wish to put in place the necessary infection prevention and control (IPC) protocols, and wish to remain available for their non-respiratory patients, many of whom will have ongoing chronic conditions which put them more at risk from COVID-19. In other cases, general practices, ACCHS and GP respiratory clinics have been closed for deep cleaning and staff furloughed after a positive case has visited the premises, with impacts on access for patients and financial impacts on the practice. To ensure there is sufficient capacity in the system:

2.10.8.1. the states and territories should work with AHPPC to finalise and apply the risk-based "COVID-19 work permissions and restrictions framework for workers in health care settings" to primary care settings (general practice, ACCHS, allied health, pharmacy, dental, community health) so as to avoid closing down primary care practices/furloughing workers for all but the briefest periods in response to COVID-19 outbreaks/unprotected contacts in those settings;

2.10.8.2. the Commonwealth will examine:

2.10.8.2.1. whether to return the network of GPRCs to their initial COVID assessment and management function to provide sufficient capacity to assess and manage symptomatic COVID patients whose usual practice is not seeing respiratory patients, or who do not have a usual practice. This would mean transferring the vaccination function CVCs currently provide to other general practices and pharmacies, after primary vaccinations start to slow; and

2.10.8.2.2. mechanisms to support general practices and ACCHS to make effective infection prevention and control arrangements (structure of premises and PPE), in order to remain open face to face to assess respiratory patients].

2.10.9. General practices and ACCHS will be able to access existing Medicare Benefit Schedule (MBS) items, including the MBS telehealth items currently available in COVID-19 hotspots, to finance the assessment and management of COVID+ patients.

2.10.10. General practices and ACCHS will also need the assurance of professional guidance on appropriate management of COVID-positive cases in the community. The Commonwealth will work with the Royal Australian College of General Practitioners (RACGP) to update the "Home-care guidelines for adult patients with mild COVID 19" to extend them to younger patients and to patients with moderate COVID-19, to provide overarching national guidance for the management of COVID-19 patients by general practice.

Cross Jurisdictional Support and National Coordination in Surge

2.10.11. Whilst it is anticipated that smaller states and territories, or regional areas within larger jurisdictions, may temporarily alternate between LWC and surge scenarios as public health response measures are adjusted, there is a risk that temporary surge demand may not be able to be met by jurisdictional efforts alone.

2.10.12. Where demand cannot be adequately managed at the jurisdictional level, or where a surge is geographically occurring near the border of another jurisdiction, there is a need to escalate surge support to a national level, to allow a coordinated effort to meet demand.

2.10.13. The National Cabinet previously agreed (17 September 2021) that the National Health Emergency Management Standing Committee (NHEMS) a sub-committee of the AHPPC would provide the governance and mechanism for cross-jurisdictional support in the event of significant surge requirements.

2.10.14. NHEMS has commenced work establishing a national coordination mechanism to support COVID-19 cross-jurisdictional surge response. This work will ensure consistent application of principles, and jurisdictional and national visibility of demand and resourcing needs across the country.

2.10.15. NHEMS are in the process of reviewing the 'AUSTRAUMAPLAN' , Australia's Domestic Response Plan for Mass Casualty Incidents of National Significance. Through revising the AUSTRAUMAPLAN , NHEMS are expanding existing arrangements to ensure they are fit-for-purpose to support a cross-jurisdictional surge response for COVID-19. NHEMS are undertaking this review in close collaboration with AHPPC and will complete this work in the coming weeks (Attachment A6).

3 Risks and sensitivities

3.1   Public confidence in the reopening strategy and support for the strategy from clinical leaders in Australia will be eroded if the reopening leads to repeated or unsustainable surge demand on the health system. COVID-19 caseloads may shift between surge and sustainment scenarios during the National Plan transition phases.

3.2   There is also a risk that the future demand for health services may be increased as a result of the response to the pandemic. There is some evidence that Australians are delaying seeking face to face primary care, early screening and delaying treatment of chronic conditions due to fear of exposure to COVID-19. This is likely to lead to a need for additional activity to catch-up on health services that were deferred. There is also risk around the unknown impact on future surges in demand for mental health services, and the potential need for additional support services for patients recovering from COVID-19. This will be mitigated by ensuring both modelled surge and living with COVID-19 scenarios are inclusive of whole of health system increased baseline capacity, for both the acute and primary care sectors, to ensure minimal impact on the provision of health services for non-COVID-19 medical treatment.

4   Impacts

4.1   Progression of this work will ensure the development of a robust, nationally comparable and monitored evidence base plan on Australia's health system capacity to meet the modelled demand through various phases of the National Plan.

Attachments

A1: Updated Doherty Institute Modelling by Jurisdiction Sizes

A2: Updated Capacity Data

A3: Jurisdictional Surge Plan Mapping and Principles

A4: Examples of COVID+ pathways models

A5: Jurisdictional snapshots

A6: NHEMS update to the AUSTRAUMAPLAN to address COVID-19 cross-jurisdictional surge responses

A7: AHPPC endorsed Work Permissions and Restrictions Framework for Workers in Health Care Settings

A8: AHPPC Statement: Mandatory Vaccination of All Workers in Health Care Settings

Attachment A1: Updated Doherty Institute Modelling by Jurisdiction Sizes

The Doherty Institute have provided updated COVID-19 scenario modelling to account for the population sizes of different jurisdictions.

These are also aligned to updated health system capacities provided by jurisdictions as at Friday 24 September 2021 in the figures that follow.

It should be noted that:

1. ICU and ward admission modelling parameters have been updated to reflect COVID-19 Delta variant severity probabilities

2. Other than population sizes for each jurisdiction, demography parameters used are National parameters, and do not account for intra-jurisdictional differences including population densities (city/regional/remote), vaccination coverage, and other variations.

3. Jurisdictions continue to revise their Surge and Living with COVID capacities, and some updates may have occurred since the capacities confirmed on 24 September were included.

Background

On 15 September 2021, the National Cabinet considered advice from the Department of Health with supporting evidence from the Doherty Institute on anticipated national clinical outcomes associated with epidemic simulations under the National Plan to Transition Australia's National COVID Response.

The report emphasised two outstanding issues to address:

1. Smaller jurisdictions are inherently more at risk of exceeding clinical capacity because early epidemic dynamics do not scale with population size, while clinical capacity (ward and ICU beds) does.

2. Emerging evidence on the increased severity of Delta was not incorporated into the analyses (Table S1).

Here, we provide a per-jurisdiction analysis of anticipated clinical outcomes, incorporating the most recent clinical evidence on the severity of Delta. For each jurisdiction, we have identified the most likely initial case numbers and corresponding possible response strategies (Table 1). Results are provided in the accompanying jurisdiction-by-jurisdiction data appendices.

Limitations

These analyses adjust for jurisdiction population size and anticipated initial case numbers. However, they do not adjust for a number of factors that we anticipate to be important, including:

- demography and the associated age-distribution of vaccine coverage at the time of achieving the threshold coverage (70 or 80%); and

- anticipated differences in the initial transmission potential by jurisdiction; and

- anticipated difference in the achievable reduction in transmission potential of the suite of PHSMs that may be enacted in response to transmission.

These factors are only able to be accounted for through continued situational assessment and real-time epidemiological surveillance.

Key messages

As anticipated, smaller jurisdictions are more likely to experience acute clinical load stress, including periods of time where surge capacity may be exceeded. These challenges are exacerbated when transition (at either 70 or 80%) occurs at higher initial case numbers.

Larger jurisdictions may also exceed "living with COVID" capacity at the height epidemic activity, particularly when initial case numbers are higher, although surge capacity is unlikely to be challenged.

Table 1. Scenarios considered in this report.

Jurisdiction	Pop size ('000)	Daily new infections at time of achieving threshold	Vaccine coverage threshold (%)	Level of PSHM and TTIQ
NSW	8176.4	Medium = 300–1000	70	Baseline + Partial
				Low + Partial
			80	Baseline + Partial
				Low + Partial
		High = 1000–4500	70	Med/Low + Partial
Victoria	6648.6	Medium = 300–1000	70	Baseline + Partial
				Low + Partial
			80	Baseline + Partial
				Low + Partial
		High = 1000–4500	70	Med/Low + Partial
Queensland	5206.4	Low = 30–100	70	Baseline + Partial
				Low + Partial
			80	Baseline + Partial
				Low + Partial
		Medium = 300–1000	70	Baseline + Partial
				Low + Partial
			80	Baseline + Partial
				Low + Partial
Western Australia	2675.8	Low = 30–100	70	Baseline + Partial
				Low + Partial
			80	Baseline + Partial
				Low + Partial
South Australia	1771.7	Low = 30–100	70	Baseline + Partial
				Low + Partial
			80	Baseline + Partial
				Low + Partial
Tasmania	542.0	Low = 30–100	70	Baseline + Partial
				Low + Partial
			80	Baseline + Partial
				Low + Partial
ACT	431.8	Low = 30–100	70	Baseline + Partial
				Low + Partial
			80	Baseline + Partial
				Low + Partial
		Medium= 300–1,000	70	Baseline + Partial
				Low + Partial
			80	Baseline + Partial
				Low + Partial
NT	247.0	Low = 30–100	70	Baseline + Partial
				Low + Partial
			80	Baseline + Partial
				Low + Partial

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Table S1. Disease severity assumptions for *unvaccinated individuals*

Parameter	Description	Source	Value(s)	
Wildtype severity parameters				
Pr(symptoms|wt)	Probability of symptomatic disease given wildtype infection	Davies et al. Nature Medicine (2020) [1] Clinical fractions estimated for 10-year age groups.	Age group	Symptomatic fraction
			0-9	0.28
			10-19	0.20
			20-29	0.26
			30-39	0.33
			40-49	0.40
			50-59	0.49
			60-69	0.63
			70+	0.69
Pr(hosp|symptoms)	Probability of hospital admission given symptomatic wildtype infection	Knock et al. Pre-print [2]. Prepared for UK roadmap modelling by Imperial group. UK data first wave.	Age-specific. See Tables S6 and S8 of Knock et al.	
Pr(ICU|hosp)	Probability of ICU admission given hospital admission	Same as above.	Same as above.	
Pr(death|ward)	Probability of death for ward patients (no ICU stay)	Same as above.	Same as above.	
Pr(death|ICU)	Probability of death for ICU patients	Same as above.	Same as above.	
Pr(death|post-ICU ward)	Probability of death for post-ICU patients	Same as above.	Same as above.	
Alpha severity parameters (versus wildtype)				
Pr(symptoms|alpha)	Probability of symptomatic disease given Alpha infection	A number of studies using UK data suggest that the probability of reporting symptoms is consistent for wildtype and Alpha Walker et al. Pre-print [3].	RR=1	

Graham et al. Lancet
Public Health (2021) [4].

Pr(hosp|alpha)	Probability of hospitalisation given Alpha infection	Bager et al. Lancet Infect Dis (2021) [5]. Denmark data.	OR=1.42
Pr(ICU|alpha)	Probability of ICU admission given Alpha infection	Patone et al. Lancet ID [6]. UK data.	HR=2.15
Pr(death|alpha)	Probability of death given Alpha infection	Davies et al. Nature (2021) [7]. UK data.	HR=1.61
Delta severity parameters (versus Alpha)			
Pr(hosp|delta)	Probability of hospitalisation given Delta infection	Bager et al. Lancet ID (2021) [8]. Denmark data.	RR = 3.01
Pr(ICU|delta	Probability of ICU admission given Delta infection	Fisman & Tuite. Pre-print [10]. Canada data.	OR = 1.86
Pr(death|delta)	Probability of death given Delta infection	Fisman & Tuite. Pre-print [10]. Canada data.	OR = 1.51

References

- Davies NG et al*.* Age-dependent effects in the transmission and control of COVID-19 epidemics. *Nat Med*. 26, 1205–11 (2020). https://doi.org/10.1038/s41591-020-0962-9
- Knock ES et al. The 2020 SARS-CoV-2 epidemic in England: key epidemiological drivers and impact of interventions. *medRxiv* (2021). https://doi.org/10.1101/2021.01.11.21249564
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- Patone M et al*.* Mortality and critical care unit admission associated with the SARS-CoV-2 lineage B.1.1.7 in England: an observational cohort study. *Lancet Infect Dis* 2021. https://doi.org/10.1016/S1473-3099(21)00318-2
- Davies NG et al*.* Increased mortality in community-tested cases of SARS-CoV-2 lineage B.1.1.7. *Nature*. 2021. https://doi.org/10.1038/s41586-021-03426-1
- Bager P, et al. Hospitalisation associated with SARS-CoV-2 delta variant in Denmark. *Lancet Infect Dis* (2021). https://doi.org/10.1016/S1473-3099(21)00580-6
- Twohig KA, et al. Hospital admission and emergency care attendance risk for SARS-CoV-2 delta (B.1.617.2) compared with alpha (B.1.1.7) variants of concern: a cohort study. *Lancet Infect Dis* (2021). https://doi.org/10.1016/S1473-3099(21)00475-8
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New South Wales

Population size 8,176,400

NSW Scenario 1:

Vaccination	70%	**PHSM**	Baseline
Daily infections at transition	Medium 300 – 1000	**TTIQ**	Partial
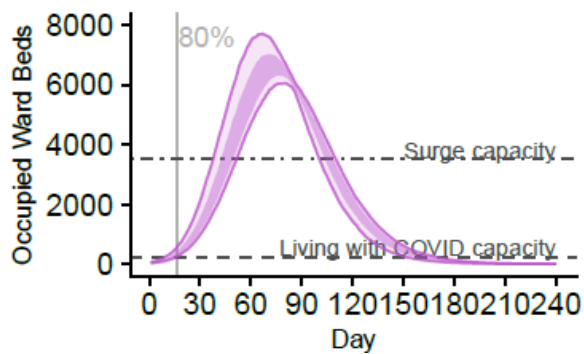
Ward Occupancy **ICU Occupancy**
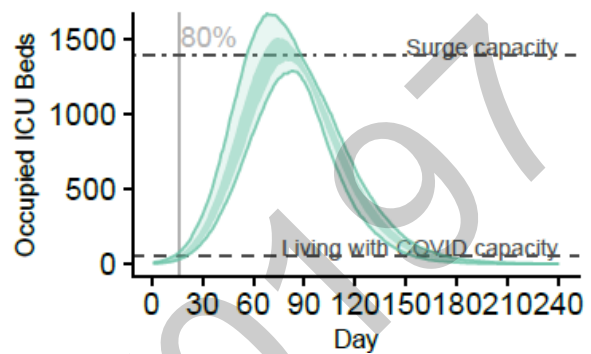
NSW Scenario 2:

Vaccination	70%	**PHSM**	Low
Daily infections at transition	Medium 300 – 1000	**TTIQ**	Partial
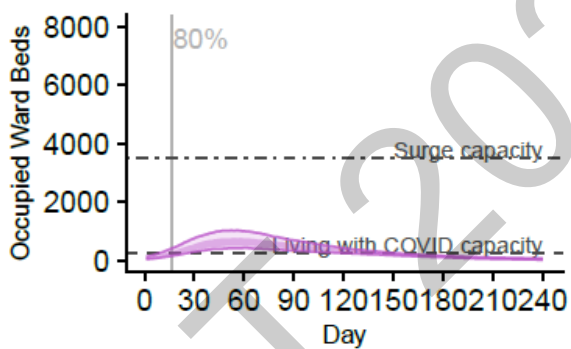
Ward Occupancy **ICU Occupancy**
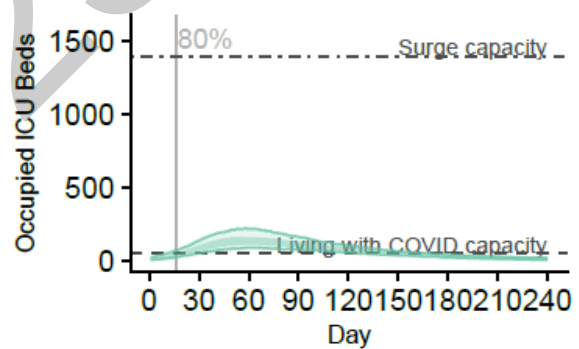
NSW Scenario 3:

Vaccination	80%	**PHSM**	Baseline
Daily infections at transition	Medium 300 – 1000	**TTIQ**	Partial
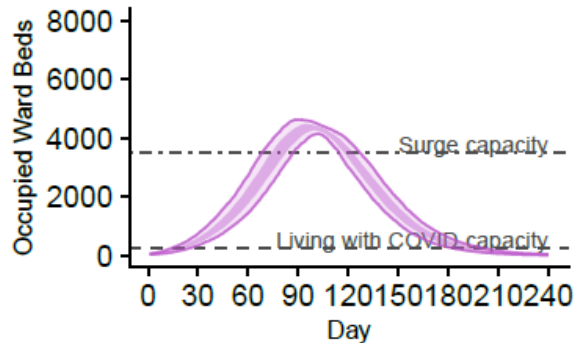
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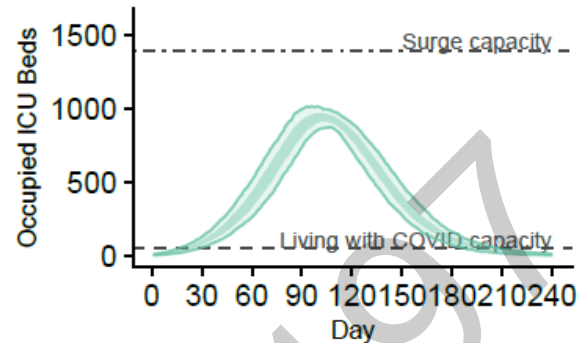
ICU Occupancy

NSW Scenario 4:

Vaccination	80%	**PHSM**	Low
Daily infections at transition	Medium 300 – 1000	**TTIQ**	Partial
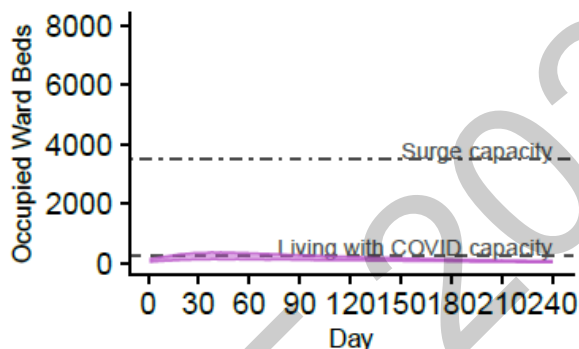
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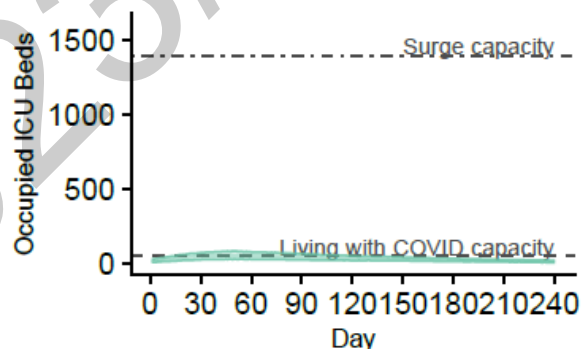
ICU Occupancy

NSW Scenario 5:

Vaccination	70%	**PHSM**	Medium, shifting to Low at 80% vaccination
Daily infections at transition	High 1000 - 4500	**TTIQ**	Partial
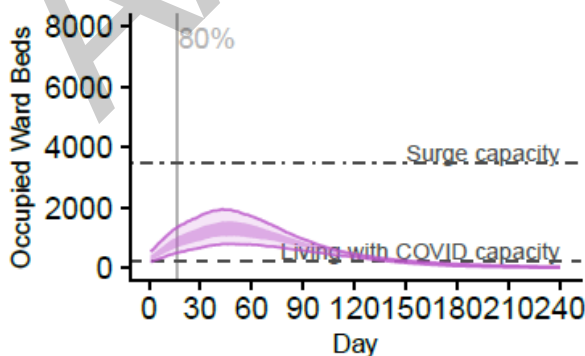
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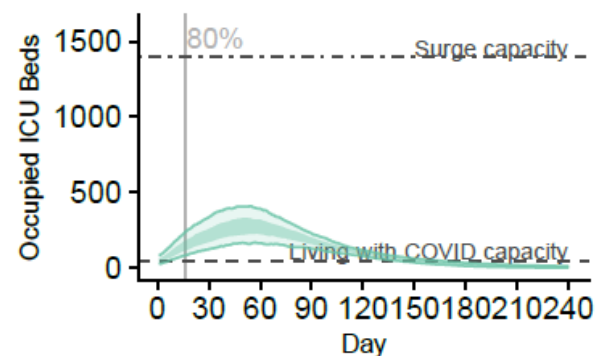
ICU Occupancy

Australian Capital Territory

Population size 431,800

ACT Scenario 1:

Vaccination	70%	**PHSM**	Baseline
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial

ACT Scenario 2:

Vaccination	70%	**PHSM**	Low
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial

ACT Scenario 3:

Vaccination	80%	**PHSM**	Baseline
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial

ACT Scenario 4:

Vaccination	80%	PHSM	Low
Daily infections at transition	Low 30 - 100	TTIQ	Partial

Ward Occupancy

ICU Occupancy

ACT Scenario 5:

Vaccination	70%	PHSM	Baseline
Daily infections at transition	Medium 300 − 1000	TTIQ	Partial
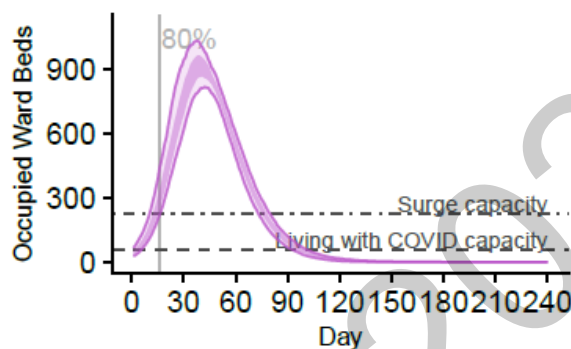
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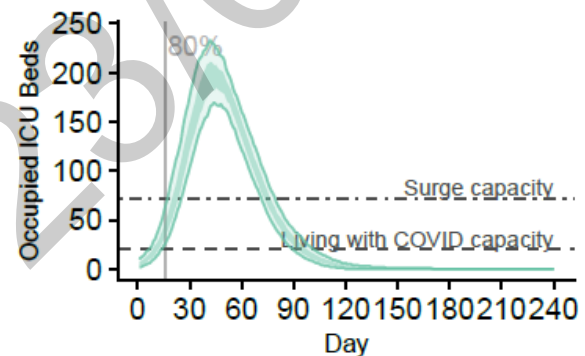
ICU Occupancy

ACT Scenario 6:

Vaccination	70%	PHSM	Low
Daily infections at transition	Medium 300 − 1000	TTIQ	Partial
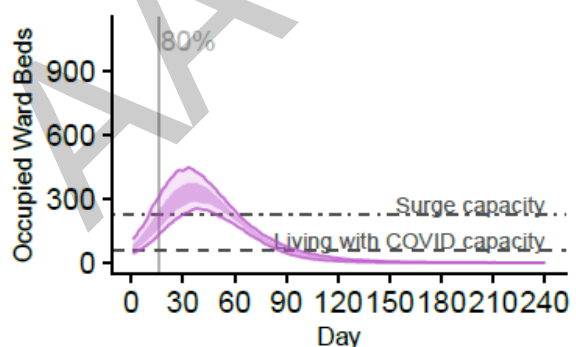
Ward Occupancy
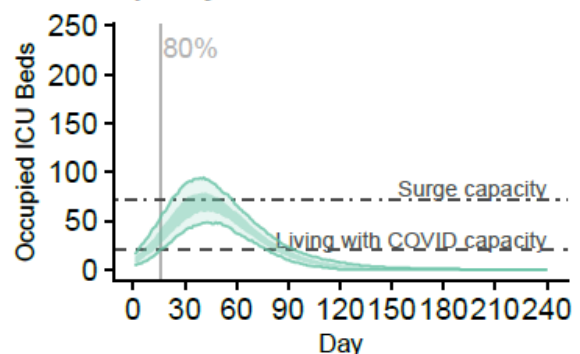
ICU Occupancy

ACT Scenario 7:

Vaccination	80%	PHSM	Baseline
Daily infections at transition	Medium 300 – 1000	TTIQ	Partial
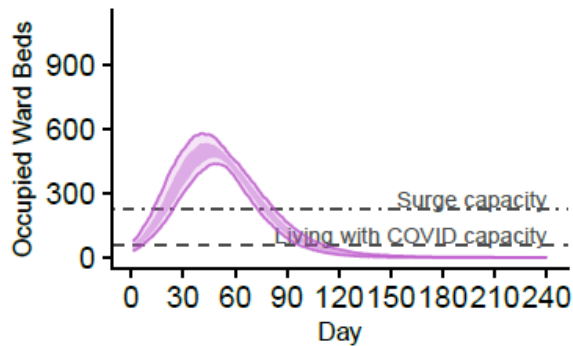
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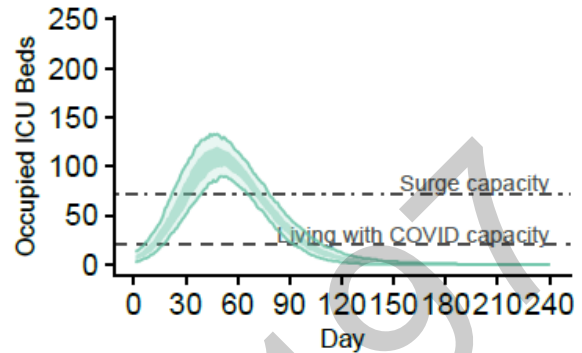
ICU Occupancy

ACT Scenario 8:

Vaccination	80%	PHSM	Low
Daily infections at transition	Medium 300 – 1000	TTIQ	Partial
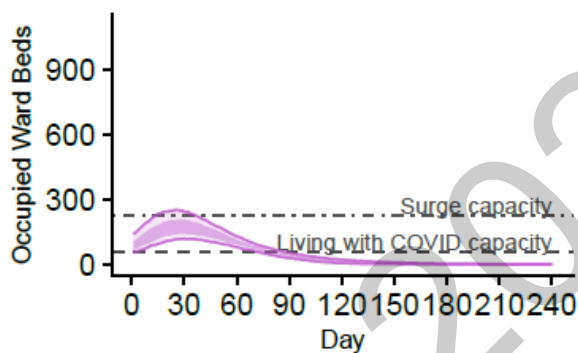
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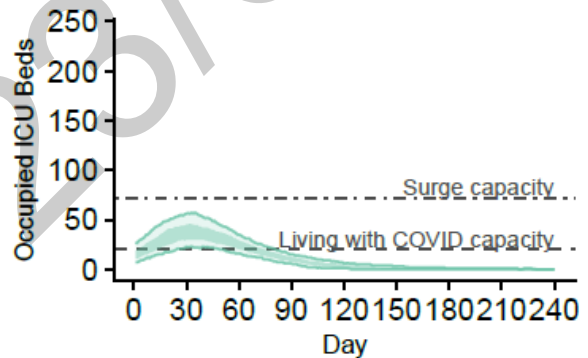
ICU Occupancy

Northern Territory

Population size 247,000

NT Scenario 1:

Vaccination	70%	**PHSM**	Baseline
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
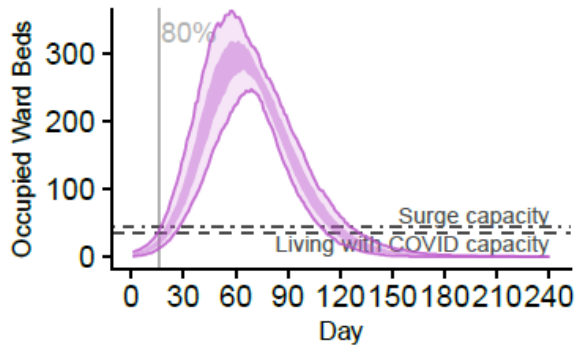
Ward Occupancy
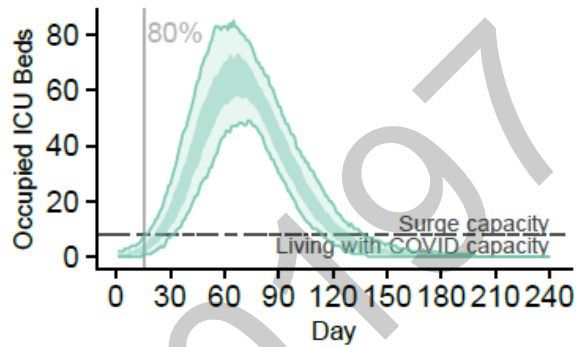
ICU Occupancy

NT Scenario 2:

Vaccination	70%	**PHSM**	Low
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
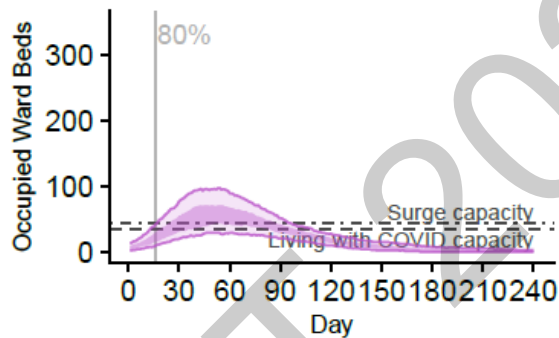
Ward Occupancy
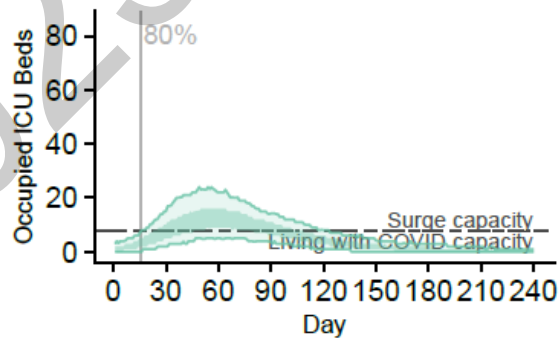
ICU Occupancy

NT Scenario 3:

Vaccination	80%	**PHSM**	Baseline
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
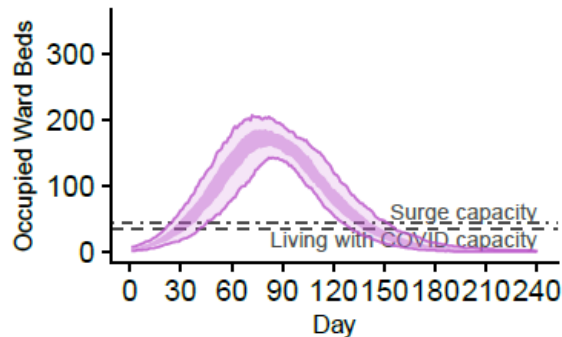
Ward Occupancy
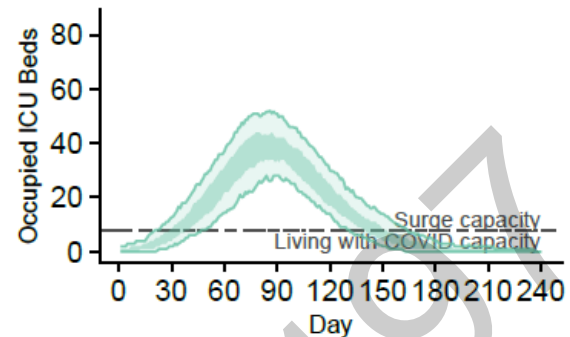
ICU Occupancy

NT Scenario 4:

Vaccination	80%	**PHSM**	Low
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
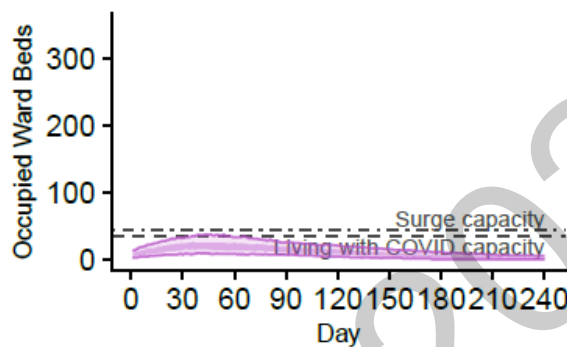
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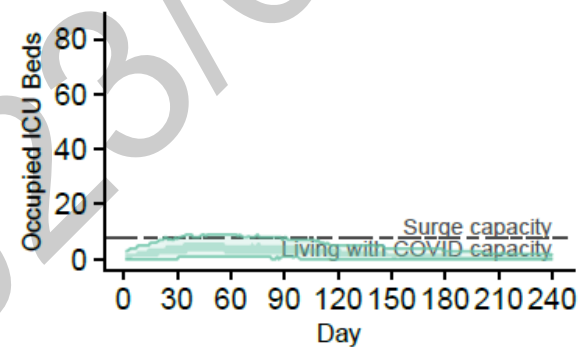
ICU Occupancy

Queensland

Population size 5,206,400

QLD Scenario 1:

Vaccination	70%	**PHSM**	Baseline
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
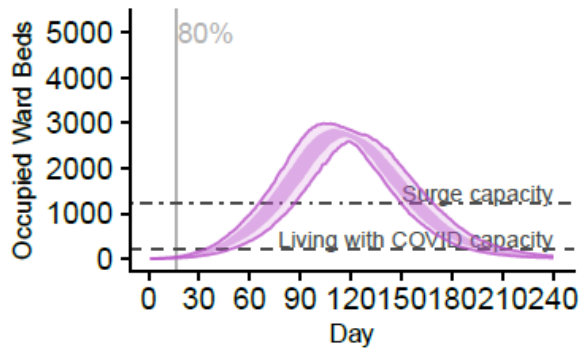
Ward Occupancy
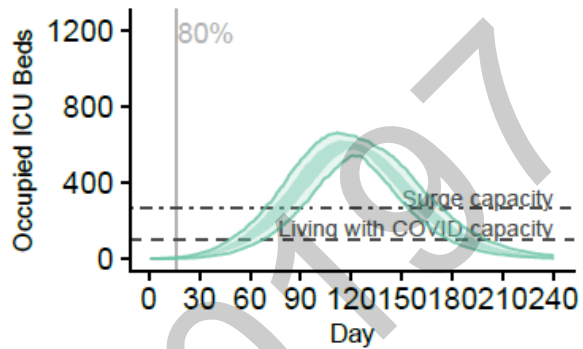
ICU Occupancy

QLD Scenario 2:

Vaccination	70%	**PHSM**	Low
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
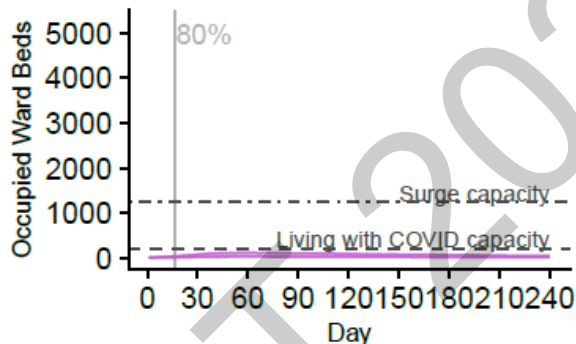
Ward Occupancy
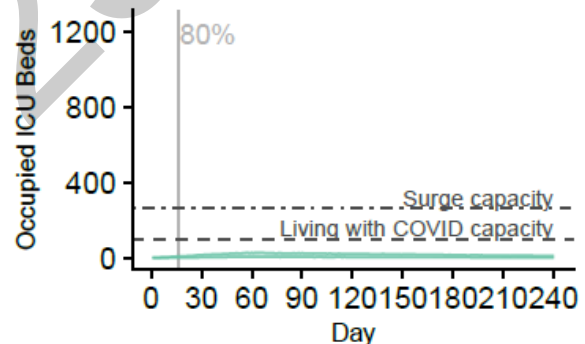
ICU Occupancy

QLD Scenario 3:

Vaccination	80%	**PHSM**	Baseline
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
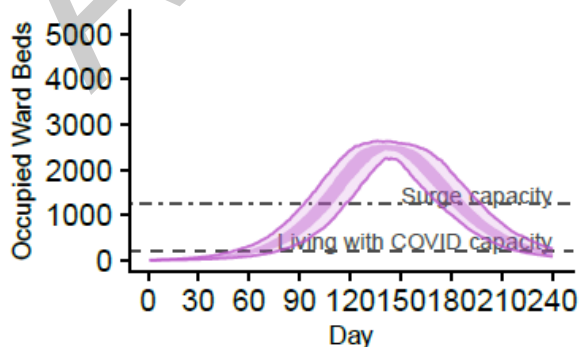
Ward Occupancy
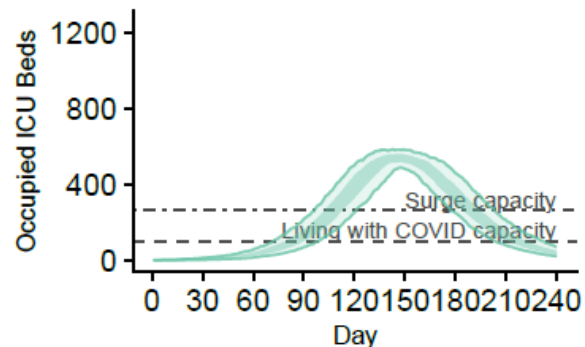
ICU Occupancy

QLD Scenario 4:

Vaccination	80%	PHSM	Low
Daily infections at transition	Low 30 - 100	TTIQ	Partial
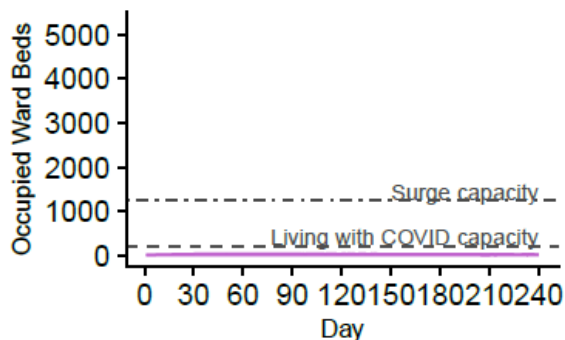
Ward Occupancy   **ICU Occupancy**
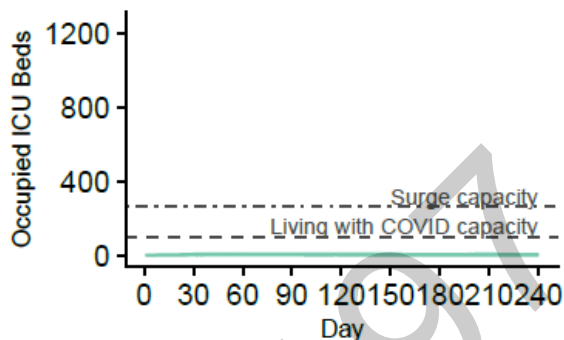
QLD Scenario 5:

Vaccination	70%	PHSM	Baseline
Daily infections at transition	Medium 300 − 1000	TTIQ	Partial
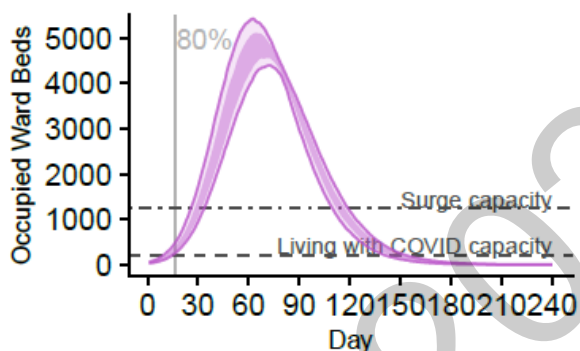
Ward Occupancy   **ICU Occupancy**
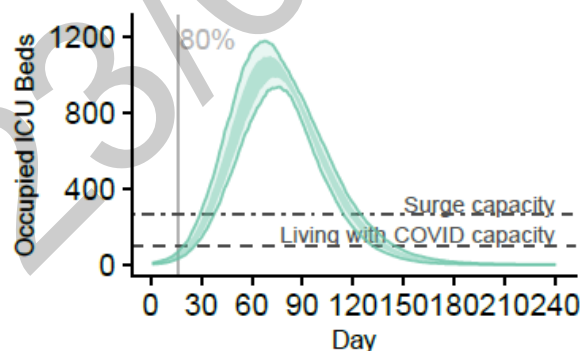
QLD Scenario 6:

Vaccination	70%	PHSM	Low
Daily infections at transition	Medium 300 − 1000	TTIQ	Partial
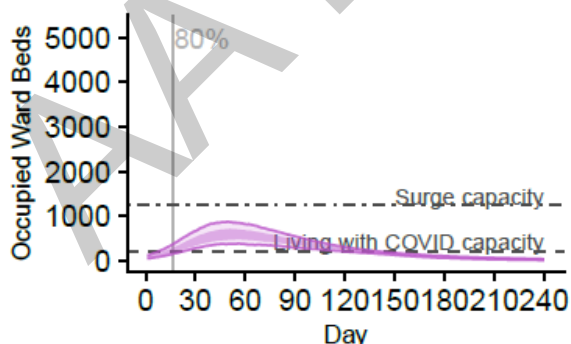
Ward Occupancy   **ICU Occupancy**
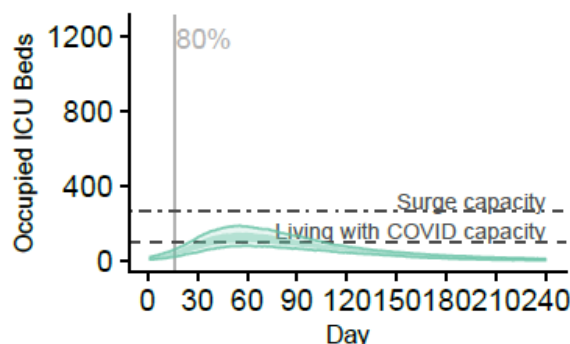
QLD Scenario 7:

Vaccination	80%		**PHSM**	Baseline
Daily infections at transition	Medium 300 – 1000		**TTIQ**	Partial
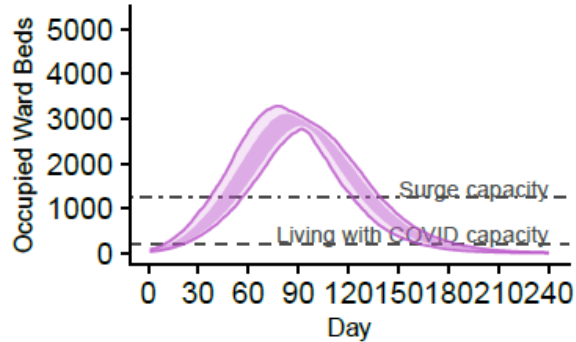
Ward Occupancy
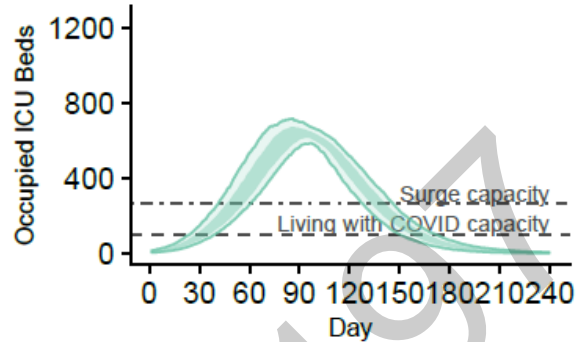
ICU Occupancy

QLD Scenario 8:

Vaccination	80%		**PHSM**	Low
Daily infections at transition	Medium 300 – 1000		**TTIQ**	Partial
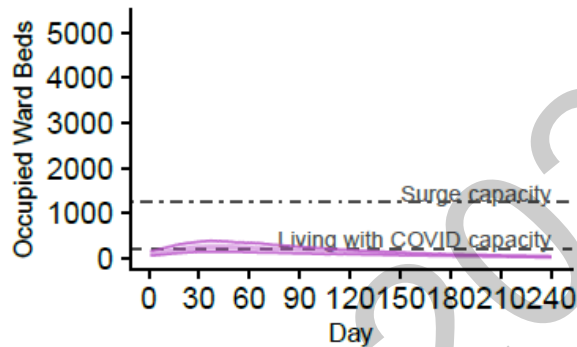
Ward Occupancy
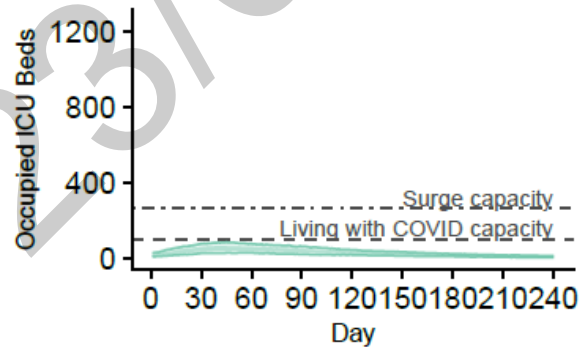
ICU Occupancy

South Australia
Population size 1,771,700

SA Scenario 1:

Vaccination	70%	**PHSM**	Baseline
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
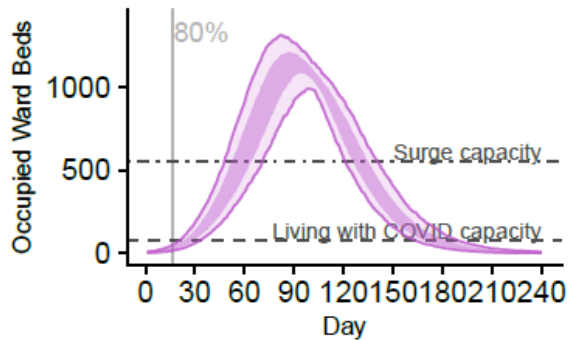
Ward Occupancy
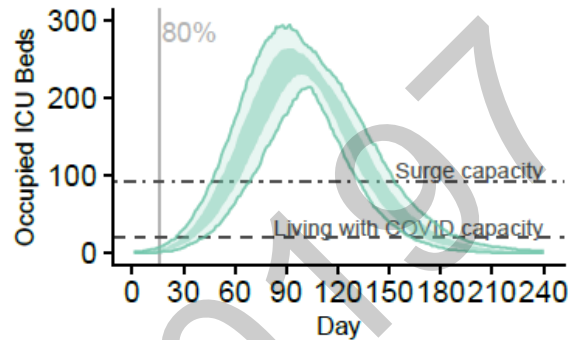
ICU Occupancy

SA Scenario 2:

Vaccination	70%	**PHSM**	Low
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
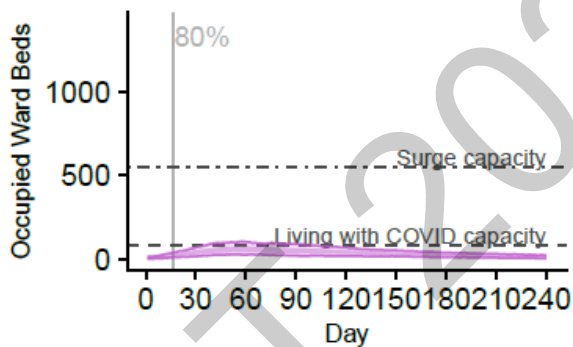
Ward Occupancy
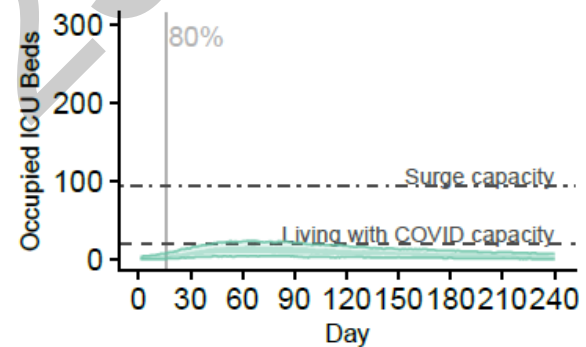
ICU Occupancy

SA Scenario 3:

Vaccination	80%	PHSM	Baseline
Daily infections at transition	Low 30 - 100	TTIQ	Partial
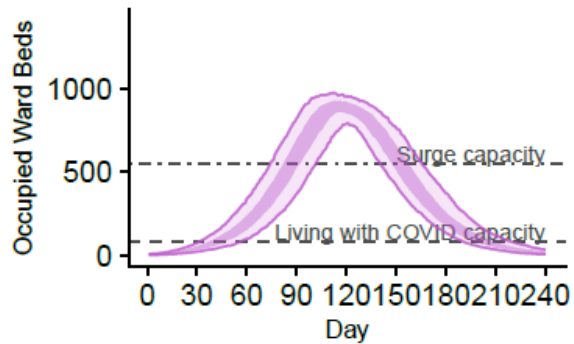
Ward Occupancy
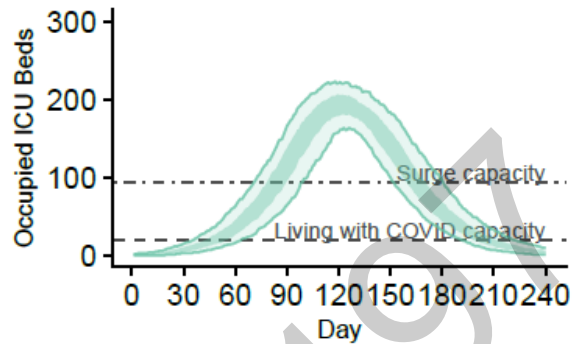
ICU Occupancy

SA Scenario 4:

Vaccination	80%	PHSM	Low
Daily infections at transition	Low 30 - 100	TTIQ	Partial
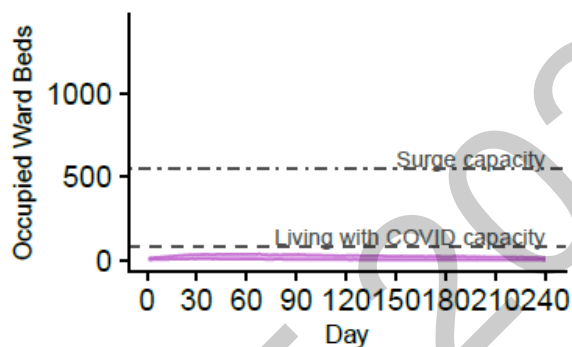
Ward Occupancy

ICU Occupancy
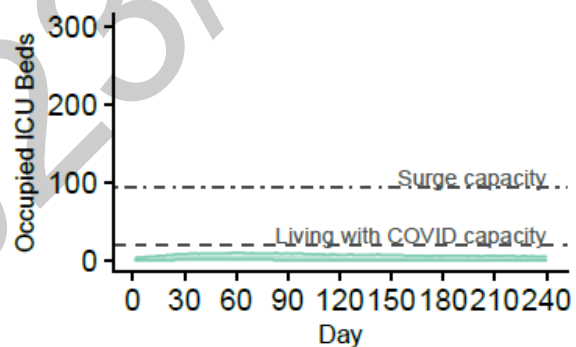
Tasmania

Population size 542,000

Note: Tasmania have indicated amendments will be made to capacities – particularly an increase in Surge capacity on Wards, since capacities were confirmed on 24th September 2021 for the production of these figures.

TAS Scenario 1:

Vaccination	70%	**PHSM**	Baseline
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial

TAS Scenario 2:
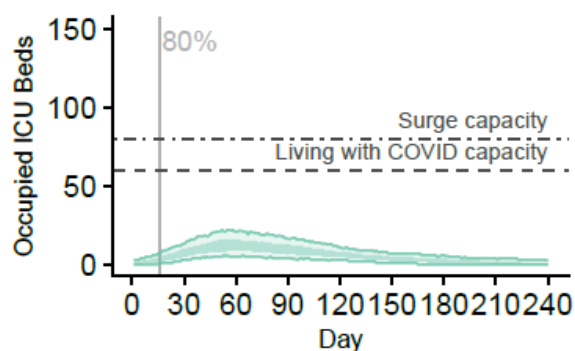
Vaccination	70%	**PHSM**	Low
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial

TAS Scenario 3:

Vaccination	80%	**PHSM**	Baseline
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial

TAS Scenario 4:

Vaccination	80%	**PHSM**	Low
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial

Victoria
Population size 6,648,600

VIC Scenario 1:

Vaccination	70%	PHSM	Baseline
Daily infections at transition	Medium 300 – 1000	TTIQ	Partial
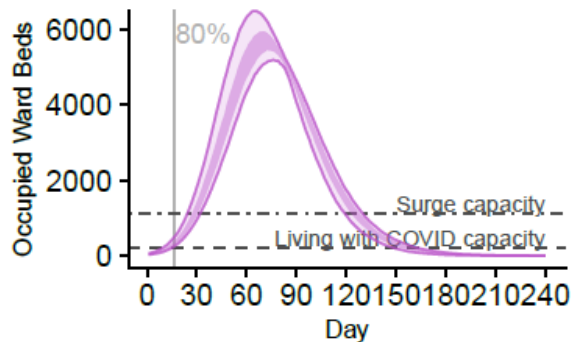
Ward Occupancy
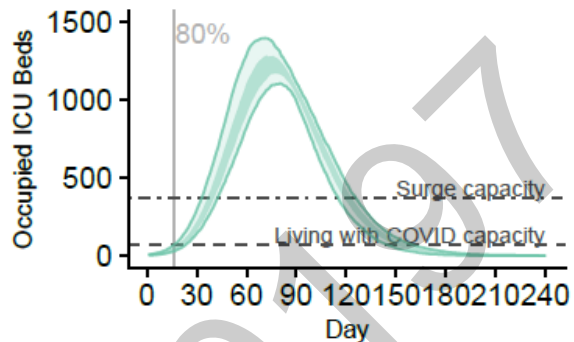
ICU Occupancy

VIC Scenario 2:

Vaccination	70%	PHSM	Low
Daily infections at transition	Medium 300 – 1000	TTIQ	Partial
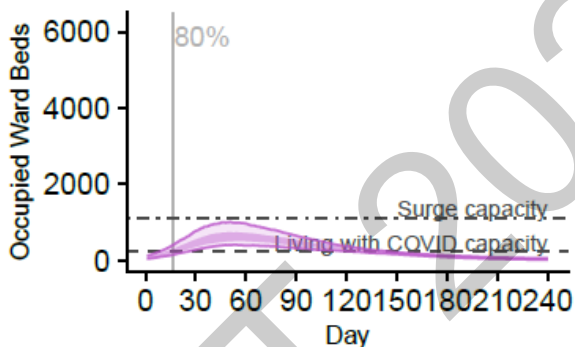
Ward Occupancy
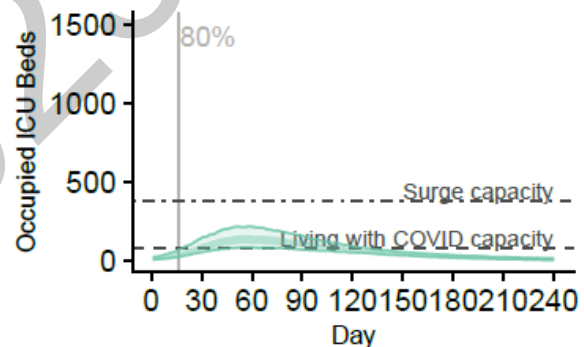
ICU Occupancy

VIC Scenario 3:

Vaccination	80%	**PHSM**	Baseline
Daily infections at transition	Medium 300 – 1000	**TTIQ**	Partial
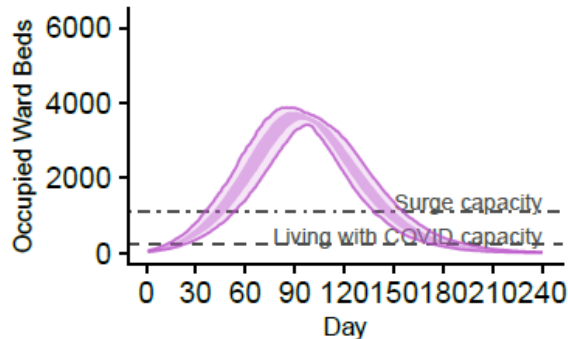
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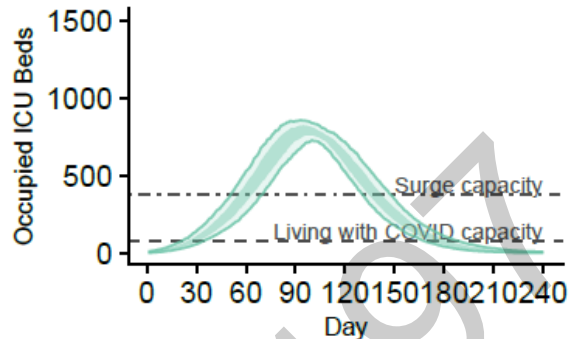
ICU Occupancy

VIC Scenario 4:

Vaccination	80%	**PHSM**	Low
Daily infections at transition	Medium 300 – 1000	**TTIQ**	Partial
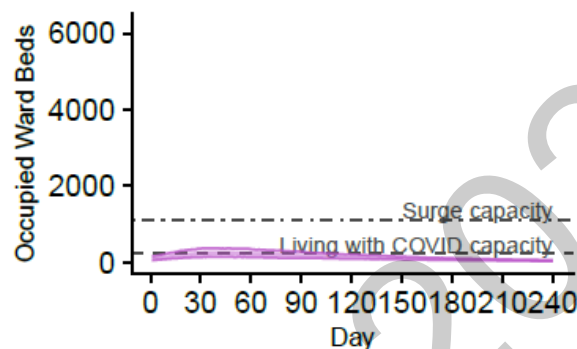
Ward Occupancy
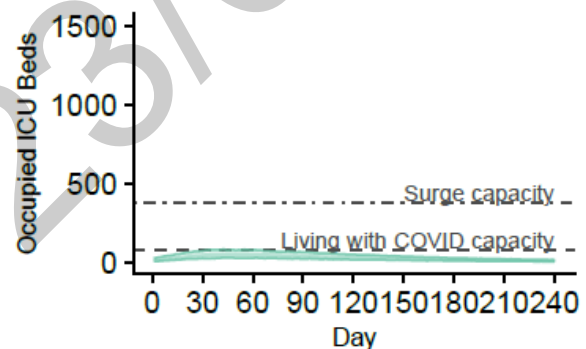
ICU Occupancy

VIC Scenario 5:

Vaccination	70%	**PHSM**	Medium, shifting to Low at 80% vaccination
Daily infections at transition	High 1000 - 4500	**TTIQ**	Partial
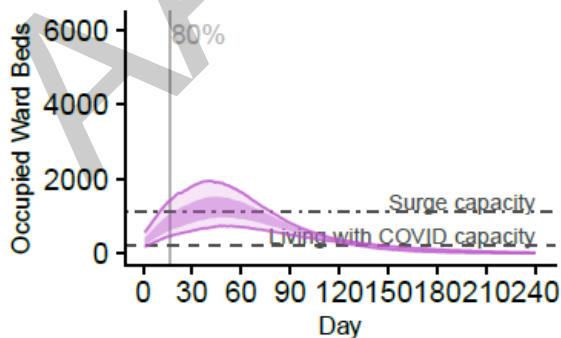
Ward Occupancy
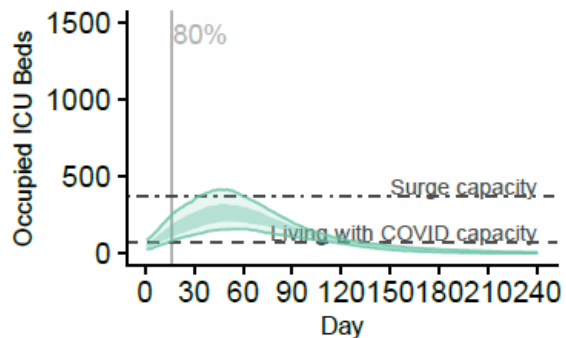
ICU Occupancy

Western Australia

Population size 2,675,800

WA Scenario 1:

Vaccination	70%	**PHSM**	Baseline
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
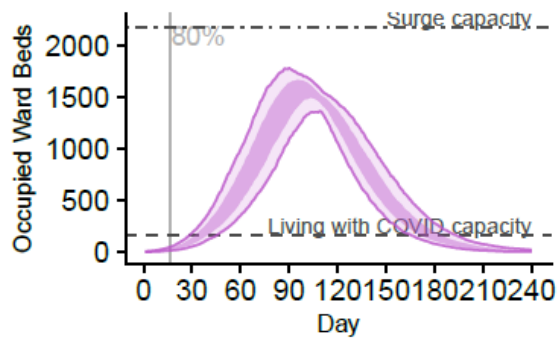
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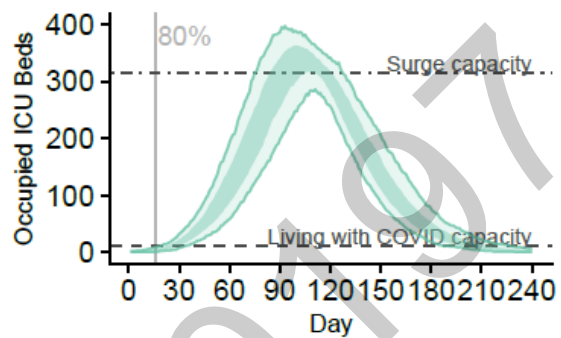
ICU Occupancy

WA Scenario 2:

Vaccination	70%	**PHSM**	Low
Daily infections at transition	Low 30 - 100	**TTIQ**	Partial
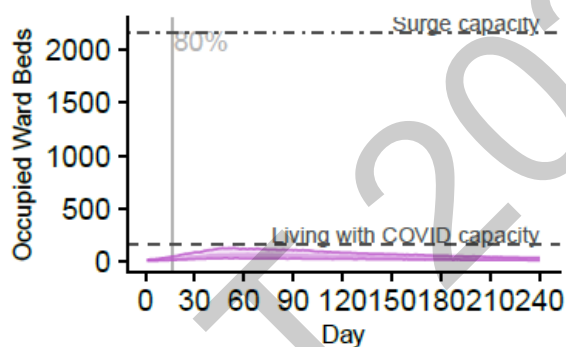
Ward Occupancy
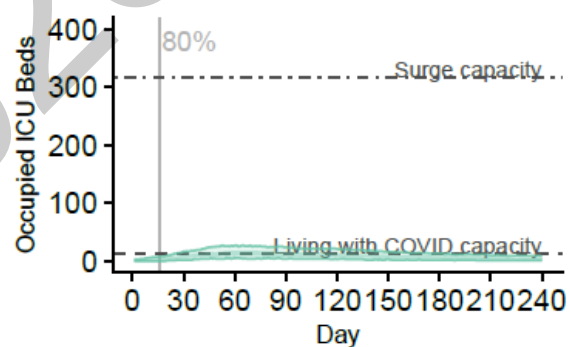
ICU Occupancy

WA Scenario 3:

Vaccination	80%		PHSM	Baseline
Daily infections at transition	Low 30 - 100		TTIQ	Partial
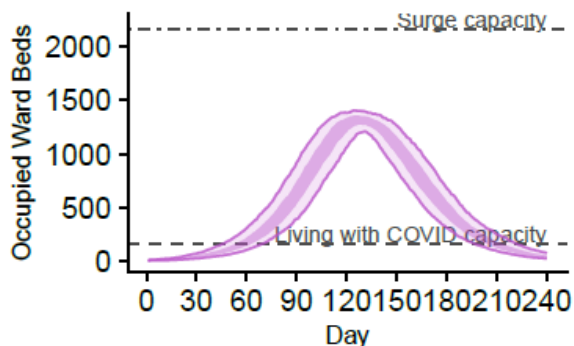
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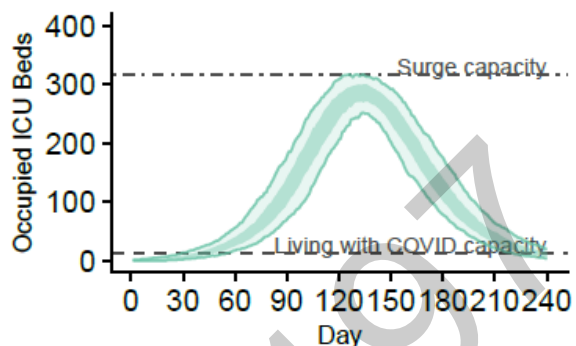
ICU Occupancy

WA Scenario 4:

Vaccination	80%		PHSM	Low
Daily infections at transition	Low 30 - 100		TTIQ	Partial
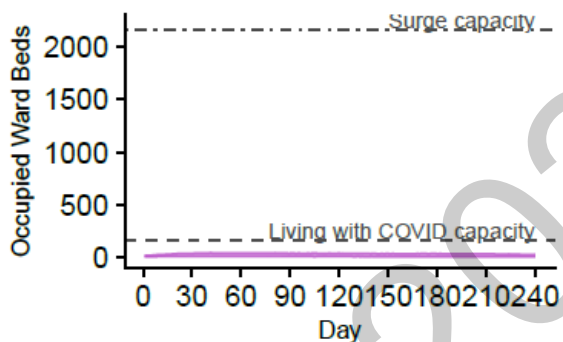
Ward Occupancy

ICU Occupancy
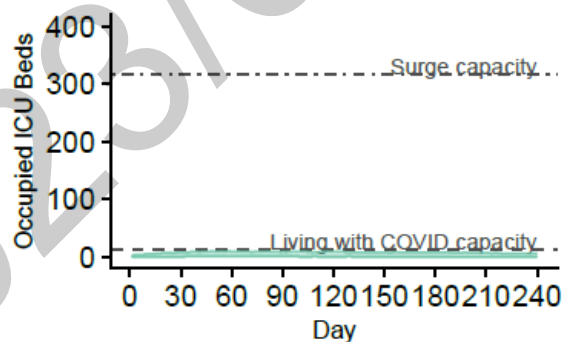
Attachment A2: Updated Capacity Data

Table 1: Hospital Capacity Data as submitted by States and Territories 14 September 2021

Hospital bed capacity	NSW	VIC	QLD [1]	WA	SA [6]	TAS	ACT [2]	NT	National
"Surge" hospital capacity									
Acute bed capacity for COVID-19 patients in public hospitals	3,000	1,125	1,238	486	423	184	227	44	6,727
Acute bed capacity for COVID-19 patients in private hospitals	500 [3]	0	0	1,683	125	0	0	0	2,308
Total acute bed capacity for COVID-19 patients	3,500	1,125	1,238	2,169	548	184	227	44	9,035
Paediatric acute bed capacity for COVID-19 patients	-	-	116	-	32	-	18	2	168
"Living with COVID" hospital capacity									
Acute bed capacity for COVID-19 patients in public hospitals	240	225	220	158	80 [7]	56	58	35	1,072
Acute bed capacity for COVID-19 patients in private hospitals [4]	0	0	0	0	0	0	0	0	0
Total acute bed capacity for COVID-19 patients	240	225	220	158 [5]	80 [7]	56	58	35	1,072
Paediatric acute bed capacity for COVID-19 patients	-	-	3	-	16	-	6	-	25
Current COVID-19 patients in acute beds as at 24 September	1,186	297	9	0	0	0	12	4	1,508

1. COVID-19 hospital acute bed capacity during surge assumes diverting Cat 3 and 50% Cat 2 elective surgery to Privates (or waitlisted). Acute bed capacity 'living with COVID' operates under a Designated COVID directive with up to 200 beds identified

2. Southern NSW LGAs may require ACT Health system inpatient beds and this has not been included in this model

3. The preference would be to manage COVID-19 patients in public hospitals, however extreme surge cases may precipitate the use of private hospital facilities

4. Under a "Living with COVID" scenario, it would be projected that all COVID-19 patients would be treated in public hospitals

5. The 158 beds are currently in the process of being opened and staffed. This is projected to increase to 272 by December 2022, dependent on capital works and staffing

6. Living with COVID-19 models will assume a vaccination rate of > 80%

7. SA is currently planning increased system capacity to facilitate 80 beds in a "Living with COVID" scenario. This would exceed our current capability whilst maintaining full elective and emergency access.

Figure 1: Hospital Capacities by States and Territories, Adjusted for Populations
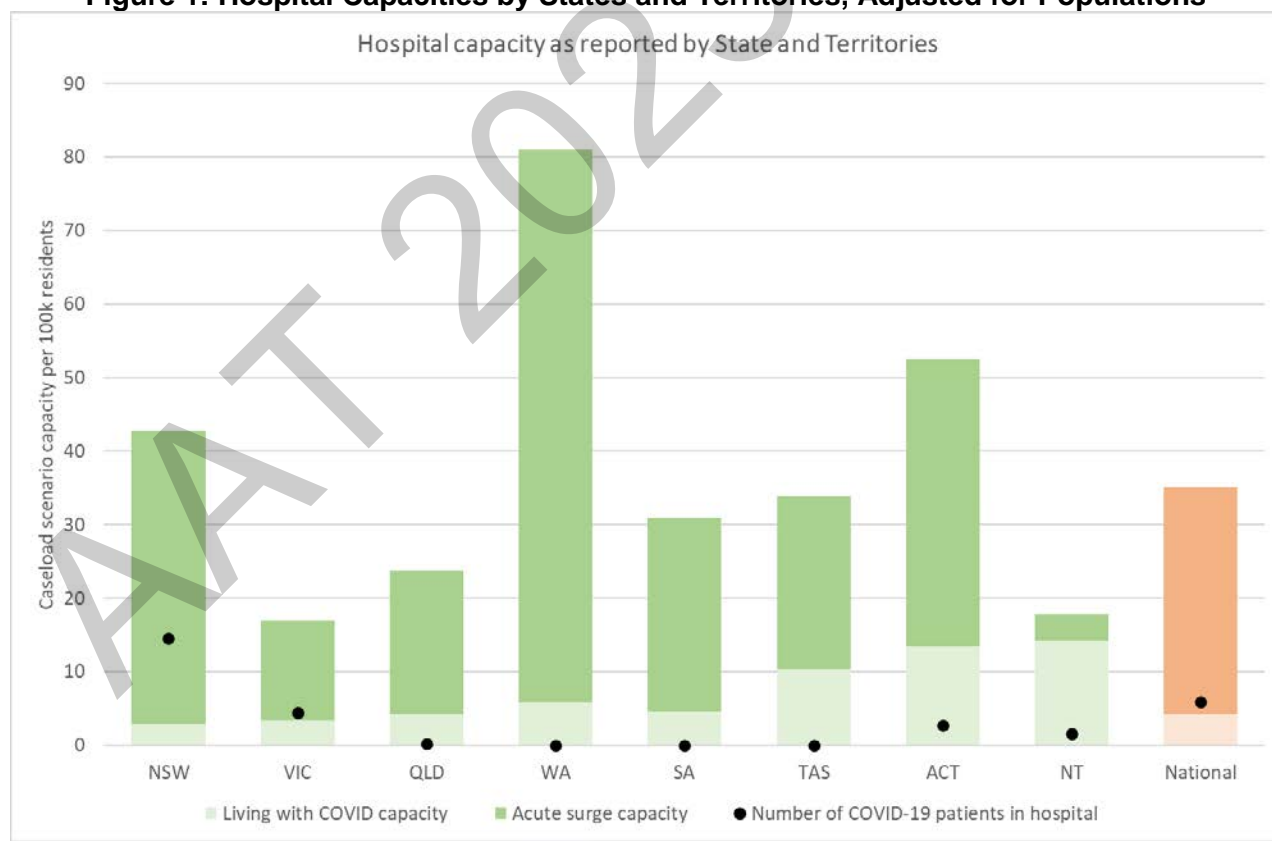
Data supplied by States and Territory Health Departments as at 14 September 2021, and adjusted using ABS Estimated Residential Population data March 2021

Table 2: ICU Capacity Data as submitted by States and Territories 14 September 2021

ICU capacity	NSW	VIC	QLD	WA	SA [6]	TAS	ACT [1]	NT	National
"Surge" ICU capacity									
ICU capacity for COVID-19 patients in public hospitals	1,163	375	264	316	73	70	72	8	2,341
ICU capacity for COVID-19 patients in private hospitals	232	0	0	0	20	10	0	0	262
Total ICU capacity for COVID-19 patients	1,395	375	264 [2]	316 [2]	93	80	72	8	2,603
Paediatric ICU capacity for COVID-19 patients	46	-	37	12	5	-	-	-	100
"Living with COVID" ICU capacity									
ICU capacity for COVID-19 patients in public hospitals	50	75	102	12	20	30	20	8	317
ICU capacity for COVID-19 patients in private hospitals	0	0	0	0	0	0	0	0	0
Total ICU capacity for COVID-19 patients	50	75	102	12	20	30	20 [3]	8	317
Paediatric ICU capacity for COVID-19 patients	6	-	24	2	2	-	-	-	34
Currently available staffed and equipped ICU beds [4]	884	479	412	159	161	60	37	20	2,212
Total enhanced ICU bed capacity (if staffing available) [5]	1,140	687	599	211	222	80	61	25	3,025
Current COVID-19 patients in ICU as at 24 September	232	66	0	0	0	0	3	0	301

1. Southern NSW LGAs may require ACT Health ICU beds but this has not been included in this model
2. Assumes a shift of non-COVID-19 patients from public to private facilities to free up public ICU capacity
3. Living with ICU beds decreases the availablity of elective surgery beds, which will either be diverted to private hospital, or ICU capacity increased at CHS. Alternatively, COVID infusion allocations should be considered an increased service.
4. ANZICS surge survey version 2, 7 September 2021, Currently available ICU beds are operational, equipped and staffed for use now. This is the maximum number reported and may vary on a daily basis.
5. ANZICS surge survey Version 2, 7 September 2021, sum of currently available operational ICU beds and additional physical ICU bed spaces - assumes staffing is available for the additional physical bed spaces
6. Living with COVID-19 models will assume a vaccination rate of > 80%

Figure 2: ICU Capacities by States and Territories, Adjusted for Populations
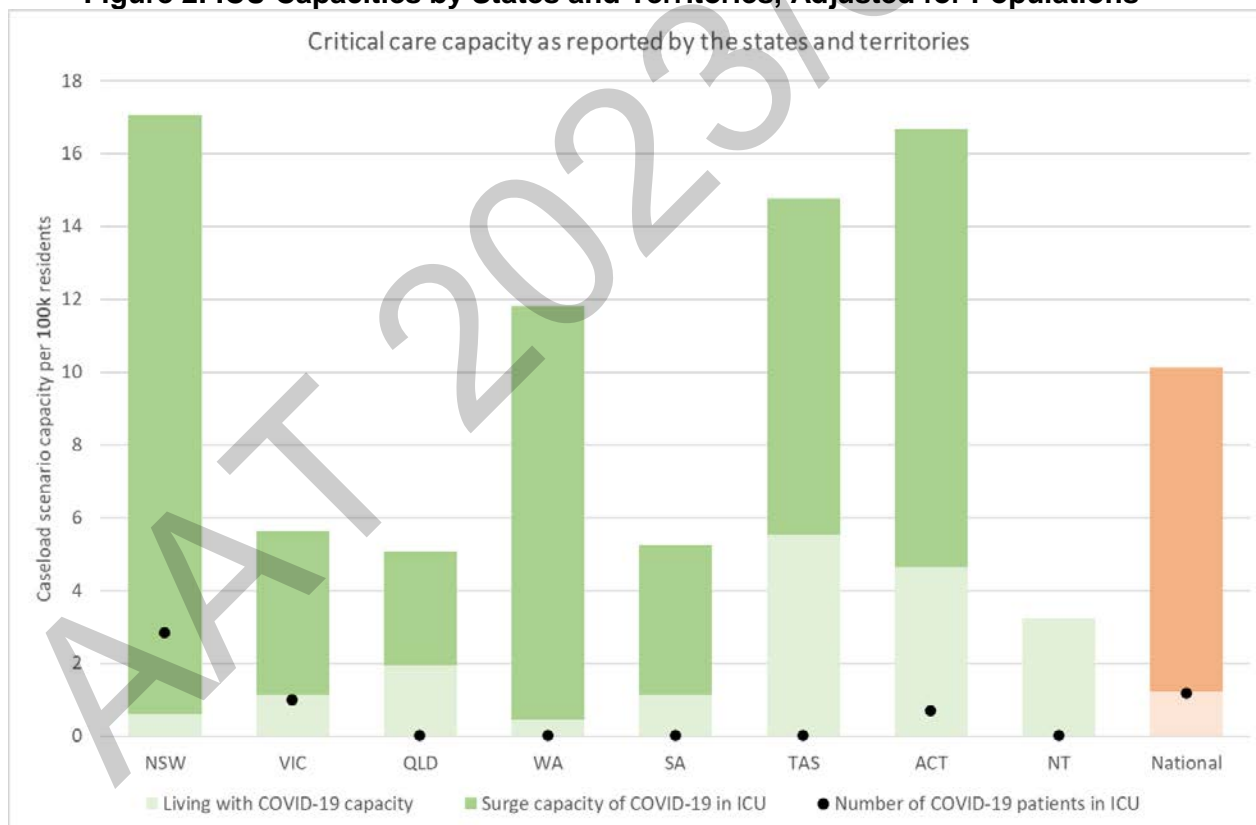
Data supplied by States and Territory Health Departments as at 14 September 2021, and adjusted using ABS Estimated Residential Population data March 2021

Table 3: Emergency Department Daily Presentations Capacity Data as submitted by States and Territories 14 September 2021

ED presentations	NSW	VIC	QLD	WA	SA [4]	TAS	ACT	NT	National
"Surge" ED presentations									
ED presentations due to suspected COVID-19	2,600	- [2]	1,051	- [1]	300 [5]	- [2]	258	124	4,333
"Living with COVID" ED presentations									
ED presentations due to suspected COVID-19	900	- [2]	908	- [3]	150 [5]	- [2]	145	124	2,227
Current ED presentations due to COVID-19	2,600	377	907	32	4	0	71	0	3,991
Current total daily ED presentations	7,900	4,757	5,816	3,158	1,596	475	276	460	24,438

1. Models to divert Covid patients either direct to a ward bed or to a separate assessment area are planned, however a maximum capacity has not been modelled
2. Yet to be determined
3. Currently numbers of ED beds are occupied with MH patients awaiting admission. If NDIS long stay MH patients could be relocated this issue would be substantially improved adding back a significant number of ED assessment basy

4. Living with COVID-19 models will assume a vaccination rate of > 80%
5. SA is seeking to create alternative destinations to ED for some this cohort.

Table 4: Hospital in the Home Capacity Data as submitted by States and Territories 14 September 2021

Hospital in the home (HITH) patients	NSW	VIC	QLD	WA	SA [3]	TAS	ACT	NT	National
"Surge" HITH patients									
HITH capacity for COVID-19 patients	2,158	- [1]	- [1]	0 [2]	0 [4]	- [1]	1,500	48	3,706
"Living with COVID" HITH patients									
HITH capacity for COVID-19 patients	750	- [1]	385	0 [2]	0 [4]	- [1]	500	29	1,664
Current total HITH COVID-19 patients	2,158	315	6	0	0	0	322	0	2,801

1. Yet to be determined
2. Current HITH model has no latent capacity for surge or living with Covid. Workforce will need to be redirected to manage this workload. Modelling is being currently undertaken
3. Living with COVID-19 models will assume a vaccination rate of > 80%
4. This is now being developed and includes management of COVID-19 positive cases in homes and medi-hotel rooms.

Attachment A3: National Principles to Guide Planning for COVID-19 'Surge' Scenarios

As states and territories progressively reopen in line with *the National Plan to transition Australia's National COVID Response* (the National Plan) it is accepted that health systems will need to be ready to meet the long-term additional demands from sustained COVID-19 cases (Living With COVID - LWC), while also being prepared to respond with shorter-term additional capacity required to effectively manage local outbreaks (surge).

Under LWC scenarios, capacities represent the COVID-19 demand that could be sustained in a steady state COVID-19 environment whilst continuing to deliver non-COVID-19 health services, with minimal disruption. While under surge scenario, capacities represent the COVID-19 demand each jurisdiction could sustain during a large-scale outbreak for some weeks in an expanded health system, and/or when the demand on resources exceeds those that have been planned for LWC, with impact on some elective health services but without limiting access to acute and urgent care when required.

The Health System Capacity Cross-Jurisdictional Working Group (the Working Group) has undertaken further analysis and mapping of current jurisdictional plans (noting these are point-in-time and subject to ongoing review and refinement). Jurisdictional level planning considers specific activities and responses that reflect the local health system conditions, epidemiology and real-time public health situation.

Jurisdictions have all planned for "surge" responses in some form, with many subject to ongoing review (a summary of current plans and status is provided at Appendix A).

The Working Group has developed 'National Principles to Guide Planning for COVID-19 Surge Scenarios' (the Principles). This seeks to provide a collaborative and consistent national foundation to guide planning for surge responses at the jurisdictional level. It is intended Working Group will continue to provide a mechanism for sharing learnings and update shared principles as real-time experience and evidence of successful approaches is gathered. The Principles have been informed by jurisdictional surge plans, the Australian and New Zealand Intensive Care Society (ANZICS) COVID-19 Guidelines and the Australasian College for Emergency Medicine (ACEM) COVID-19 Clinical Guidelines.

These Principles are not expected to apply to all jurisdiction in all surge scenarios and are expected to be updated over time.

Tiers of escalation

- Planning should reflect a tiered approach, identifying stages of escalation across the spectrum of potential surge scenarios. Strategies to enhance capacity should be identified for each stage of escalation.
- Triggers for escalation should be clearly defined in advance and informed by real-time data (where possible) and regular updates of projected demand to support timely decision making. Triggers should consider both staffing and physical capacity of hospitals and acute care.
- An example framework to support a tiered approach is provided at Appendix B, for illustrative purposes, noting associated strategies and responses will vary by jurisdiction.

System Flow and Capacity

- Each jurisdiction should consider systems for managing capacity and flow across facilities. This should include appropriate strategies for load sharing, in line with jurisdictional planning. This may involve:
  - Pre-Hospital Ambulance Distribution;
  - Proactive Redistribution for Hospital in the Home, Acute and Intensive Care Demand to support local capacity;
  - Reactive Distribution for Hospital in the Home, Acute and Intensive Care Demand to reduce excessive local surge; and
  - Coordination for Inter Hospital Transfers during periods where established pathways are impacted.

Infrastructure

- Planning should identify infrastructure requirements to manage a surge response. As appropriate and feasible, wards and/or hospitals should be designated for COVID-19 cases in advance.
- Planning should identify additional infrastructure that can be utilised, and staffed (including under alternative workforce models), during a surge response (critical care, acute and sub-acute), and/or options for mobilising non-COVID patients to other available infrastructure (e.g. private hospitals, residential care).

Remote, rural and regional surge

1. Planning must consider surge support requirements for outbreaks that occur in remote, rural and regional settings.
   - Centralised or regionalised decision making should be considered during surge scenarios. This may support mobilising staff to areas of need across a jurisdiction.
   - This should include consideration of patient transport arrangements including potential mass movements of patients in response to a surge scenario.

o Consideration of increasing service capacity (infrastructure/ resources/ workforce) in remote, rural and regional settings if ability to transfer patients unable to meet demand.

Workforce

- Planning should clearly identify workforce constraints and strategies to implement at each stage of the tiered escalation response.
- Planning should consider options for mobilising and redeploying staff in response to a surge scenario.
  - o Staff who are likely to be redeployed should be identified in advance and trained to address skills shortages, where possible.
  - o Staff with existing skillsets may be mobilised, for example encouraging part time and casual staff to work fulltime and encouraging recently retired staff to return to the workforce.
- Planning should consider utilisation of alternative models of care to support a surge response where existing acute care workforce is overwhelmed and usual care practices cannot be maintained.
- Jurisdictions should develop consistent COVID-19 deployment strategies including processes for pre-deployment briefings, education and training for local policy and equipment, accommodation, travel, processes to return employees to their local area including surveillance testing.
- Where possible, jurisdictions should pre-identify staff for COVID-19 deployment and have them on standby in preparation for a surge.

Delivering Acute Care

2. Planning should include strategies for reducing demand on acute care and intensive care services.
   - o Non-urgent elective surgeries should be deferred, cancelled, or transitioned out of the public health system into the private health system, depending on state and territory plans.
   - o Wherever possible, expedited patient discharge should be considered. This may involve discharge of ICU patients to wards for continued clinical oversight, or discharge of general patients to the home environment to be cared for via hospital in the home.
   - o Jurisdictions should consider enhancing capability to allow for home oxygenation of suitable COVID-19 patient groups to maintain acute care capacity for patients requiring hospitalisation.

3. Acute care should be applied in an ethical and equitable manner, in line with jurisdictional and national guidance:
   - o Appropriate healthcare should always be provided irrespective of admission diagnosis.

- o Consistent decision-making frameworks should be applied when life-saving resources are scarce and inadequate to treat all patients. This includes maximising the number of lives saved and reassessing decision making and provision of support in intensive care.
- o Services must avoid discrimination when managing patients.

4. Hospitals should consider ways to reduce demand and increase capacity of Emergency Departments at a local level, in line with broader jurisdictional planning.
   - o Planning should consider strategies to support patient flow, such as early redirection of patients with mild illness and deferring patients to alternative health services if required. Planning should consider infrastructure and layouts as EDs may require expansion and short stay units to meet demand. This may also involve establishing hospital based respiratory assessment clinics to manage patient surge. Layout of EDs should also be considered, with a system of risk stratifying patients and zoning to minimise risk of transmission in EDs.
   - o Planning should reflect strategies to manage surge patients within patient transport systems, and surge options for these systems.

Stockpile

5. Planning should consider stockpiling essential medicines, consumables, oxygen and equipment to support surge scenarios. During surge, state-wide coordination of stock should occur, with real-time data supporting forecasting of demand so that stock can be released in advance of anticipated need. A central stockpile of suitable ICU ventilators should be maintained to support ICU surge.

Cross-Jurisdictional Surge

6. In later stages of intra-jurisdictional escalation, cross-jurisdictional support may be provided in line with guidance through the National Health Emergency Management Sub-committee (NHEMS).

Surge-plan review and continuous improvement

7. There is a strong commitment to continuous improvement and collaborative learning, and jurisdictions will continue to share best practice learnings to inform improvement across the country via the Working Group.
8. Surge planning should be regularly reviewed and updated as appropriate to jurisdictional contexts in line with new information as it is received.

Appendix A: Status and summary of jurisdictional surge plans

Jurisdiction	Status of surge planning	Summary of key elements of surge plan

NSW	- Current surge plan is specific to ICUs - Work is underway to formalise surge planning in other parts of the health system	- ICU Pandemic STEP defines the impact of the pandemic on daily operations and the triggers to move to the next escalation level. It enables facilities to employ strategies to manage critically ill patients during each phase of the pandemic.
		ICU Pandemic STEP levels:
		1. Minimal impact on daily operations;
		2. Moderate impact on daily operations – ICU approaching operational capacity;
		3. Severe impact – overall demand for critical care exceeding operational capacity; and
		4. Overwhelming impact – demand significantly exceeds organisation wide capacity. - SHEOC ICU strategies – aim to plan, monitor, implement and support surge demand. - ICU teleconference to support ICU capacity and flow. - ICU system flow coordinator role – centralised coordination of ICU capacity and flow. - Intensive care advisory service to support rural, remote and regional areas. - Ventilators and equipment stockpiled and distributed to meet predicted demand. - Weekly forecasting of consumable and pharmaceutical stock and predicted surge. - Resource based decision making:
		   o Allocate resources to maximise the number of lives saved;
		   o Provide appropriate medical treatment irrespective of admission diagnosis;
		   o Avoid unjust discrimination; and
		   o Process for decision making when resources are inadequate to treat all patients. - Reassess provision of support in intensive care.

VIC	• Health system strategies have been developed across five stages of COVID Caseload, including 'surge' levels. • Implementation of strategies has begun	Plans have been developed with five stages of COVID caseload, with strategies regarding workforce and management of non-COVID care corresponding to each:

Stage 1 - COVID-19 admissions: 0-600
- Additional workforce supports, and maximisation of workforce capacity and scope
- Shift care to free up beds and stream COVID-19 patients by:
  - Postponing non urgent elective surgery in major COVID streaming sites in metropolitan Melbourne
  - Pausing 50 per cent of elective surgery in private hospitals and day procedures in metropolitan Melbourne
  - Referring where possible priority public patients, including non-urgent public patients who have waited significantly and beyond the clinically recommended time, to private hospitals
- Further minor capital works to improve ventilation, safety and ward capacity
- Ramp up home-based care

Stage 2 - COVID-19 admissions: 600-1,000
- Further shift care to free up beds and stream COVID-19 patients
- Additional home-based care
- Where necessary, move to alternative workforce models in critical care settings

Stage 3 - COVID-19 admissions: 1,000-1,500
- Seek further additional workforces (including from private hospital capacity, vaccine and testing workforce)
- Reduce remaining elective surgery to a minimum.
- Reduce other non-urgent medical care
- System wide maximisation of workforce capacity and scope, with increasing adaption of alternative workforce models, particularly in critical care

		Stage 4 - COVID-19 admissions: 1,500-2,500 • Cease majority of elective surgery • Reduced access to emergency care including emergency surgery • Shift lower acuity patients to sub-acute beds • Widespread adoption of alternative workforce models • Extended alternative workforce models in ICU
QLD	• QLD has mapped capacity across the health system, including consideration of surge capacity and alternative models of care. • Currently working with GPs regarding rural and remote surge planning.	• Steps with defined criteria and planning across public hospitals, private hospitals, first nations, aged care, disability care, PPE for each stage: o Business as usual o Planning and precautionary o Responding moderate o Responding high o Responding crisis o Responding extreme • Implementation of COVID-19 tactical group o Centralised decision making • Pathology o Prioritise testing in boundary suburbs, high risk settings, and finally outside of lockdown areas • Public hospital o Suspend non-urgent surgeries, move urgent surgeries to private hospitals • Maximise HITH • Private hospital o Reactivate contracts, use for covid care only at higher levels of surge response • First nations response o Household lockdowns at higher levels of surge response

		- Aged care - Additional restrictions as required. - Transfer COVID-19 positive residents to hospital. - Transfer COVID-19 negative residents where needed. - Mobilise GP workforce to support emergency departments and fever clinics, mobilise GP workforce to support acute in-patient care - Disability care - Restrict movement - PPE requirements – increased precautions as surge response progresses
WA	- Significant surge planning has been undertaken and is being reviewed. - Workforce surge plan in the process of being updated.	- Accommodate long stay patients fit for discharge elsewhere (e.g. NDIS) - Enhancing community care model – triage of patients according to risk - Primary care provides non-urgent telehealth, HITH models where appropriate - Each site considering dedicated respiratory triage - Expanding functions of patient flow command centre to coordinate pathways - Consideration of rapid testing strategies - Plan to identify surge capacity (general/ICU/ED): - utilisation of existing beds - cessation of non-urgent elective work - private sector beds - identify non-standard bed locations - activation plans for each tranche of capacity and supporting items - dedicated roll out plan for ventilators - PPE training, high risk areas fit-testing - Mandatory vaccination - Plan for moving remote/regional patients including mass movements - Testing surge – private sector pathology providers - Alternative models of care if required
SA	Ongoing updating of existing plans to expand for living with COVID scenarios, and	- Plan informed by triggers defined from CO STAT one (current state) to co state 5 (full lockdown) - Creation of additional health system acute capacity including alternate destinations and pathways for rehabilitation, NDIS, aged care , private sector decant, HITH, GITH and home services

	- surges within living with COVID scenarios. - Building increased system capacity to reduce hospital occupancy levels. - Primary care taskforce engaged for revised COVID planning -	- Updating of integrated in-patient COVID pathway to build a full pathway in living with COVID scenario and update for surges within the living with COVID scenario, across public and private sector. ADF supporting. - Identified surge and living with COVID capacity – private and public expansion. - Identified designated COVID sites – infrastructure informs patient destination. (predominantly in public sector). Improve infrastructure where possible for ongoing living with COVID. - Staff and services to be brought to designated COVID site to support services - Designated non-COVID hospitals, to ensure the system can deliver ongoing care. - Development of out of extensive and scaled up hospital COVID management pathways in both the home and revision of role of medi-hotels, as part of step up and step down care. - Creation of rapid treatment and assessment centres, notably for respiratory, with day infusion capacity to support new treatment interventions and medical modalities, to also support ED alternative destinations. PHN / CW provision of similar would be invaluable. - Infrastructure to inform hospital destination in living with COVID scenarios. - Re-skilling of ICU surge staffing, to support 60 COVID ICU beds. - Workforce renewal including recruitment of additional nursing staff from recently qualified cohort ongoing. - Development of Elective surgery matrix completed to align ES with public activity staging - Continue to promote and base plans on mandated vacc for HCW

TAS	- Surge planning has been completed and will be updated as needed.	- Alignment with ANZICS phased and tiered response:
		  o Minimal impact on daily operations (10% beds occupied with COVID cases)
		  o Moderate impact or ICU at capacity (still able to meet demand, approx. 25% beds occupied by COVID cases)

- o Severe impact (at capacity for ventilated patients, approx. 50% beds occupied by COVID cases)
- o Overwhelming impact on daily operations (no longer able to meet demand for ventilated patients)
- Addition of beds ring fenced for COVID-19 cases with ventilators and pharmacy supply.
- Established Tasmanian critical care network to inform strategic direction and delivery of crit care
- Scaling of actions in line with ANZICS guidelines.
- Strategies to reduce ICU demand
  - o Deferment or cancellation of non-urgent elective surgery
  - o Development of cooperative agreements with other health services
  - o Reserve ICU admission for patients requiring ICU specific intervention
  - o Non-ICU involvement in rapid response and medical emergency teams
  - o Proactive consideration of treatment goals
- Strategies to increase ICU capacity infrastructure
  - o All ICUs within Tasmania have available non-staffed beds and these will be made operational utilising re-deployed staff and an increase in hours for part-time staff. All acute care facilities have identified further areas outside of ICUs that can be utilised for surge.
- Strategies to increase ICU capacity equipment and consumables
  - o Central pandemic ventilator stockpile
  - o Increased medication stock holdings
  - o State wide management of COVID positive patients
    - Preferred option to transfer patients rather than equipment or staff
    - Patients initially will be sent to ICUs with available negative pressure rooms, until these become exhausted
    - Always prioritise patient care
- Strategies to increase ICU capacity staffing and workforce
  - o Redeployment of staff for surge
  - o Training and education for staff with skills shortages
  - o Support from other jurisdictions

		- Alternative models of care when other alternatives have been exhausted. - Clinical support strategies - ADF support - Ambulance Tasmanian deployment clinical assistance team - Partnership with private hospital
ACT	Surge planning completed. Planning focuses on ICU and inpatient wards, however considers the private sector.	- Triggers – if daily cases increases to threshold will trigger an anticipated stretch of health system - Pressure point ICU workforce - Decision made to crowd out non-COVID elective activities in line with Territory Wide COVID-19 Response Plan - Key focus on vaccination of children - Living COVID-19 Clinical Response Plan (e.g. delta and evidence of aerosolization impacted plan) - Consideration of infrastructure, negative pressure rooms, rooms with bathrooms - Detailed operational plans at the facility level - Feedback on demand for acute services to public health to determine when to reintroduce measures - Consistent and collaborative approach to providing safe quality care - Describe new and alternate models of care - Coordinate deployment of human resources and equipment - Development of adult inpatient care pathway with designated adult covid wards
NT	Surge planning in process including NT Health COVID response unit, special consideration of remote communities, hospital capacity,	- Territory Wide Health surge capacity and capability review being conducted - Setting trigger points for enacting surge response across NT settings: - Remote - Regional - Urban - Identified tertiary health care facilities as options for commission COVID wards across NT - Continued planning with private sector noting this is limited in the NT

Models of Care, workforce readiness and border control/quarantine measures	- Set Public Health trigger to enact 'lockouts' in line with guiding principles across NT - Set staffing trigger points – KEY Limiting factor for NT - ICU - Alternative models of care - Redeployments of surge workforce - Upskilling/training/develop staff to redeploy - Planning alternative roles for vulnerable staff/non-vaccinated during an outbreak such as remote contract tracing - Set trigger points to reduce/cease/recommence non-covid related activities - Detailed operational plans at the facility level across NT noting limited critical care capacity across the NT - Detailed planning for care in remote settings - Detailed planning for remote retrievals of COVID and non-COVID patients - Hub & Spoke modelling - Consideration of planning for outbreak in remote/regional communities – isolate/lock-in community vs decant community to Darwin - Planning with ACCHO's, PHN & TO - Role of vaccination in emergency response - Development of NT Health COVID Response Unit to coordinate planning and response in an outbreak - Outbreak clinical scenario planning to stress test planning and response assumptions - Reviewing of Border Control and Quarantine measures in line with principles and with external stakeholders - Trials of 10 day quarantine

- o Alternative places of quarantine
- o Application of RAT in select settings
- o Exploration of Bio Security borders

AAT 2023/0197

Appendix B: Examples of Tiered Approaches

Figure 1: ICU Surge Planning Matrix *(source: ANZICS COVID-19 Guidelines)*

		Critical Care Workforce Capacity			
		Clinical needs met by regular staffing models	Critical Care needs met by redeployment of non-ICU but critical-care trained staff	Critical care Clinical needs met by deployment of non-ICU, non-critical care trained staff	Unable to meet Critical Care staffing needs
System Capacity	System has capacity to meet demand for usual operation.				
	ICU approaching or at capacity to meet demand for all critical care and ventilated patients.				
	ICU unable to meet overall demand for critical care patients, and at maximum capacity for ventilated patients.				
	ICU is significantly beyond capacity for critical care and ventilated patients.				

Figure 2: Example of Tiered Surge Plan (source: adapted from NSW ICU Surge Plan)

Level	COVID related surge impact	Surge Responses	Triggers to escalate to next level
1	Minimal impact on usual activity		
2	Moderate impact on daily operations ICU approaching maximal operational capacity		
3	Severe impact on daily operations Overall demand for critical care exceeding ICU operational capacity		
3	Overwhelming impact on daily operations Demand for critical care services significantly exceeds organisation-wide capacity		

Attachment A4: Examples of COVID+ Pathways

Figure 1. Western Sydney

COVID-19 +ve patient: Assessment and Referral
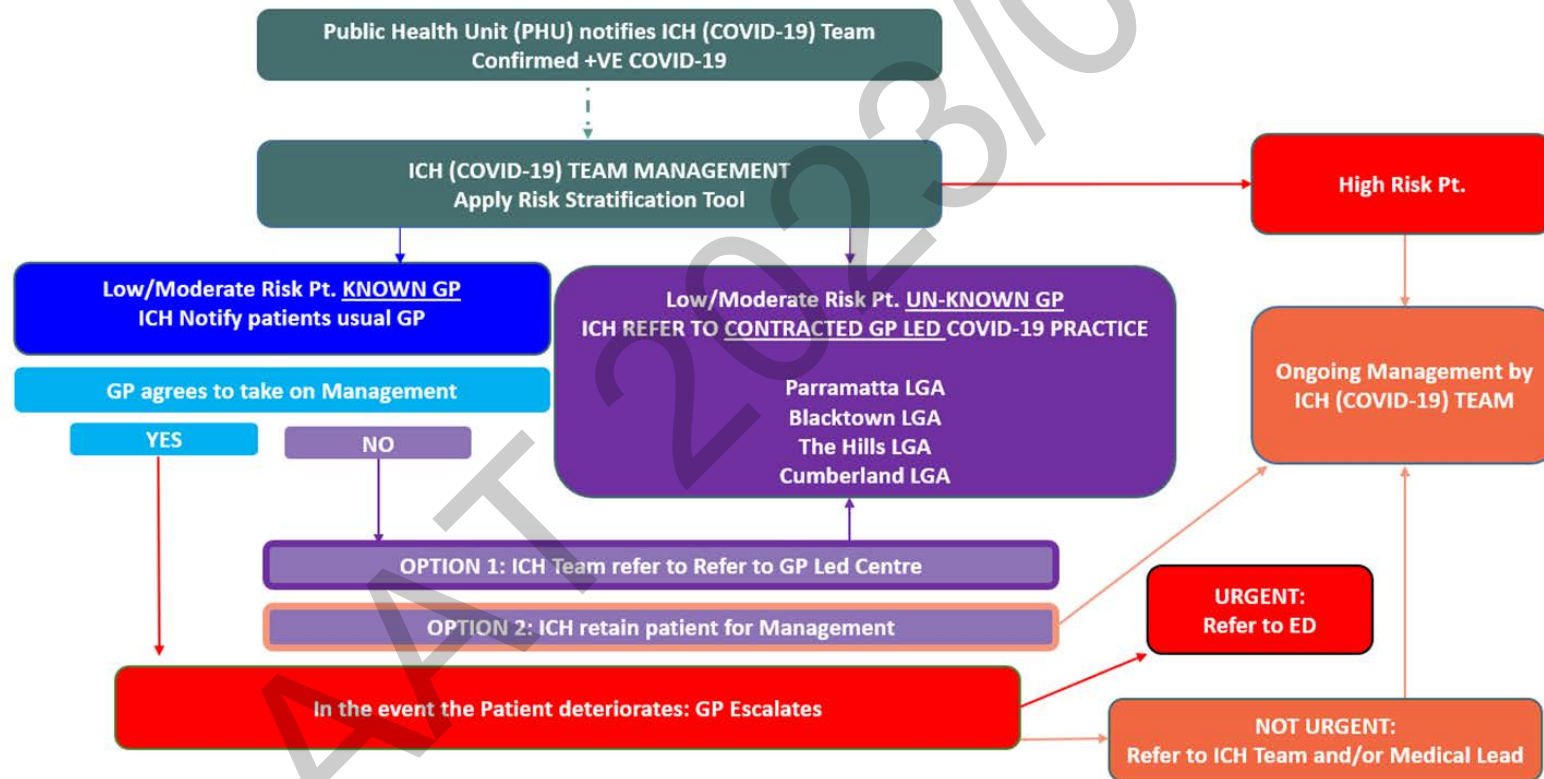
Figure 2:

Northwest Melbourne

The North Western Melbourne COVID+ Pathway was in place for 14 weeks from 3 August 2020

The North Western Melbourne COVID+ Pathway was in place for 14 weeks from 3 Aug 2020 - 8 Nov 2020[1].

During this period, 1397 referrals were received with **663 (47%) participants[2] streamed to one of three clinical care pathways based on assessment of their clinical and social risk – low, medium, high.**

Of the remaining 734 of COVID+ people referred to the program, 93% (681) were exited from the program during the assessment phase and were not referred to clinical care within the pathway. A further 53 COVID+ people entered into the program exited before they were cleared as an active COVID+ case – most commonly due to moving to care of another program e.g. hotel quarantine or another catchment area.

Common reasons for non-enrolment into the Pathway include people already having completed their isolation period (33%), in care of another program (33%), declined to participate (22), or were uncontactable (10%).

Referrals (1397)
Assessment

Refer for Clinical Care and Completed Pathway (663)
Not Referred for Clinical Care or Did not Complete Program (734)

High Risk (48)
Medium Risk (88)
Low Risk (527)
Unable to be Assessed (218)
Eligible for other care programs (282)
Not Required (228)

Refer for Inpatient Care
Medium A: HITH
Refer to regular GP
Uncontactable
Residents in Aged Care Facilities
Isolation completed

Medium B; Respiratory HARP
Refer to GP in private practice
Declined to Participate
Hotel Quarantine

Medium A: Outpatient Telehealth
Refer to cohealth GP
Other Catchments

1) Pilot was considered completed when the last active case in the 4 catchments for the COVID+ care pathways was completed (8 Nov is last date an active case list was published by DHHS for the North Western Melbourne COVID+ care pathway) 2) Participants refers to people who were streamed into a clinical care pathway and remained in care with the North West Melbourne COVID+ care program until cleared as an active covid case upon ceasing isolation or being deceased.

13

Attachment A5: Jurisdiction Snapshots

The following pages draw together a two-page snapshot view of each jurisdiction as at 24 September 2021. The snapshots include:

1. Active COVID-19 case data

2. COVID-19 vaccination coverage data

3. Capacity data for Surge and 'Living with COVID' scenarios as provided by jurisdictions; and

4. Observations of COVID-19 demand on Hospital wards and ICU's since 1 June 2021

Jurisdictional snapshots highlight the variation in current COVID-19 health system capacity demand and vaccination coverage in each jurisdiction, and the specific considerations in estimates provided.

NSW Snapshot

Table 1: COVID-19 cases as at 24 September 2021

	ICU Ventilated	ICU (incl. Ventilated)	Hospital (excl. ICU)	Daily ED Presentations	Hospital in the Home	Total Active Cases
COVID-19 Patients	128	232	1,186	2,600	2,158	12,173

Table 2: Vaccination Coverage as at 22 September 2021

Dose 1:	84.1%
Dose 2:	56.6%

Data sourced from Australian Immunisation Register 22 September 2021

Figure 1: Dose 2 Vaccination Rates by LGA for 16+ year olds as at 24 September 2021

Data sourced from Australian Immunisation Register 24 September 2021

Table 3: Surge Scenario for COVID-19 patients as at 24 September 2021

	Metro surge capacity for COVID-19 patients	Regional, rural and remote surge capacity for COVID-19 patients	Total surge capacity for COVID-19 patients	Current total physical capacity	COVID-19 Surge capacity as % of current total physical capacity
ICU	947	448	1,395	884	157.8%
Hospital Wards	3,100	400	3,500	9,734	36.0%
Daily ED Presentations	2,300	300	2,600	7,900	32.9%
Hospital in the Home	NA	NA	2,158	NA	NA

Table 4: Living with COVID-19 Scenario for COVID-19 patient as at 24 September 2021

	Metro living with COVID-19 capacity for COVID-19 patients	Regional, rural and remote living with COVID-19 capacity for COVID-19 patients	Total living with COVID-19 capacity	Current total physical capacity	Living with COVID-19 capacity as % of current total physical capacity
ICU	34	16	50	884	5.7%
Hospital Wards	220	20	240	9,734	2.5%
Daily ED Presentations	800	100	900	7,900	11.4%
Hospital in the Home	NA	NA	750	NA	NA

Data caveats:

- NSW assumes 387 non-COVID-19 ICU baseline demand, a proportion of this may be moved to private hospitals.
- The provided data does not include full utilisation of 2,015 available ventilators in NSW
- Information for private hospitals for ED and hospital in the home is not available

Figure 2: ICU and hospital acute bed capacity and COVID-19 patients

VIC Snapshot

Table 1: COVID-19 cases as at 24 September 2021

	ICU Ventilated	ICU (incl. Ventilated)	Hospital (excl. ICU)	Daily ED Presentations	Hospital in the Home	Total Active Cases
COVID-19 Patients	46	66	297	377	315	7,160

Table 2: Vaccination Coverage as at 22 September 2021

Dose 1:	75.4%
Dose 2:	45.9%

Data sourced from Australian Immunisation Register 22 September 2021

Figure 2: Dose 2 Vaccination Rates by LGA for 16+ year olds as at 24 September 2021

Data sourced from Australian Immunisation Register 24 September 2021

Table 3: Surge Scenario for COVID-19 patients as at 24 September 2021

	Metro surge capacity for COVID-19 patients	Regional, rural and remote surge capacity for COVID-19 patients	Total surge capacity for COVID-19 patients	Current total physical capacity	COVID-19 Surge capacity as % of current total physical capacity
ICU	375	0	375	479	78.3%
Hospital Wards	1,125	o	1,125	10,177	11.1%
Daily ED Presentations	NA	NA	NA	4,757	NA
Hospital in the Home	NA	NA	NA	315	NA

Table 4: Living with COVID-19 Scenario for COVID-19 patient as at 24 September 2021

	Metro living with COVID-19 capacity for COVID-19 patients	Regional, rural and remote living with COVID-19 capacity for COVID-19 patients	Total living with COVID-19 capacity	Current total physical capacity	Living with COVID-19 capacity as % of current total physical capacity
ICU	75	0	75	479	15.7%
Hospital Wards	225	0	225	10,177	2.2%
Daily ED Presentations	NA	NA	NA	4,757	NA
Hospital in the Home	NA	NA	NA	315	NA

Data caveats:

- Paediatric acute beds and paediatric ICU beds are included in corresponding VIC totals

Figure 2: ICU and hospital acute bed capacity and COVID-19 patients
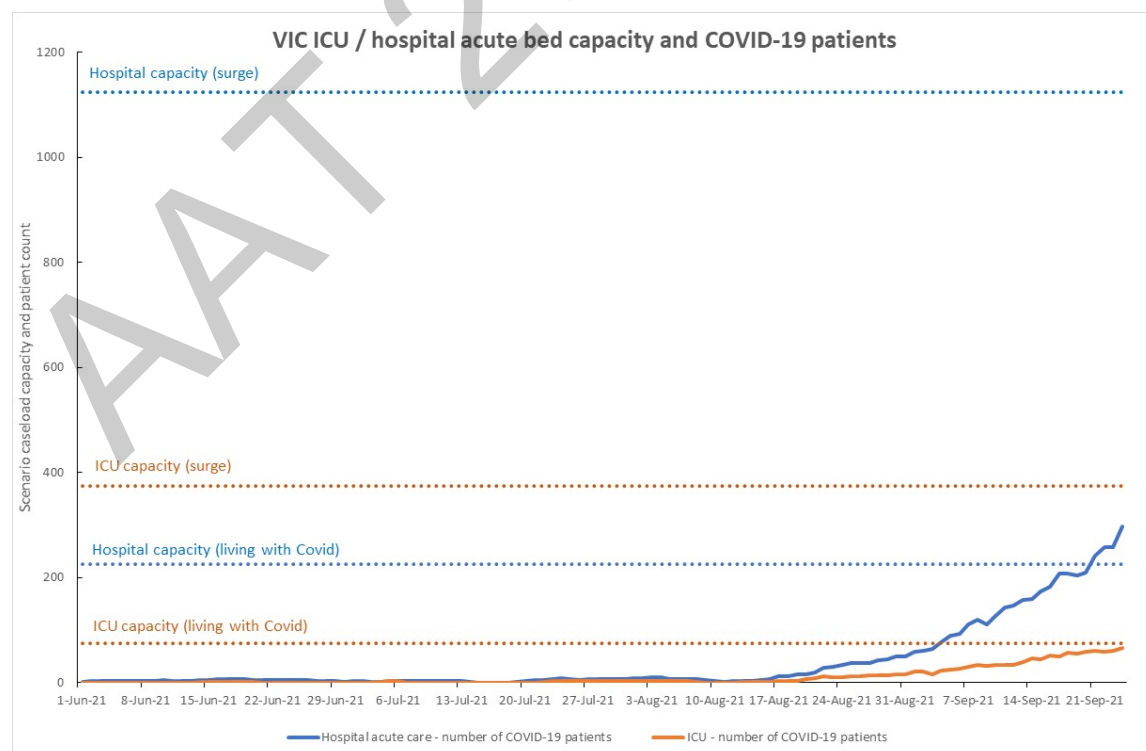
QLD Snapshot

Table 1: COVID-19 cases as at 24 September 2021

	ICU Ventilated	ICU (incl. Ventilated)	Hospital (excl. ICU)	Daily ED Presentations	Hospital in the Home	Total Active Cases
COVID-19 Patients	0	0	9	907	6	25

Table 2: Vaccination Coverage as at 22 September 2021

Dose 1:	62.1%
Dose 2:	43.4%

Data sourced from Australian Immunisation Register 22 September 2021

Figure 3: Dose 2 Vaccination Rates by LGA for 16+ year olds as at 24 September 2021

Data sourced from Australian Immunisation Register 24 September 2021

Table 3: Surge Scenario for COVID-19 patients as at 24 September 2021

	Metro surge capacity for COVID-19 patients	Regional, rural and remote surge capacity for COVID-19 patients	Total surge capacity for COVID-19 patients	Current total physical capacity	COVID-19 Surge capacity as % of current total physical capacity
ICU	199	65	264	412	64.1%
Hospital Wards	759	479	1,238	8,353	14.8%
Daily ED Presentations	853	198	1,051	5,816	18.1%
Hospital in the Home	NA	NA	NA	NA	NA

Table 4: Living with COVID-19 Scenario for COVID-19 patient as at 24 September 2021

	Metro living with COVID-19 capacity for COVID-19 patients	Regional, rural and remote living with COVID-19 capacity for COVID-19 patients	Total living with COVID-19 capacity	Current total physical capacity	Living with COVID-19 capacity as % of current total physical capacity
ICU	78	24	102	412	24.8%
Hospital Wards	201	19	220	8,353	2.6%
Daily ED Presentations	739	169	908	5,816	15.6%
Hospital in the Home	305	80	385	NA	NA

Data caveats:

- QLD is currently working on expanded HITH plans
- COVID hospital acute bed capacity during surge assumes diverting Cat 3 and 50% Cat 2 elective surgery to Privates (or waitlisted).
- Acute bed capacity 'living with COVID' operates under a Designated COVID directive with up to 200 beds identified
- ICU capacity surge and living with COVID excludes BAU occupancy
- Private capacity not considered in current COVID management plans (until extreme scenario). Private capacity is considered for supporting diverted elective services
- Surge ICU capacity excludes expanded capacity identified outside of the normal ICU footprint
- Metro includes SEQ plus GOL, SUN and WMT. Regional / Rural and Remote all other HHSs.

Figure 2: ICU and hospital acute bed capacity and COVID-19 patients
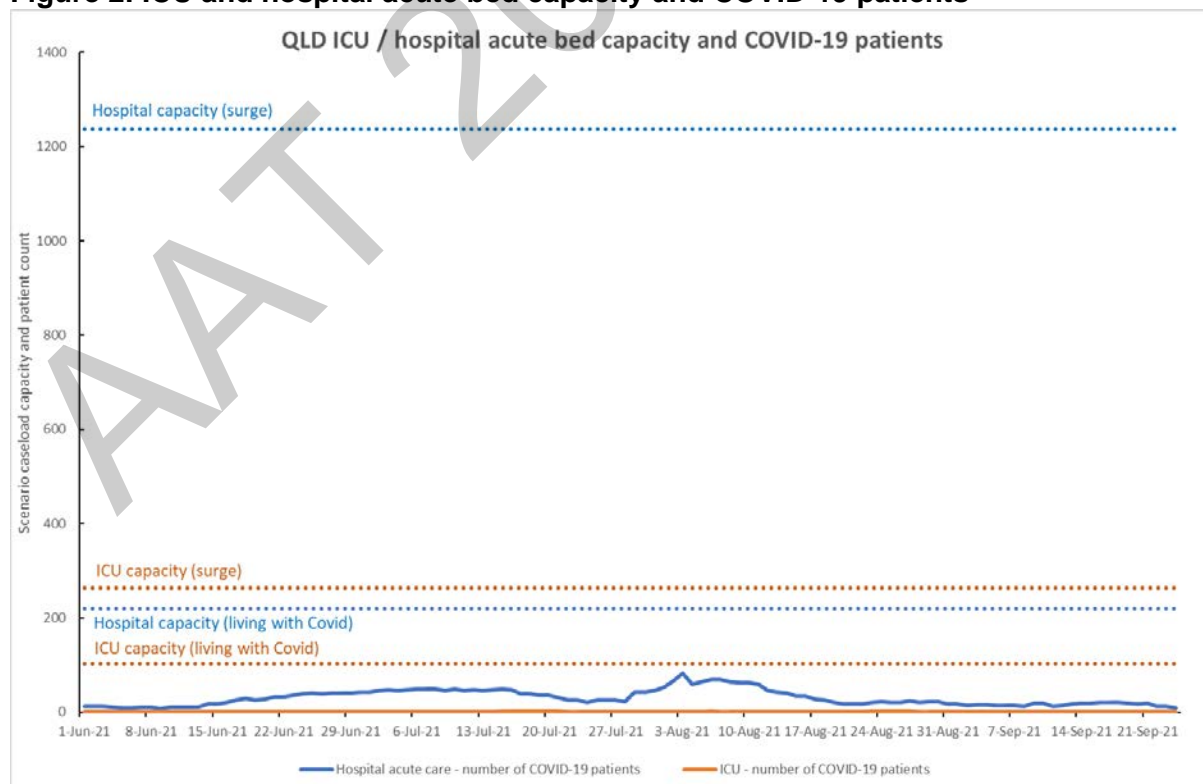
WA Snapshot

Table 1: COVID-19 cases as at 24 September 2021

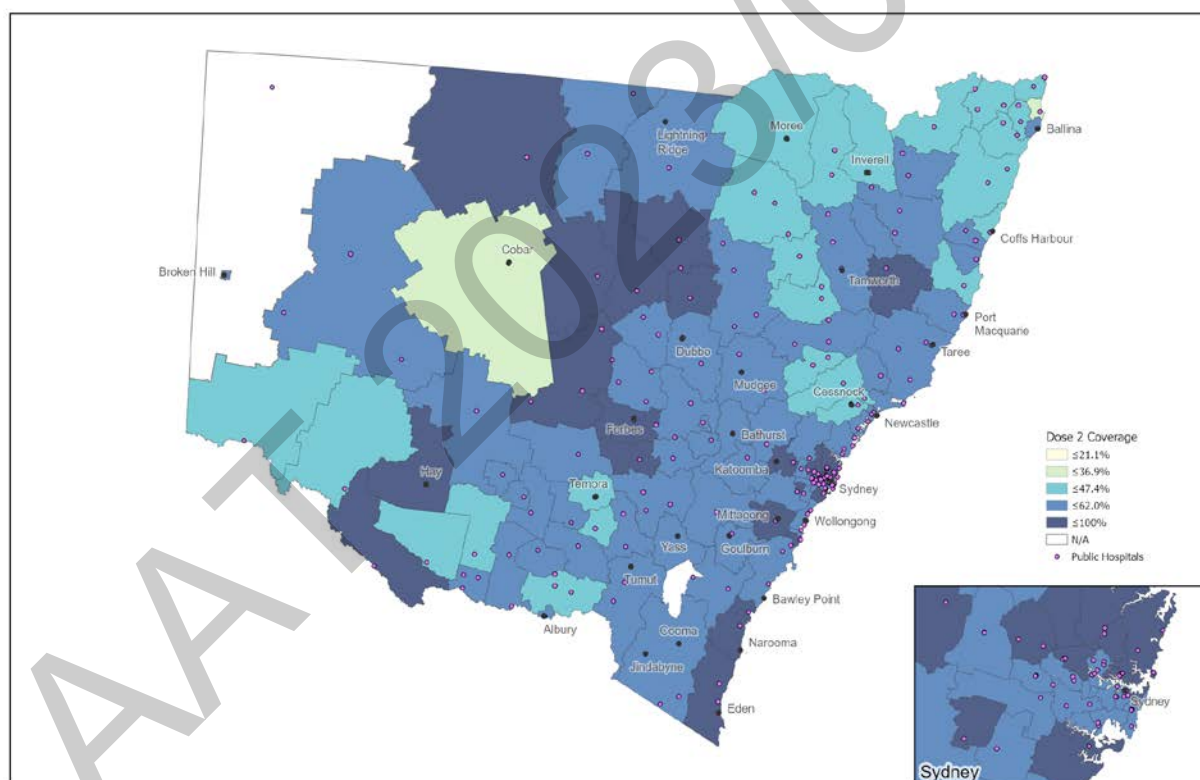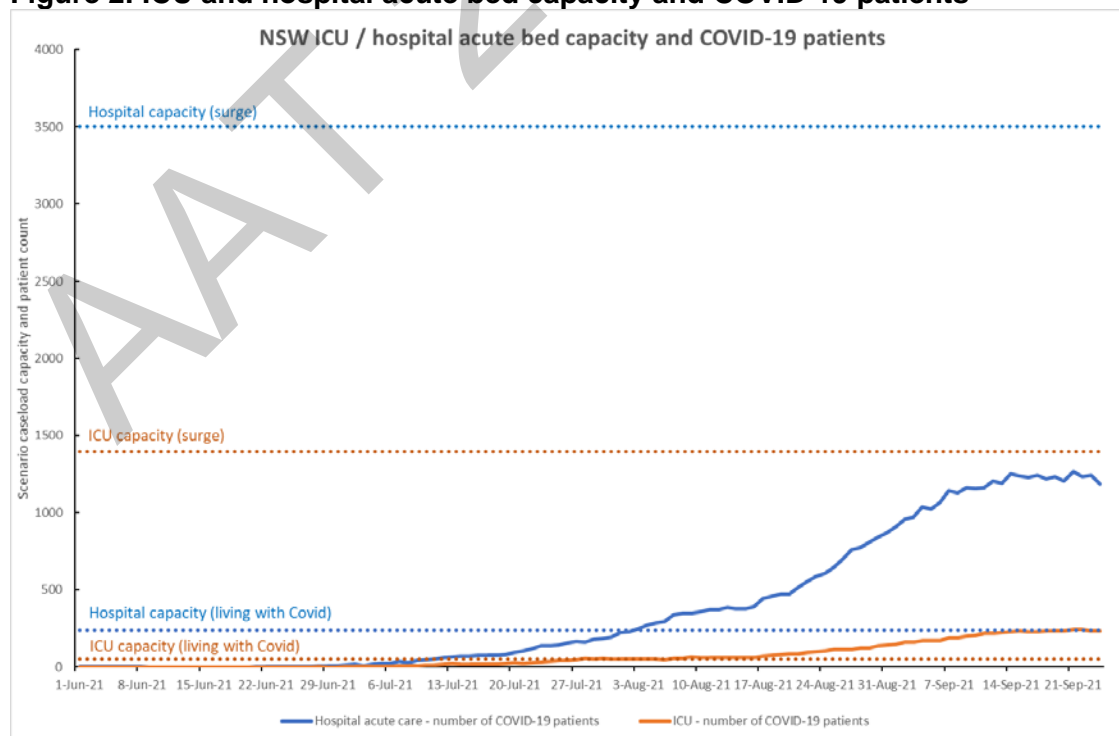|	ICU Ventilated	ICU (incl. Ventilated)	Hospital (excl. ICU)	Daily ED Presentations	Hospital in the Home	Total Active Cases
COVID-19 Patients	0	0	0	32	0	6

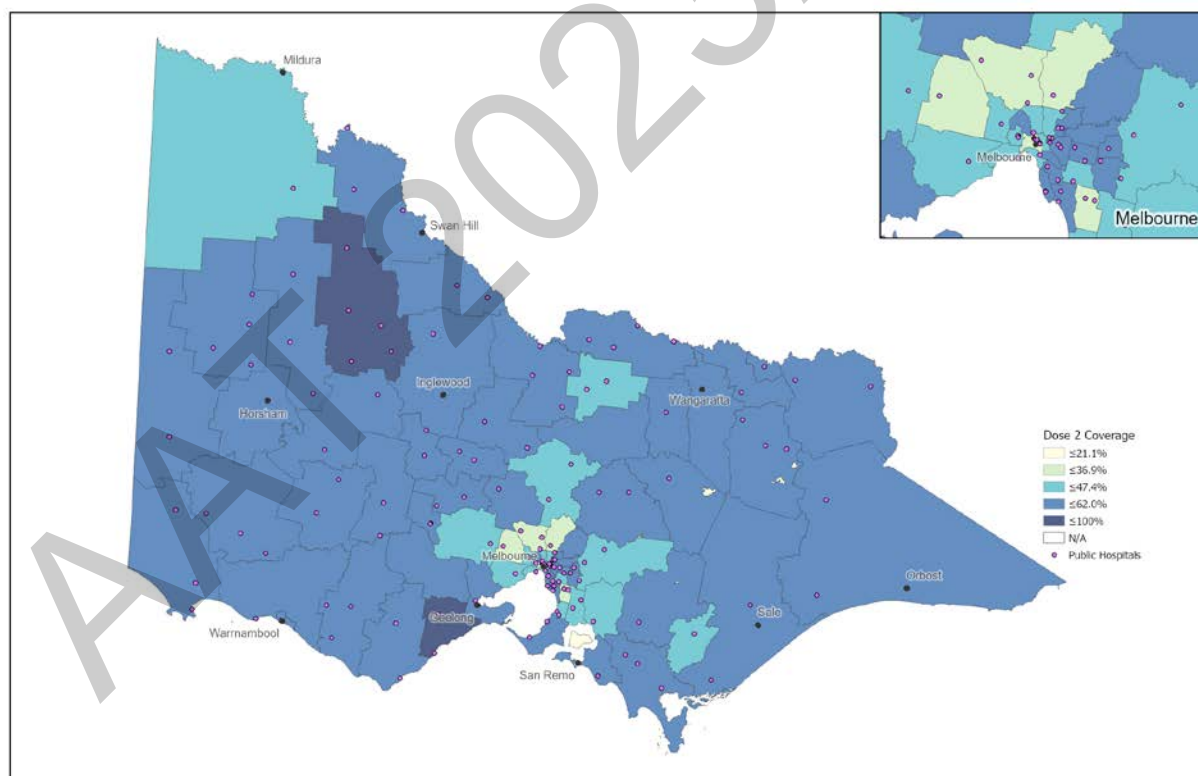## Table 2: WA Vaccination Coverage as at 22 September 2021

Dose 1: 61.8%
Dose 2: 43.4%

Data sourced from Australian Immunisation Register 22 September 2021

Figure 4: Dose 2 Vaccination Rates by LGA for 16+ year olds as at 24 September 2021

Data sourced from Australian Immunisation Register 24 September 2021

Table 3: Surge Scenario for COVID-19 patients as at 24 September 2021

|	Metro surge capacity for COVID-19 patients	Regional, rural and remote surge capacity for COVID-19 patients	Total surge capacity for COVID-19 patients	Current total physical capacity	COVID-19 Surge capacity as % of current total physical capacity
ICU	316	0	316	159	198.7%
Hospital Wards	2,016	151	2,169	6,462	33.6%
Daily ED Presentations	NA	NA	NA	NA	NA
Hospital in the Home	0	0	0	0	NA

Table 4: Living with COVID-19 Scenario for COVID-19 patient as at 24 September 2021

	Metro living with COVID-19 capacity for COVID-19 patients	Regional, rural and remote living with COVID-19 capacity for COVID-19 patients	Total living with COVID-19 capacity	Current total physical capacity	Living with COVID-19 capacity as % of current total physical capacity
ICU	12	0	12	159	7.5%
Hospital Wards	158	0	158	6462	2.4%
Daily ED Presentations	NA	NA	NA	NA	NA
Hospital in the Home	0	0	0	0	NA

Data caveats:

- The current HITH model has no latent capacity for surge or living with COVID-19. Workforce will need to be redirected to manage this workload. WA are currently modelling what this is likely to be in the living with COVID-19 model.
- Surge scenario accounts for a mix of public and transfer of work to private
- Currently numbers of ED beds are occupied with MH patients awaiting admission. If NDIS long stay MH patients could be relocated this issue would be substantially improved adding back a significant number of ED assessment bays

Figure 2: ICU and hospital acute bed capacity and COVID-19 patients
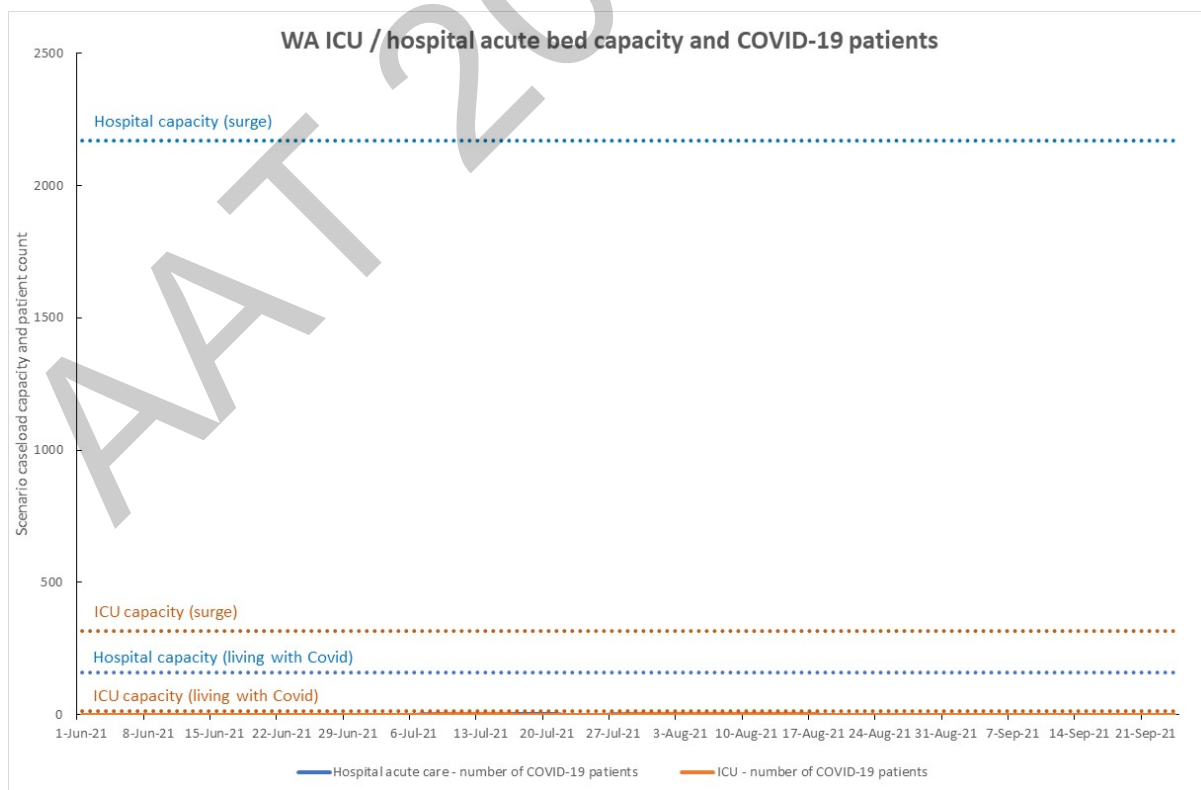
SA Snapshot

Table 1: COVID-19 cases as at 24 September 2021

	ICU Ventilated	ICU (incl. Ventilated)	Hospital (excl. ICU)	Daily ED Presentations	Hospital in the Home	Total Active Cases
COVID-19 Patients	0	0	0	4	0	6

Table 2: Vaccination Coverage as at 22 September 2021

Dose 1:	64.5%
Dose 2:	45.9%

Data sourced from Australian Immunisation Register 22 September 2021

Figure 5: Dose 2 Vaccination Rates by LGA for 16+ year olds as at 24 September 2021

Data sourced from Australian Immunisation Register 24 September 2021

Table 3: Surge Scenario for COVID-19 patients as at 24 September 2021

|	Metro surge capacity for COVID-19 patients	Regional, rural and remote surge capacity for COVID-19 patients	Total surge capacity for COVID-19 patients	Current total physical capacity	COVID-19 Surge capacity as % of current total physical capacity
ICU	93	0	93	161	57.8%
Hospital Wards	548	0	548	4,292	12.8%
Daily ED Presentations			300	1,596	18.8%
Hospital in the Home			0	0	NA

Table 4: Living with COVID-19 Scenario for COVID-19 patient as at 24 September 2021

	Metro living with COVID-19 capacity for COVID-19 patients	Regional, rural and remote living with COVID-19 capacity for COVID-19 patients	Total living with COVID-19 capacity	Current total physical capacity	Living with COVID-19 capacity as % of current total physical capacity
ICU	20	0	20	161	12.4%
Hospital Wards	80	0	80	4,292	1.9%
Daily ED Presentations			150	1,596	9.4%
Hospital in the Home			0	0	NA

Data caveats:

- Living with COVID-19 models will assume vaccination rate of >80%
- SA is seeking to create alternative destinations to ED for some of this cohort.
- SA is currently planning increased system capacity to facilitate 80 beds in a "Living with COVID" scenario. This would exceed our current capability whilst maintaining full elective and emergency access.
- HITH includes out of hospital acute services (nursing and medical) provided by metropolitan local health networks. There are other services that could/should be included here in SA's view that are not HITH including COVID-19 services for quarantine patients, positive medi-hotels, GITH
- HITH is now being developed and includes management of COVID-19 positive cases in homes and medi-hotel rooms.

Figure 2: ICU and hospital acute bed capacity and COVID-19 patients
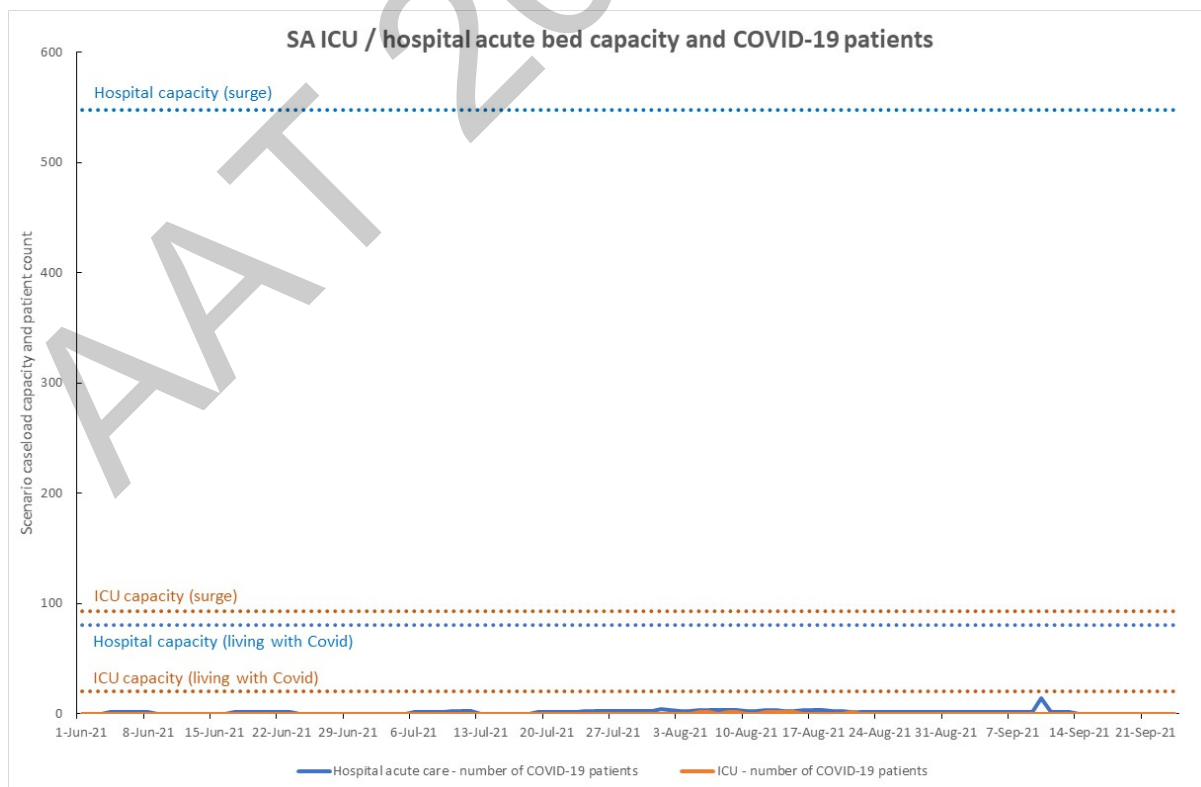
TAS Snapshot

Table 1: COVID-19 cases as at 24 September 2021

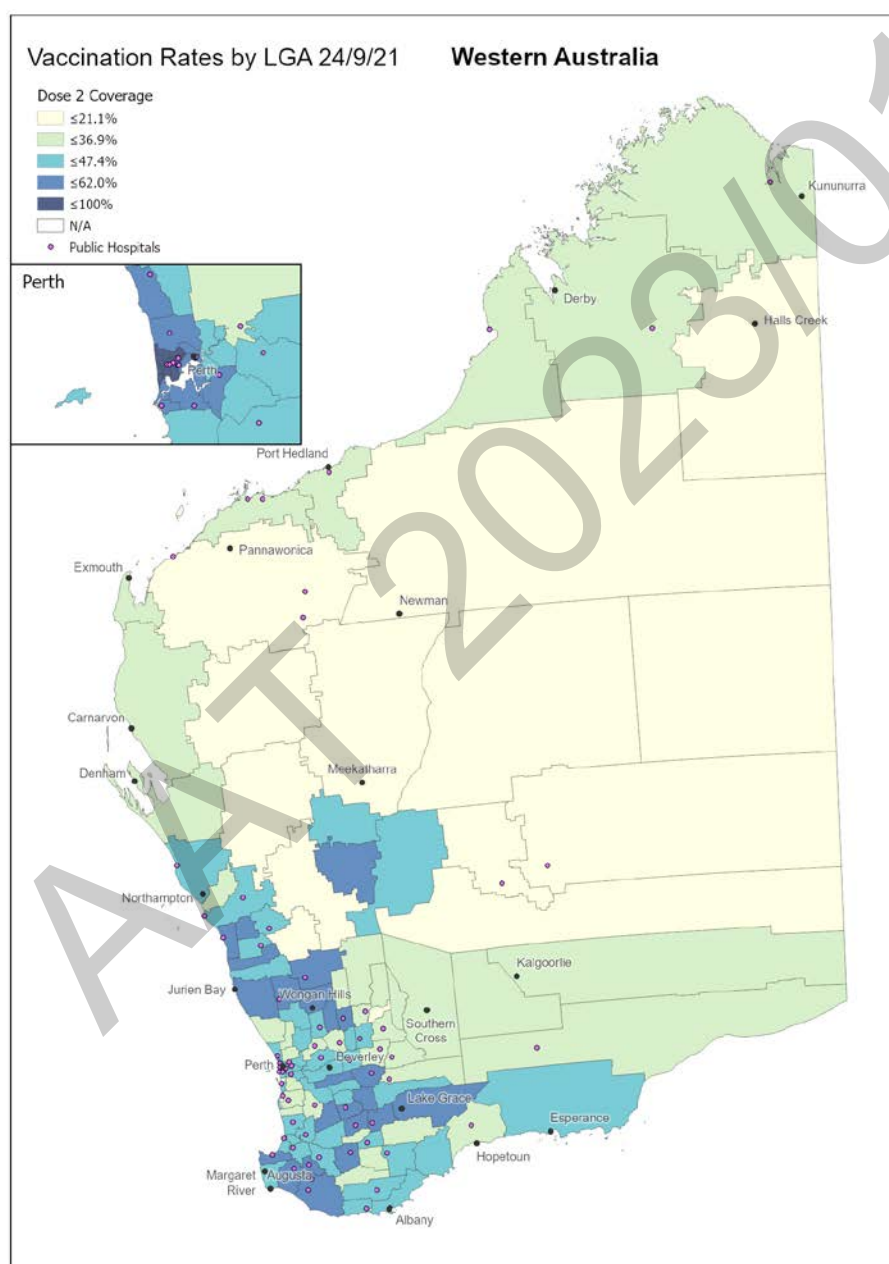|	ICU Ventilated	ICU (incl. Ventilated)	Hospital (excl. ICU)	Daily ED Presentations	Hospital in the Home	Total Active Cases
COVID-19 Patients	0	0	0	0	0	0

Table 2: Vaccination Coverage as at 22 September 2021

Dose 1:	73.1%
Dose 2:	54.5%

Data sourced from Australian Immunisation Register 22 September 2021

Figure 6: Dose 2 Vaccination Rates by LGA for 16+ year olds as at 24 September 2021

Data sourced from Australian Immunisation Register 24 September 2021

Table 3: Surge Scenario for COVID-19 patients as at 24 September 2021

|	Metro surge capacity for COVID-19 patients	Regional, rural and remote surge capacity for COVID-19 patients	Total surge capacity for COVID-19 patients	Current total physical capacity	COVID-19 Surge capacity as % of current total physical capacity
ICU	72	8	80	60	133.3%
Hospital Wards	172	12	184	655	28.1%
Daily ED Presentations	NA	NA	NA	475	NA
Hospital in the Home	NA	NA	NA	NA	NA

Table 4: Living with COVID-19 Scenario for COVID-19 patient as at 24 September 2021

	Metro living with COVID-19 capacity for COVID-19 patients	Regional, rural and remote living with COVID-19 capacity for COVID-19 patients	Total living with COVID-19 capacity	Current total physical capacity	Living with COVID-19 capacity as % of current total physical capacity
ICU	26	4	30	60	50.0%
Hospital Wards	41	15	56	655	8.6%
Daily ED Presentations	NA	NA	NA	475	NA
Hospital in the Home	NA	NA	NA	NA	NA

Data caveats:

- For Tasmania, Living with COVID assumes vaccination coverage of 90% for 16 years and over.
- Tasmania has 655 current acute beds and a total of 1583 physical beds.
- ICU capacity is modulated based on ability to undertake category 2 and 3 or non-urgent surgery.
- Tasmania is finalising a COVID@Home model, drawing from our hotel quarantine health monitoring experience and the current NSW, VIC and ACT COVID@Home experience.
- Tasmania also maintains a 50 bed community care facility (Fountainside) as an extension of the Royal Hobart Hospital for those unable to manage COVID@Home. This is not included in the tables above
-

Figure 2: ICU and hospital acute bed capacity and COVID-19 patients
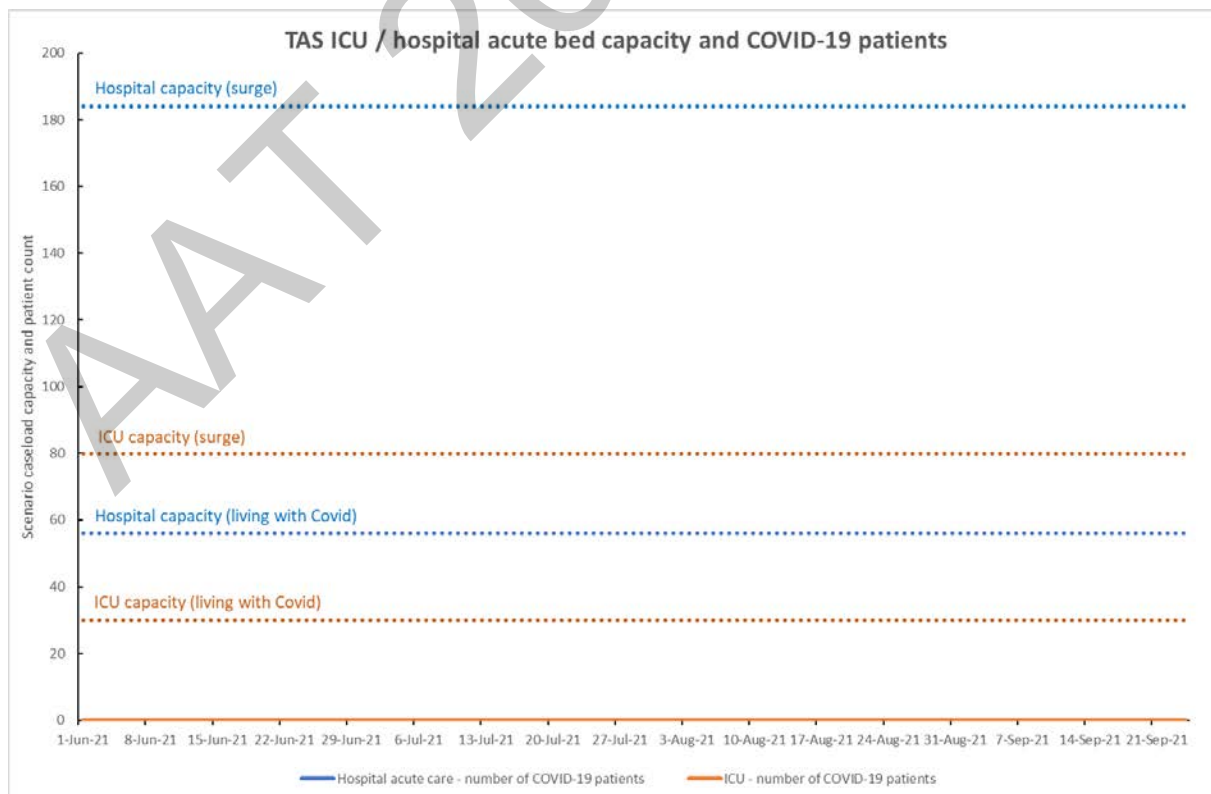
ACT Snapshot

Table 1: COVID-19 cases as at 24 September 2021

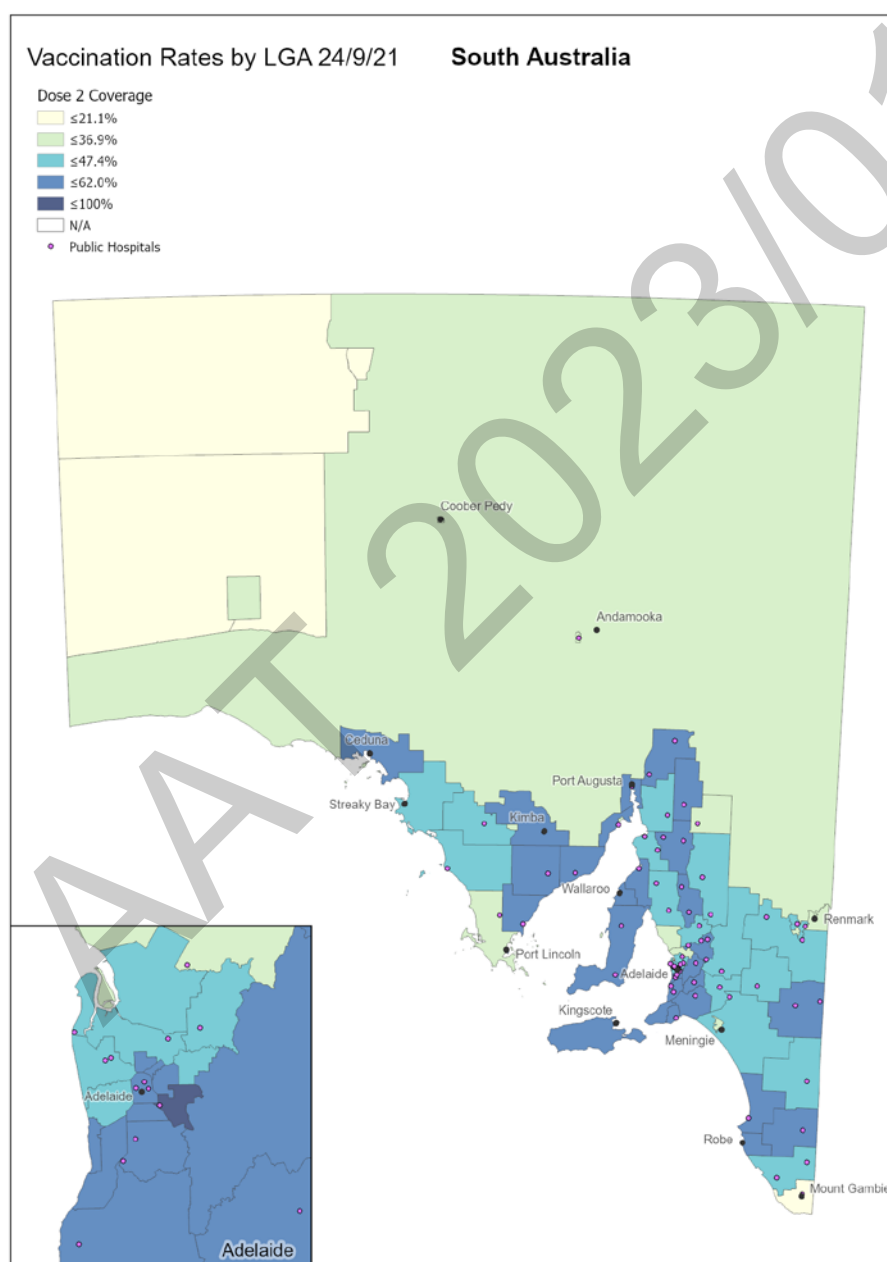|	ICU Ventilated	ICU (incl. Ventilated)	Hospital (excl. ICU)	Daily ED Presentations	Hospital in the Home	Total Active Cases
COVID-19 Patients	2	3	12	71	322	213

Table 2: ACT Vaccination Coverage as at 22 September 2021

Dose 1:	83.9%
Dose 2:	58.7%

Data sourced from Australian Immunisation Register 22 September 2021

Figure 7: Dose 2 Vaccination Rates by LGA for 16+ year olds as at 24 September 2021

Data sourced from Australian Immunisation Register 24 September 2021

Table 3: Surge Scenario for COVID-19 patients as at 24 September 2021

|	Metro surge capacity for COVID-19 patients	Regional, rural and remote surge capacity for COVID-19 patients	Total surge capacity for COVID-19 patients	Current total physical capacity	COVID-19 Surge capacity as % of current total physical capacity
ICU	72	0	72	37	194.6%
Hospital Wards	227	0	227	1,090	20.8%
Daily ED Presentations	258	0	258	276	93.5%
Hospital in the Home	1,500	0	1,500	NA	NA

Table 4: Living with COVID-19 Scenario for COVID-19 patient as at 24 September 2021

	Metro living with COVID-19 capacity for COVID-19 patients	Regional, rural and remote living with COVID-19 capacity for COVID-19 patients	Total living with COVID-19 capacity	Current total physical capacity	Living with COVID-19 capacity as % of current total physical capacity
ICU	20	0	20	37	54.1%
Hospital Wards	58	0	58	1,090	5.3%
Daily ED Presentations	145	0	145	276	52.5%
Hospital in the Home	500	0	500	NA	NA

Data caveats:
- Living with ICU beds decreases the availability of elective surgery beds by 11 - which will either need to be diverted to private hospital, or ICU capacity increased at CHS. Alternatively, COVID infusion allocations should be considered an increased service.
- CHS ED capacity has been trending over capacity in BAU - with a 5.9% increase in presentations on last year. New ED capacity will be constrained if the 8B and 7A ward is continuously required for living with COVID at full capacity (8B was earmarked over summer months for the decant of paediatric day surgery which is due for Capital works build to expand Paediatric services).
- HITH has not been planned for ACTH for surge or living with COVID - estimates only for this model of care - staffing model/technology would need to be funded

Figure 2: ACT ICU and hospital acute bed capacity and COVID-19 patients

ACT ICU / hospital acute bed capacity and COVID-19 patients
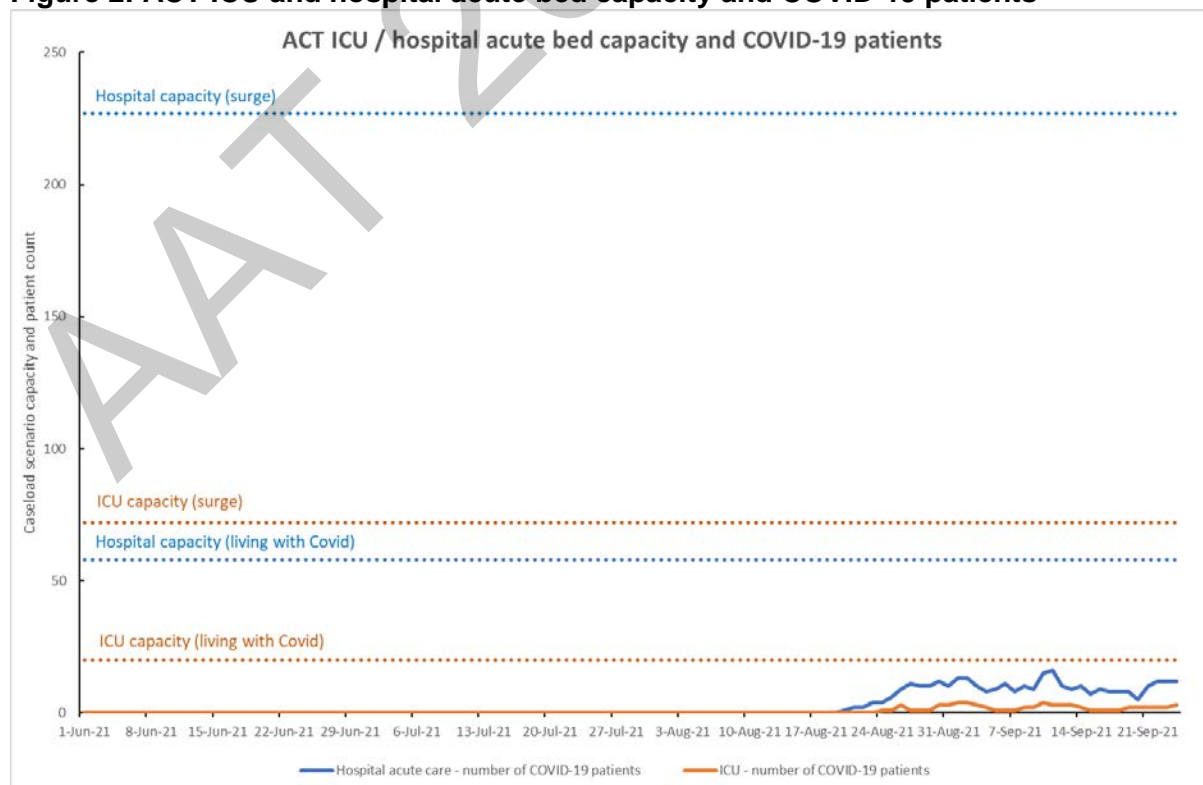
NT Snapshot

Table 1: COVID-19 cases as at 24 September 2021

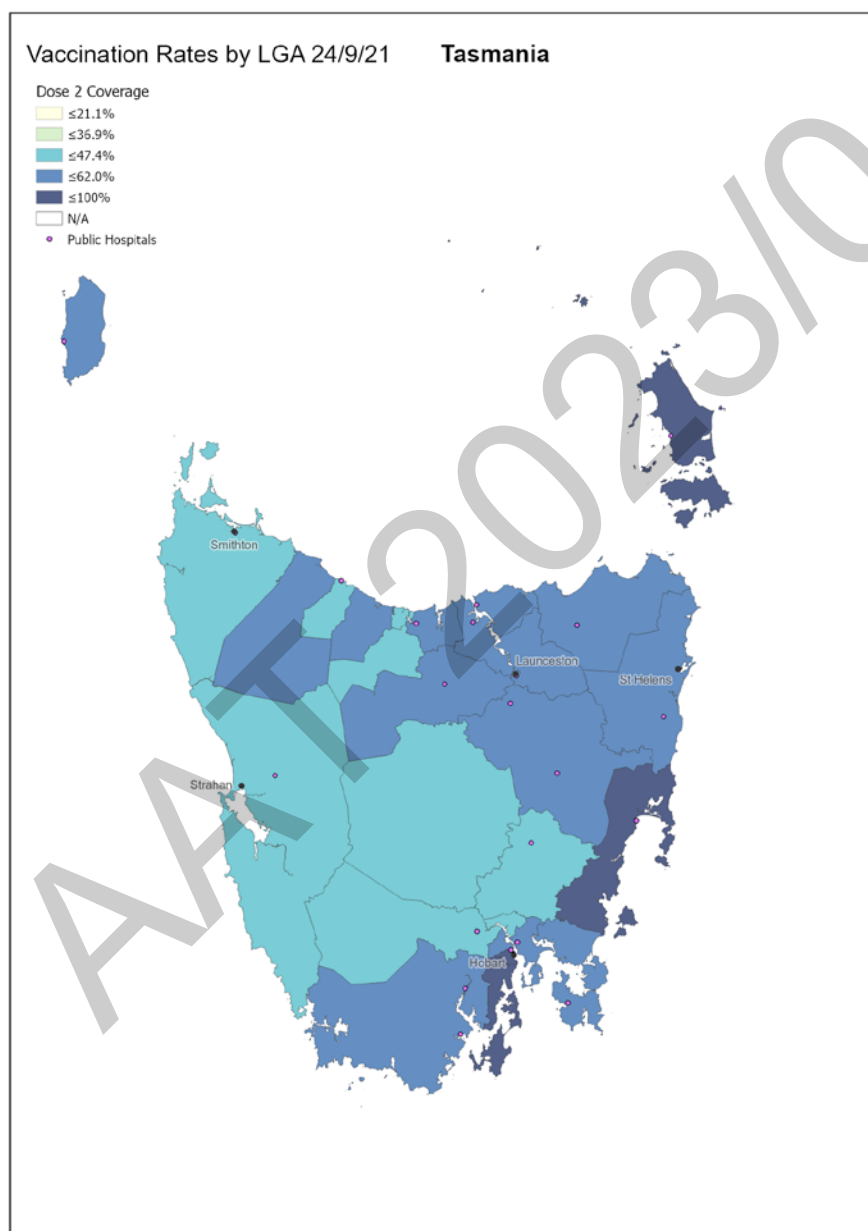|	ICU Ventilated	ICU (incl. Ventilated)	Hospital (excl. ICU)	Daily ED Presentations	Hospital in the Home	Total Active Cases
COVID-19 Patients	0	0	4	0	0	4

Table 2: NT Vaccination Coverage as at 22 September 2021

Dose 1: 64.0%
Dose 2: 49.3%

Data sourced from Australian Immunisation Register 22 September 2021

Figure 8: Dose 2 Vaccination Rates by LGA for 16+ year olds as at 24 September 2021

Data sourced from Australian Immunisation Register 24 September 2021

Table 3: Surge Scenario for COVID-19 patients as at 24 September 2021

|	Metro surge capacity for COVID-19 patients	Regional, rural and remote surge capacity for COVID-19 patients	Total surge capacity for COVID-19 patients	Current total physical capacity	COVID-19 Surge capacity as % of current total physical capacity
ICU	5	3	8	20	40.0%
Hospital Wards	17	27	44	686	6.4%
Daily ED Presentations	50	74	124	460	27.0%
Hospital in the Home	30	18	48	NA	NA

Table 4: Living with COVID-19 Scenario for COVID-19 patient as at 24 September 2021

	Metro living with COVID-19 capacity for COVID-19 patients	Regional, rural and remote living with COVID-19 capacity for COVID-19 patients	Total living with COVID-19 capacity	Current total physical capacity	Living with COVID-19 capacity as % of current total physical capacity
ICU	5	3	8	20	40.0%
Hospital Wards	15	20	35	686	5.1%
Daily ED Presentations	50	74	124	460	27.0%
Hospital in the Home	0	29	29	NA	NA

Data caveats:

- NT hospitals: Metropolitan (Darwin), Regional (Alice Springs), Remote (Katherine, Tennant Creek, Nhulunbuy)
- Private bed bays are only an option in Darwin, negotiations will be for transfer of BAU demand in the event of a 'surge' or 'living with COVID' scenario

Figure 2: ICU and hospital acute bed capacity and COVID-19 patients

Figure 2: ICU and hospital acute bed capacity and COVID-19 patients
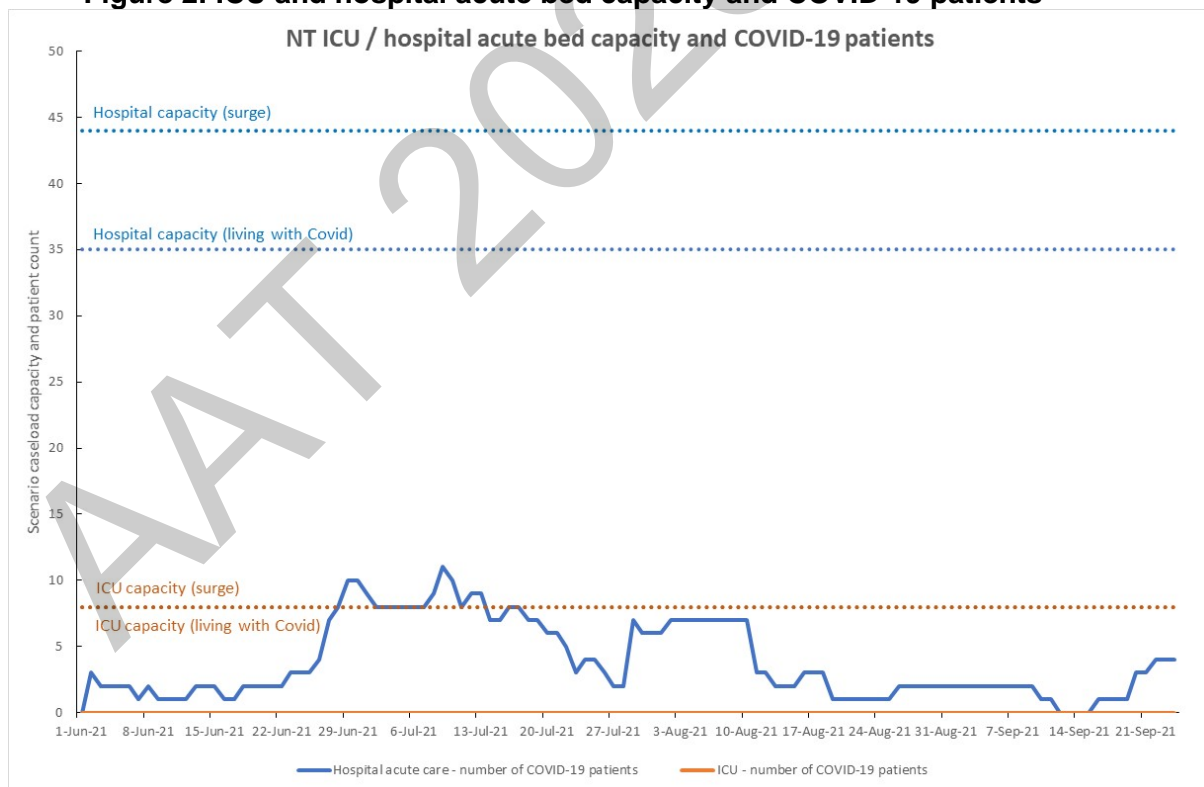
Attachment A6: NHEMS draft update to the AUSTRAUMAPLAN

AUSRESPONDPLAN

Domestic Health Response Plan for

All-hazards Incidents of National Significance

CERTIFICATE OF AMENDMENT

This version amends and renames AUSTRAUMAPLAN to reflect an all hazards approach. The Australian Government Department of Health (Health) will review the *Domestic Health Response Plan for All Hazards Incidents of National Significance* (AUSRESPONDPLAN) as appropriate. Recommendations for amendments or suggestions for improvement may be made at any time to:

Assistant Secretary
Health Emergency Management Branch
Office of Health Protection
Australian Government Department of Health
MDP 140
GPO Box 9848
Canberra ACT 2601

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E-Mail: Health.Ops@Health.gov.au

Amendment No	Issue Date	Amended By	Date
1	November 2011	HEMB	November 2011
2	July 2018	HEMB	July 2018
3	October 2018	HEMB	October 2018
4	TBA 2021	HEMB	October 2021

AUTHORITY

The Domestic Health Response Plan for All-Hazards Incidents of National Significance (AUSRESPONDPLAN) was reviewed by the National Health Emergency Management Standing (NHEMS) Committee of the Australian Heath Protection Principal Committee (AHPPC) on (XX date). AUSRESPONDPLAN was endorsed by the AHPPC on (XX date)

Section 1: INTRODUCTION

1.1.   AUSRESPONDPLAN is the domestic health response plan for All-Hazards Incidents of National Significance (AHINS). The plan provides an agreed framework and mechanisms for the effective national health coordination and response arrangements for AHINS.

1.2.   AUSRESPONDPLAN acknowledges that the primary responsibility for managing the impacts of an All-Hazards Incident with the potential for or resulting in significant health impacts including casualties and severe illness within their respective jurisdictions lies with the state and territory governments. Each jurisdiction has a mandate under state or territory emergency legislation for the prevention and, if they occur, management of emergencies and disasters including Mass Casualty Incidents (MCI) and major infectious disease outbreaks and pandemics.

1.3.   AUSRESPONDPLAN does not negate or override normal jurisdictional command and control arrangements.

1.4.   For the purpose of this plan, an All Hazards Incident of National Significance (AHINS) is defined as an incident which results in a significant number of casualties (with significant or critical trauma injury) or cases (of infectious disease) requiring a health sector response. The absolute number of casualties or cases may vary and, due to combinations of geography and severity an AHINS, by definition, may have the potential to overwhelm local/regional/jurisdiction response resources.

1.5.   An AHINS is defined as a MCI that requires consideration of national level policy, strategy and public messaging or inter-jurisdictional assistance, where such assistance is not covered by existing arrangements.

1.6.   An MCI may transition into an AHINS when a jurisdiction's response capacity is predicted to be overwhelmed (either immediately or exhausted over time) or the MCI has inherent complex political management implications above and beyond the routine jurisdictional clinical and operational management/response.

1.7.   The AHPPC is the peak national health emergency management committee with the authority to plan, prepare and coordinate the national health response to significant incidents.

1.8.   The national focal point for health coordination of the AHINS is Health's National Incident Centre (NIC).

1.9.   Health maintains lead agency status in the coordination of Health assets, including hospital beds and personnel.

Section 2: AIM AND OBJECTIVE

2.1   The aim of AUSRESPONDPLAN is to provide an agreed framework for the coordination and response arrangements for national health sector operations in response to AHINS.

2.2   The objective of a response to an AHINS is to minimise the impact on the health sector of the affected jurisdictions and the individuals affected in the event of an incident.

Section 3: SCOPE

3.1   AUSRESPONDPLAN describes the domestic national coordination arrangements required within Australia in the event of an AHINS.

3.2   It is acknowledged that Australia's health sector frequently functions at or near capacity with routine all-hazards cases. AHINS may occur even in the event of relatively small numbers of cases, particularly in regional and remote areas.

3.3   AUSRESPONDPLAN is not a plan for routine incidents which fall within the capacity of an individual jurisdiction

3.4   All jurisdictions have surge plans to address health sector system capacity and capability requirements in circumstances of dynamic demand and resourcing.

3.5   AUSRESPONDPLAN can be activated in conjunction with other national level plans (see Section 4 Linkages to National Plans).

Section 4: LINKAGES TO NATIONAL PLANS

4.1   AUSRESPONDPLAN operates under the auspices of the *National Health Emergency Response Arrangements 2011* (the NatHealth Arrangements).

4.2   The Australian Government Disaster Response Plan (COMDISPLAN) provides the framework for addressing state and territory requests for Australian Government non-financial assistance arising from any type of emergency. COMDISPLAN is normally activated when Australian Government assistance is requested or likely to be requested.

4.3   AUSRESPONDPLAN can operate independently of COMDISPLAN. However, if COMDISPLAN is activated, AUSRESPONDPLAN acknowledges that the formal COMDISPLAN pathways and requests for national health sector assistance must follow the prescribed arrangements for COMDISPLAN in requests being directed from the nominated State Controller to EMA and EMA tasking to the relevant agency.

Section 5: ACTIVATION

5.1 Activation Authority

5.1.1   The Chair of the AHPPC (or nominated Health delegate) has the authority to activate AUSRESPONDPLAN.

5.2 Triggers

5.2.1   The key triggers for activation of AUSRESPONDPLAN may include:

- Jurisdiction strategies to re-balance or mitigate the effect of increased demand across a health system either overall or at sub-speciality level (e.g. ICU) are insufficient or are unlikely to be fully effective.

- A domestic AHINS occurs where national coordination of health aspects is required.
- A domestic MCI occurs in a single jurisdiction and the affected jurisdiction requests assistance from the Australian Government in managing the health aspects of the MCI.
- An international MCI occurs resulting in the activation of OSMASSCASPLAN.
- Any other circumstances deemed necessary by the AHPPC.

5.3 Execution

5.3.1 Health, in consultation with AHPPC, may issue preliminary AUSRESPONDPLAN response activity messages.

5.3.2 Once activated, the AHPPC can co-opt relevant clinicians or subject matter experts as required.

5.3.3 The NIC will advise relevant Australian Government and state and territory health services of the appropriate AUSRESPONDPLAN response activity. The NIC will provide agencies with Situation Reports (SitReps) for events that require activation and/or escalation of the plan.

Section 6: AUSRESPONDPLAN Response Activities

6.1   Stages

6.1.1   The AUSRESPONDPLAN has three (3) stages: STANDBY, ACTION and STAND DOWN.

6.1.2   The Australian Government Chief Medical Officer (CMO), as Chair of AHPPC, has the authority to escalate and deescalate the AUSRESPONDPLAN through its stages, based on advice from the AHPPC.

6.1.3   The key actions for each stage are identified in the table below. The NIC will advise on changes to stages.

Table 1 – AUSRESPONDPLAN Stages

Stage	Key Actions	Trigger
STANDBY	• Situational awareness and information flow maintained by the NIC through communication between affected and non-affected jurisdictions. • An emergency AHPPC teleconference may be convened at the CMO's request • Jurisdictions identify available resources for the response.	• Affected jurisdiction alerts the NIC of a potential or confirmed MCI.
ACTION	• AHPPC convened to determine response. The CMO, on advice from AHPPC will activate AUSRESPONDPLAN. • Response coordination undertaken as outlined in Section 8. • The deployment of Australian Government and/or jurisdiction assets to support the MCI response as required. • Situational awareness and information flow maintained by the NIC through communication between affected and non-affected jurisdictions.	• Request for assistance received from affected jurisdiction or tasking received from Australian Government.
STAND DOWN	• The CMO, on advice from AHPPC, will authorise the Stand Down of AUSRESPONDPLAN. • Facilitate ongoing health recovery processes that need national coordination. • Recovery and repatriation of deployed medical teams and their equipment. • Ongoing monitoring to ensure repatriation of casualties to home jurisdictions. • AHPPC to conduct an After-Action Review with all relevant parties.	• National coordination is no longer required.

Section 7: NATIONAL COORDINATION MODEL

7.1   The AUSRESPONDPLAN National Coordination Model provides the coordination and connection between the Australian Government, AHPPC, NHEMS, State and Territory Health Emergency Operation Centres (EOCs) and State Coordination Centres (SCCs) or their equivalent.

7.2   Under the AUSRESPONDPLAN, a nationally coordinated response will leverage off existing state and territory "business as usual" mechanisms to enable an emergency response.

7.3   AHPPC provides strategic decision making in planning a potential nationally coordinated health response. AHPPC does not have a command role under AUSRESPONDPLAN.

7.4   Health has the relationship with the state and territory health authorities through the AHPPC and standing committees including NHEMS. Health is the conduit and liaison with the CMO and state and territory Chief Health Officers (CHOs).

7.5   EMA is a member of NHEMS and the AHPPC and has the relationship with the state and territory SCC. EMA has authority for tasking jurisdictional capabilities through the SCCs. EMA is the conduit and liaison with SCCs.

7.6   AHPPC members may engage with respective NHEMS members or other appropriate experts, to gain advice on what assistance can be provided in the event of a nationally coordinated health response.

7.7   The triage, management and movement of casualties or cases within and across jurisdictional borders, is a clinical decision made and facilitated by the responsible jurisdictions' health emergency management agencies, in consultation with the receiving jurisdiction's health emergency management agencies, as per jurisdictional emergency response plans.

7.8   The affected jurisdiction's Health EOC will be the single source of truth for health-related information (e.g. transfer of patients interstate).

7.9   Bilateral agreements between states and territories may not necessarily be pre-arrangements or written agreements. Under the NatHealth Arrangements there is an understanding between all parties that a jurisdiction may call upon another for assistance. There is no expectation or requirement that bilateral agreements are brokered or need to be exhausted before seeking support through national coordination (i.e. AUSRESPONDPLAN)

7.10   As with all incidents, the affected jurisdiction:
- controls the incident and the overall direction of jurisdictional response activities in an emergency, operating horizontally across agencies;
- coordinates the communication of information between all agencies; and
- commands emergency response agencies in the response to an emergency, within their legislation and their emergency response arrangements with state and territory Health EOCs working in conjunction with SCCs.

Figure 1 AUSRESPONDPLAN– National Coordination Model

The following flowchart represents the national coordination of jurisdictional and Australian Government support under the AUSRESPONDPLAN.

Affected jurisdiction HEOC	Incident occurs	Affected jurisdiction SCC

HEALTH (NIC)

EMA (NSR)

CMO convenes an AHPPC Emergency Teleconference
- Due to request received or likely to be received from affected jurisdiction.

AGCRC / NCC may be convened

AGCRC Convened (AG Agencies Only)

NCM Convened (AG + S/T Agencies)

- An RFA can come through the affected jurisdictions SCC to the NSR. An RFA must be received before a nationally coordinated response can occur.
- Intelligence is shared and plans for a response are identified

Strategic decision making undertaken regarding jurisdictions capacity to assist.
- AHPPC (informed by NHEMS member and appropriate subject matter experts) of initial indication of capacity/assets.

AUSRESPONDPLANS TANDBY
- Monitor / Plan

AUSRESPONDPLANACTIVATE*

ACTIVATION
National Coordination

HEALTH / EMA
Facilitate the coordination of jurisdictional and Australian Government assets under the AUSRESPONDPLAN
Monitor and report through to completion.
Section 8 refers

CMO / Health Delegate communicates the outcomes of AHPPC to the relevant meetings/coordination bodies including AGCRC, NCM and NSR.

Note – decision of AHPPC not required to activate plan

Section 8: RESPONSE COORDINATION

8.1 Medical Retrieval

8.1.1 This section provides further detail as reflected in the Activation of the National Coordination Model at Figure 1.

8.1.2 Following a AHINS national coordination of medical retrieval services may be required to transfer patients to other jurisdictions.

8.1.3 National coordination occurs after an AHPPC decision to activate the AUSRESPONDPLAN, Health will request EMA to coordinate the medical transport.

8.1.4 The scope of these arrangements will be subject to the affected jurisdictions need and will usually apply to the initial movement of patients. Secondary movement may also be incorporated if the affected jurisdiction indicates a need for ongoing assistance.

8.1.5 This process does not replace the affected jurisdictions immediate response which will likely draw on bilateral relations with other jurisdictions. These arrangements are intended to be applied for AHINS when a gap has been identified by the affected jurisdiction.

8.1.6 A Health Liaison Officer (LO) may be deployed to form part of the Crisis Coordination Team (CCT) in EMA. The Health LO will act as the conduit between the Australian Government National Situation Room (NSR) and the NIC.

8.1.7 The CCT will facilitate an operational teleconference between jurisdictions with relevant participants which will be co-chaired by EMA and Health. This teleconference is to facilitate national logistics coordination and does not replace or duplicate jurisdictional processes for triage, management and movement of casualties and cases. Detailed in section 8.2.

8.1.8 As detailed in section 8.2.1, EMA will issue tasking for the deployment of assets and resources to assist the affected jurisdiction. The affected jurisdiction will coordinate medical retrievals utilising the assets assigned as part of EMA tasking. For the purposes of this plan, tasking has the same meaning as it does in COMDISPLAN.

8.1.9 Appropriate representation from the jurisdictions will be determined by the jurisdiction's NHEMS member. It is the responsibility of NHEMS members to maintain contact lists for all jurisdictional health emergency response capabilities.

8.1.10 Representation from the affected and assisting jurisdictions may include:
- Health EOC;
- SCC as required; and
- NHEMS member and other relevant jurisdictional contacts (e.g. retrieval transport coordinators, clinical specialists such as burns and paediatricians, ambulance etc.).

8.2   Operational Teleconference

8.2.1   The outcomes of the initial operational teleconference should include:

- Facilitating the development of a transport management plan, which includes:
  - o   identification of assets available to undertake the retrieval tasks including normal aeromedical (including aircraft with or without crew), defence or other assets, as well as hospital bed capacity and ongoing transport to facilities;
  - o   communication of timeframes for arrival of resources;
  - o   arrangements for recording all movements; and
  - o   tasking by EMA
- Ensuring effective information flow between affected and assisting jurisdictions, including allocation of capabilities to tasks.
- Once a jurisdiction is tasked by EMA; the assisting jurisdiction will work with the affected jurisdiction to complete the retrieval which will be coordinated by the affected jurisdiction.

8.2.2   There will be a need to conduct follow up teleconferences to:

- Provide status updates on:
  - o   availability or changes to additional aeromedical assets
  - o   changes to patient numbers to be moved
- Seek solutions to issues or gaps identified; and
- Communicate regularly to ensure shared understanding and consistent reporting with retrieval transport coordinators.

8.2.3   Assisting jurisdictions will advise the affected jurisdiction of patient arrivals or changes to patient destinations.

8.2.4   The affected jurisdiction will advise the NSR upon completion of patient transfers to close off tasking[1].

8.3.   Surge Capacity

8.3.1   The deployment of Australian Government and/or jurisdiction assets, including movement of health personnel, to support the MCI response can be coordinated under COMDISPLAN.

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[1] It is assumed that the jurisdictional asset will return to its home jurisdiction unless otherwise pre-planned and agreed.

8.4   Communications

8.4.1   This section relates to communication coordination at the national level under the AUSRESPONDPLAN. It describes principles for communication across a broad range of stakeholders involved in, and affected, by an AHINS. These include:

- Communicating to the public;
- Reporting to government agencies and Ministers; and
- Communicating with jurisdictions before, during and after an emergency.

8.4.2   *Public Information*

8.4.2.1   The Australian Government will work with the National Health Emergency Media Response Network (NHEMRN) to ensure consistent messaging and comprehensive sharing of information.

8.4.2.2   Public information about health measures will be coordinated through the CMO via the NIC.

8.4.3   *Media Coordination*

8.4.3.1   Health in consultation with the AHPPC will be responsible for coordinating national media statements on the health aspects of the response to a AHINS.

8.4.3.2   Health will nominate a Media Liaison Officer (MLO) supported by the NIC who will work in conjunction with the AHPPC to manage the release of public information.

8.5   Financial Considerations

8.5.1   All agencies in all jurisdictions involved in AUSRESPONDPLAN operations are expected, in the first instance, to cover any costs incurred. Details of expenditure should be recorded at all stages of AUSRESPONDPLAN operations by all agencies in each jurisdiction.

8.5.2   Requests for Assistance and Tasking Requests authorised under COMDISPLAN will have task specific financial arrangements detailed.

8.5.3   Internal agency authorisations for expenditure of funds and deployment of resources in response to AUSRESPONDPLAN activation are the responsibility of that agency and should be included in their agency plans.

Section 9: REVIEW

A process of exercising and review will be followed to ensure that this plan continues to match current needs and resources. This will be managed through the NHEMS work plan. The CMO, after appropriate consultation, may approve amendment to AUSRESPONDPLAN as needed to address administrative changes. Fundamental changes to the plan will be referred to the AHPPC for endorsement.

GLOSSARY / DEFINITIONS

Affected jurisdiction	A state or territory where an all-hazards incident has occurred (or is expected to occur).
Agency	A government or non-government agency.
All Hazards	This approach concerns arrangements for managing the large range of possible effects of risks and emergencies, as a large range of risks can cause similar problems and similar measures, such as warning, evacuation, medical services and community recovery, will be required during and following emergencies.
Assisting jurisdiction	A state or territory able to provide support to an affected jurisdiction.
Australian Government Crisis and Recovery Committee (AGCRC)	The primary forum for coordinating the Australian Government response to, and recovery from, a major incident including consolidating information and coordinating information exchange, advising ministers and coordinating implementation of ministerial decisions and coordinating with states and territories to implement additional measures if needed.
Australian New Zealand Counter Terrorism Committee (ANZCTC)	The objectives of the ANZCTC are to contribute to the security of Australia and New Zealand
Australian Health Protection Principal Committee (AHPPC)	Established in 2006 as the peak national health emergency management committee, with the authority to plan, prepare and coordinate the national health response to significant incidents.
Command	Refers to the direction of members and resources of an agency/organisation in the performance of the agency/organisation's roles and tasks. Authority to command is established by legislation or by agreement within the agency/organisation. Command relates to agencies/organisations only and operates vertically within the agency/organisation.
Consequence Management	Measures taken to protect public health and safety. Restore essential government services and provide emergency relief to governments, businesses and individuals affected.
Control	Refers to the overall direction of the activities, agencies or individuals concerned. Control operates horizontally across all

	agencies/organisations, functions and individuals. Situations or incidents are controlled.
Coordination	Coordination is the act of managing interdependencies between activities. In emergency management, coordination involves the bringing together of many organisations to pursue a common goal and to share resources, information, expertise and decision making.
Crisis Coordination Team (CCT)	An internal team established within the NSR to undertake EMA's operational roles under the Australian Government Crisis Management Arrangements.
Crisis Management	Deliberate and immediate management for whole of Government consideration of policy, decision making and coordination for the prevention and/or resolution of situations/incidents, in order to maintain national security and confidence in Government. (Source: National Counter-Terrorism Plan).
Hazard	A potential or existing condition that may cause harm to people or damage to property or the environment. (Source: Emergency Management Australia Glossary)
Health Emergency Management Branch (HEMB)	Health Emergency Management Branch is responsible for prevention, preparedness and response activities related to national health emergencies and risks. These national health emergencies and risks include mass casualty events, communicable disease outbreaks, terrorism and natural disasters. The branch also provides strategic advice to the Australian Health Protection Principal Committee (AHPPC).
Incident	A localised event, either accidental or deliberate, which may result in death or injury, or damage to property, which requires a normal response from an agency or agencies.
Australian Government National Situation Room (NSR)	A dedicated facility provided by EMA, Department of Home Affairs that will coordinate the non-health specific consequence management arrangements of the incident. Tasking recommended by Health and the AHPPC will be actioned by the NSR. The NSR will liaise through the state and territory State Coordination Centres (SCCs).
Liaison Officer (LO)	A person, nominated or appointed by an organisation or functional area, to represent that organisation or functional area at a control centre, emergency operations centre, coordination centre or site control point. A liaison officer maintains communications with and conveys directions/requests to their organisation or functional area,

	and provides advice on the status, capabilities, actions and requirements of their organisation or functional area.
Logistics	The range of operational activities concerned with supply, handling, transportation, and distribution of materials. Also applicable to the transportation and support of people.
Major Trauma Injury (MTI)	Traumatic injury likely to require admission to an Australian Major Trauma Service. For simplicity, patients with less severe injuries resulting from an MCI may also be included when considering the availability of and need for resources.
Mass Casualty Incident (MCI)	An incident which results in a significant number of casualties. The absolute number of casualties may vary and due to combinations of geography and severity, an MCI by definition, has the potential to overwhelm local/regional response resources.
All Hazards Incident of National Significance (AHINS)	An MCI that requires consideration of national level policy, strategy and public messaging or inter-jurisdictional assistance, where such assistance is not covered by existing arrangements. It is expected that the National Incident Centre (NIC) will be notified of a AHINS so that an AHPPC meeting can be convened as required. An MCI may transition into an AHINS when a jurisdictions response resources are overwhelmed (either immediately or over time) or the MCI has inherent complex political management implications such as the involvement of a large number of foreign nationals or complex logistical implications due to the geography of the incident location.
National Crisis Committee (NCC)	The primary forum for coordinating whole-of-government response to an incident of national significance including consolidation of information and coordination of information exchange, advice to ministers and coordination of ministerial decisions across the Federal, State and Territory governments.
National Health Emergency Response Arrangements (NatHealth Arrangements)	The principle response document of the AHPPC that outlines the strategic authorities, responsibilities, arrangements and the mechanisms that enable a coordinated national health sector response to emergencies of national significance.
National Health Emergency Media Response Network (NHEMRN)	The NHEMRN is managed by the Media Unit in the Australian Government Department of Health. The NHEMRN comprises the media units from all state and territory health departments, representatives from Australian Government departments and identified public health advocacy organisations. Private enterprise media officers can also be co-opted into the network as required
National Health Emergency Management	NHEMS is a sub-committee of the Australian Health Protection Principal Committee (AHPPC), to address the operational aspects of disaster medicine and health

Standing Committee (NHEMS)	emergency management in an all hazards context with a focus on Prevention, Preparedness, Response and Recovery
National Incident Centre (NIC)	An operational response capability located within Health. The NIC acts a conduit for response and recovery operations within Health and between state and territory health authorities, other Australian Government operations centres and the international health community.
Preparedness	In relation to an emergency, includes arrangements or plans to deal with an emergency or the effects of an emergency. (Source: Emergency Management Australia Glossary) This may include establishing the plans, training, exercises, and resources necessary to achieve readiness for all hazards, including a MCI from trauma.
Prevention	In relation to an emergency, includes the identification of hazards, the assessment of threats to life and property and the taking of measures to reduce potential loss to life or property.
Recovery	In relation to an emergency, includes the process of returning an affected community to its proper level of functioning after an emergency. (Source: Emergency Management Australia Glossary) In this document, refers to all types of emergency actions dedicated to the continued protection of the public or promoting the resumption of normal activities in the affected area.
Response	In relation to an emergency, includes the process of combating an emergency and of providing immediate relief for persons affected by an emergency. Executing the plan and resources identified to perform those duties and services to preserve and protect life and property.
State/Territory Health Emergency Operations Centre (HEOC)	A dedicated (health) control facility from which a state/territory response will be coordinated.
Triage	The process by which casualties are sorted and prioritised according to their need for first-aid, resuscitation and emergency transport.

ABBREVIATIONS AND ACRONYMNS

AG	Australian Government
AHPPC	Australian Health Protection Principal Committee
ANZCTC	Australian New Zealand Counter-Terrorism Committee
CCT	Crisis Coordination Team
CBRN	Chemical, Biological Radiological and Nuclear
CHO	State or territory Chief Health Officer
CMO	Australian Government - Chief Medical Officer
COMDISPLAN	Australian Government Disaster Response Plan
DFAT	Department of Foreign Affairs and Trade
EMA	Emergency Management Australia (Department of Home Affairs)
HEOC	State / Territory Health Emergency Operations Centre
Home Affairs	Department of Home Affairs
Health	Australian Government Department of Health
NHEMS	National Health Emergency Management Standing Committee
NIC	National Incident Centre
NSR	National Situation Room
OSMASSCASPLAN	Australian Government Response Plan for Overseas Mass Casualty Incidents.
RFA	Request For Assistance
S/T	State and Territory

SCC	State / Territory Coordination Centre
SITREP	Situation Report

Appendix 1 - State and Territory Emergency Operation Centre Contact Details

State/Territory	Agency	Email	Phone(s)
ACT Health Emergency Control Centre	ACT Health Health Emergency Management Unit	hpsops@act.gov.au	Office phone: (02) 6205 1700 Office fax: (02) 6205 1705 Duty Officer Mobile: 0435 963 482
NSW SHEOC	NSW Health	NSW-HSFAC@health.nsw.gov.au	Office phone: (02) 8644 8444 Office fax: (02) 8644 8450 24 hour Duty Officer (02) 8396 5019
NCCTRC (RDH)	NT Health Centre for Disease Control	CDCSurveillance.darwin@nt.gov.au	Office phone: (08) 8922 8044 Office fax: (08) 8922 8501 RDH switchboard number (08) 8922 8888 (request CDC On Call Medical Officer)
QLD SHECC	QLD Health State Health Emergency Coordination Centre	shecc@health.qld.gov.au	Office phone: (07) 3328 9995 Office fax: (07) 3221 7535 On Call Officer: 0407 127 126
SA SCC-H	SA Health State Control Centre - Health	emergencymanagement@health.sa.gov.au	Office phone: (08) 7425 7065 24 hour Duty Officer: 1300 245 603
TAS DOH	TAS Department of Health Emergency Preparedness and Response Unit Emergency Coordination Centre)	emergency.management@health.tas.gov.au	Duty Officer 24/7 phone: (03) 6166 0412 Office fax: (03) 6166 3141
VIC SEMC	State Emergency Management Centre Department of Health and Human Services Victoria	semc@dhhs.vic.gov.au	On Call pager: 1300 790 733 Office Fax: (03) 9096 0003

| WA SHEOC | WA Health

State Health Incident Coordination Centre | shicc@health.wa.gov.au | 24/7 On call Duty Officer: (08) 9328 0553

SHEOC (when activated): (08) 9222 4444

Office fax: (08) 9222 2304 |

Appendix 2 – Australian Government Contacts

National Incident Centre (NIC)

(Department of Health (Health))

02 6289 3030

Health.Ops@Health.gov.au

Australian Government National Situation Room (NSR)

(Department of Home Affairs - Emergency Management Australia (EMA)

1300 243 222

NSR@homeaffairs.gov.au

Attachment A7: AHPPC endorsed Work Permissions and Restrictions Framework for Workers in Health Care Settings

Background

This framework supports safe decision making when determining whether to place work permissions/restrictions, independent of quarantine, on a worker after a COVID-19 exposure in a healthcare setting in the context of an outbreak and community transmission of COVID-19.

Workers in health care settings include a broad array of workers including public, private, and primary care health settings. This includes workers in:

- Public health settings (e.g. public hospitals, public health clinics, ambulance services, and patient transport services)
- Private health settings (e.g. private hospital, day procedure centre or specialist outpatient services)
- Private provider facilities (e.g. general practitioners, private nurse offices, community pharmacies, consulting offices)
- Education settings in which health care students are managed to undertake placement, registration and/or internships in clinical settings

This also includes disability care workers and residential care workers, and associated students within these settings.

Healthcare services should apply a broad hierarchy of control framework to minimise and manage the risk of transmission of COVID-19. A system-based risk managed approach that applies appropriate mitigations reduces the risk of exposure in healthcare settings. However, it is acknowledged that risk cannot be eliminated and that exposures will occur.

Health services, supported by the local Public Health Units (PHU), are responsible for considering when work permissions and restrictions are required. Health Services and Jurisdictional Departments of Health are also responsible for operationalising these guidelines including defining the reporting and escalation requirements (e.g., if multiple health services are involved) internally.

Work permissions and restrictions framework (the Framework)

The Framework provides a process and tools to support exposure assessment, work restriction and return to work decision making for workers in health care settings. The Framework is designed for workers in health care settings who have had an individual risk assessment completed after exposure to suspect or known COVID-19 case within a health care setting.

Health care managers are encouraged to be familiar with the Framework and additional jurisdictional requirements. Where possible, identify appropriate contacts to be involved in assessment teams in advance and consider training in relation to the Framework. Consider locally applying a process of monitoring and evaluation, in line with jurisdictional requirements.

The Framework includes 3 steps:

1. Individual risk assessment of a worker in a health care setting after potential exposure a suspect or known COVID-19 case within a healthcare setting
   - Assessment is conducted by appropriately trained and skilled local teams from health service providers and residential care facilities (including disability services) in collaboration with the public health unit (PHU) and other specialties where available and required (e.g. Infection Prevention and Control (IPC) Units, Work Health and Safety Units, Infectious Diseases Physicians).
   - Consultation should include hospital and health service operational managers, where relevant, to provide guidance on staff dynamics, workplace layouts, staffing pressure and other factors as required
   - Tools to assist the assessment at this stage are available at:
     - Table 1 – Workers in health care settings exposure risk matrix for workers who are fully vaccinated for COVID-19
     - Table 2 – Workers in health care settings exposure risk matrix for workers who are unvaccinated or partially vaccinated for COVID-19
     - Table 3 – Personal Protective Equipment (PPE) breach risk assessment and actions
2. Determine the potential impacts of work restrictions on the safe ongoing management of the health service.
3. Once exposure risk is determined in the context of the facility and work impacts, refer to the recommended work permissions and mitigations action matrix.
   - Tools to assist the assessment at this stage are available at:
     - Table 4 – Recommended work restrictions and permissions as determined by risk.

Once these steps have been completed, the health service should work with the worker and supervisor to implement appropriate actions. These actions should be in line with public health policy and directives from the Chief Health Officer. Where final actions deviate from the recommended work restrictions and permissions (table 4), this must be approved by the relevant delegate or Chief Health Officer.

Decisions should be regularly reviewed in the context of the evolving local epidemiological and public health situation. If an outbreak escalates, it may be necessary to review a worker in a health care setting's work restrictions and permissions to facilitate continuation of essential health services.

STEP 1: Undertake an individual risk assessment of affected workers in health care settings and determine level of exposure

Factors to be considered when undertaking an individual risk assessment are:

Details of exposure event (type, dose, time):

- Case details (infectious period, transmission risk, behaviour's, vaccination status, information on viral load (CT values) if available)
- Type of exposure: types of care or potential behaviours that increase the risk of COVID-19 transmission

- Details of related transmission events in the outbreak
- Amount of cumulative time the worker has occupied the same shared space as the case including type and proximity
- Vaccination status: unvaccinated, partially vaccinated, fully vaccinated
- Staff mobility: Work across multiple facilities highly mobile within the facility, work in high-risk area.

Details of mitigations in place:

- Vaccination status of the worker (unvaccinated/ partially vaccinated/ fully vaccinated)
- PPE and IPC: correct use of appropriate PPE and IPC precautions by the case and worker

Risk assessments should be made on a case-by-case basis by local health service staff in consultation with the PHU and other relevant staff. In most circumstances, exposure risk should be determined using the appropriate healthcare worker exposure matrix based on vaccination status (table 1 fully vaccinated OR table 2 partial or unvaccinated).

In some circumstances, the exposure matrices provide an option of moderate or high risk, to reflect that a qualitative assessment is required to determine the appropriate level of exposure. In other circumstances, the matrix provides a clear indication of the exposure risk, however this remains subject to a case-by-case assessment. For example, in circumstances where the worker in a healthcare setting is immune-compromised, it may be necessary to increase the risk profile (e.g., a fully vaccinated worker may be assessed using the unvaccinated risk matrix).

Final decisions should be informed by a qualitative assessment considering variety of factors, as outlined in step 2 and 3. Once a risk assessment, based on the above considerations, has been conducted, it is important to characterise the situational context of the exposure to help understand the impact of a potential transmission event and whether situational factors may further mitigate or increase the level of exposure and associated risk.

Factors to consider when characterising the situational context:

- Type of work location, role, and environment (e.g., use of shared equipment, shared/communal spaces, high risk setting/persons, whether indoors or outdoors, level of vaccination coverage of workers in a healthcare setting)
- Other workplace mitigations in place during time of potential exposure (physical barriers, negative pressure rooms, ventilation characteristics in the relevant rooms/spaces and additional HEPA air filtration)
- Vulnerability of population (workers in health care setting and patients)
- Additional controls and residual risk of transmission in the setting (e.g. daily testing programs).

Based on these situational factors, the assessment team should consider whether the exposure risk should be amended and the worker's level of exposure risk reclassified. This will inform the final individual risk assessment, prior to moving to Step 2.

Table 1: Workers in health care settings exposure risk matrix – Fully vaccinated for COVID-19

Note: This table represents minimum national recommendations. Jurisdictions may implement additional requirements above these minimum national recommendations.

NB: All exposure category decisions are based on a local risk assessment Case = Any confirmed positive case of COVID-19 (co-worker, patient, or other)	**EXPOSURE EVENT SCENARIO**[#]			
	Low Risk Scenario: Transient, limited and distanced contact that does not meet the definition for face-to-face or close contact.	**Medium Risk Scenario**: Transient face-to-face contact with a confirmed case **OR** Non-transient distanced contact in an indoor space.	**Highest Risk Scenario**: Providing direct care to a case **OR** Non-transient face-to-face contact with a confirmed case **OR** Prolonged/cumulative contact in the same enclosed/confined space **OR** Where the types of care or potential behaviours increase the risk of COVID-19 transmission **OR** Contact with multiple COVID-19 cases.	
Staff: No effective PPE Case: With or without mask	Low to Moderate Risk	Moderate Risk	High Risk	
Staff: Surgical mask only Case: No surgical mask	Low Risk	Low to Moderate Risk	High Risk	
Staff: Surgical mask + eye protection* Case: No surgical mask	Low Risk	Low to Moderate Risk	Moderate Risk Depending on risk assessment	High Risk Depending on risk assessment
Staff: Surgical mask only Case: Surgical mask§	Low Risk	Low Risk	Moderate Risk Depending on risk assessment	High risk Depending on risk assessment
Staff: Surgical mask + eye protection* Case: Surgical mask§	Low Risk	Low Risk	Low to Moderate Risk Depending on risk assessment	Moderate Risk Depending on risk assessment
Staff: P2/N95 + eye protection* Case: With or without surgical mask	Low Risk	Low Risk	Low Risk	
Staff: Full PPE – P2/N95, eye protection, gown, gloves; no breaches Case: With or without surgical mask	Low Risk	Low Risk	Low Risk	

(Row group labelled vertically: PPE WORN BY STAFF & CASE DURING)

* If gown/apron or gloves were also worn during the exposure event, this should be documented and may be factored into the exposure event risk assessment.

§ Incorrect mask use is to be considered the same as 'no surgical mask'. For cases, P2/N95 mask use to be considered the same as surgical mask.

Documented risk assessment for all exposure events should include evaluation of occupational exposures and of the space (including size and ventilation, where possible).

Table 2: Workers in health care settings exposure risk matrix – Unvaccinated or partially vaccinated for COVID-19

Note: Mandatory vaccination requirements for workers in health care settings will be set by jurisdictions.

Note: This table represents minimum national recommendations. Jurisdictions may implement additional requirements above these minimum national recommendations.

NB: All exposure category decisions are based on a local risk assessment

Case = Any confirmed positive case of COVID-19 (co-worker, patient, or other)

PPE WORN BY STAFF & CASE DURING EXPOSURE	EXPOSURE EVENT SCENARIO#		
	Low Risk Scenario: Transient, limited and distanced contact that does not meet the definition for face-to-face or close contact.	**Medium Risk Scenario**: Transient face-to-face contact with a confirmed case OR Non-transient distanced contact in an indoor space.	**Highest Risk Scenario**: Providing direct care to a case OR Non-transient face-to-face contact with a confirmed case OR Prolonged/cumulative contact in the same enclosed/confined space OR Where the types of care or potential behaviours increase the risk of COVID-19 transmission OR Contact with multiple COVID-19 cases.
Staff: No effective PPE Case: With or without mask	Moderate Risk	Moderate Risk	High Risk
Staff: Surgical mask only Case: No surgical mask	Low to Moderate Risk Depending on risk assessment | Moderate Risk Depending on risk assessment	Moderate Risk	High Risk
Staff: Surgical mask + eye protection* Case: No surgical mask	Low to Moderate Risk	Low to Moderate Risk Depending on risk assessment | Moderate Risk Depending on risk assessment	High Risk
Staff: Surgical mask only Case: Surgical mask§	Low Risk	Low to Moderate Risk Depending on risk assessment | Moderate Risk Depending on risk assessment	High Risk
Staff: Surgical mask + eye protection* Case: Surgical mask§	Low Risk	Low Risk Case: Surgical mask | Low to Moderate Risk Depending on risk assessment	High Risk
Staff: P2/N95 + eye protection* Case: With or without surgical mask	Low Risk	Low Risk Case: Surgical mask | Low to Moderate Risk Case: No mask	Low to Moderate Risk No prolonged/ cumulative/ physical contact | Moderate Risk Prolonged / cumulative/ physical contact
Staff: Full PPE – P2/N95, eye protection, gown, gloves; no breaches Case: With or without surgical mask	Low Risk	Low Risk	Low Risk

* If gown/apron or gloves were also worn during the exposure event, this should be documented and may be factored into the exposure event risk assessment.

§ Incorrect mask use is to be considered the same as 'no surgical mask'. For cases, P2/N95 mask use to be considered the same as surgical mask.

Documented risk assessment for all exposure events should include evaluation of occupational exposures and of the space (including size and ventilation, where possible).

Table 3: PPE breach risk assessment and actions
Note: This table represents minimum national recommendations. Jurisdictions may implement additional requirements above these minimum national recommendations.

Determine level of exposure		Immediate actions	Actions once risk confirmed
LOW RISK BREACH	• Breaches in PPE that occur below the neck and are managed immediately (e.g., torn glove)	• Remove from situation • Remove PPE • Perform hand hygiene • Inform line manager	Follow actions for low risk as outlined in table 4 'Recommended work permissions and restrictions'
MODERATE RISK BREACH Increased risk of infection	• Incorrect use of PPE • Incorrect PPE for task • Contamination occurs during doffing (occurs above neck)	• Remove from situation • Remove PPE • Perform hand hygiene/flush site or relevant care • Inform line manager • Screening/testing • Continuous monitoring	Follow actions for moderate risk as outlined in table 4 'Recommended work permissions and restrictions'
HIGH RISK BREACH Likely risk of infection	• Exposure of mucous membranes by direct droplets from confirmed COVID positive (e.g., spitting in HCW face by confirmed COVID case) • Contamination occurs during doffing	• Remove from situation • Remove PPE • Perform hand hygiene/flush site or relevant care • Inform line manager • Closely monitor • Screen/test • Remove from immediate duties	Follow actions for high risk as outlined in table 4 'Recommended work permissions and restrictions'

STEP 2: Assess the impacts of the work restrictions

Health services and their IPC staff, with support of PHUs, are responsible for operationalising and tailoring this guidance. This may involve consultation with other specialties where available, such as Work Health and Safety units and Infectious Diseases Specialists. While this framework cannot capture all the nuance and influential factors that may arise, the framework notes that there will be circumstances in which it is not possible to apply the recommended work permissions and restrictions as determined by the level of risk (outlined in Step 3).

In determining the final work restrictions and permissions for a staff member, the impact of these restrictions on the health services must be assessed. For example:

- If the majority or all staff in a highly specialised area are exposed
- If in a rural or regional setting where only a few staff members possess specialised skills
- If the health care service has a significant caseload without additional staff to engage.

In the first instance, health services should consider whether staff furlough can be compensated through rostering arrangements. Where possible, staff members requiring quarantine or furlough should be removed from the roster or replaced for their furlough/quarantine period.

Where this would significantly impact on the ongoing safe delivery of services, alternative rostering arrangements should be considered. This may involve:

- Redeployment of staff (e.g., accessing staff from other areas of a facility or bringing staff in from other facilities to fill roster gaps)
- Reducing hours of service operation if this can be managed whilst safely providing essential services
- Diverting patients to another facility, where this can be safely managed without overwhelming other essential health services
- Reducing the scope of service provision to only provide the highest priority care (e.g., delaying non-critical services)

Where these actions are not possible or would result in a significant disruption of essential services, it may be necessary to implement alternative mitigations so that staff members may continue working and providing essential services (see Step 3). In these circumstances, if the workforce impact is considered critical, healthcare services should work with the Public Health Unit to ensure their unique circumstances are considered and that appropriate mitigations are implemented (see Step 3).

STEP 3: Once exposure risk is determined refer to the recommended work permissions and restrictions action matrix

After undertaking an individual risk assessment (step 1) and considering impacts of work restrictions (step 2), the assessment team should allocate a 'risk assessment outcome' to the worker (low, low to moderate, moderate or high). Based on the risk assessment outcome, the

assessment team should consider the recommended work permission and restrictions, taking into account the impacts of these restrictions for the health care setting.

Where a worker is assessed as moderate or high risk, the Public Health Unit may recommend they undertake a period of quarantine. Where possible, workers who are advised to quarantine should complete the required quarantine period and should not attend work whilst in quarantine. However, noting that this may not be possible due to work requirements (as identified in step 2), it may be necessary to implement mitigations so that workers may continue to work or have a reduced quarantine period.

In some circumstances, these arrangements may result in a worker who is in quarantine due to being a close contact being able to work (pending results of PCR testing) prior to being released from quarantine. This may be necessary due to substantial workforce impacts associated with the worker needing to quarantine. Workers should adhere to the guidance of the Public Health Unit. In some cases, this may involve attending work with appropriate mitigations, however being restricted from movements within the community.

The minimum recommended work permissions and restrictions for workers based on their risk assessment outcomes are outlined in Table 3. Final work permissions and restrictions should be determined in a case-by-case basis, in line with jurisdictional requirements. Additional mitigations may include:

- Daily or more regular screening requirements
- Daily testing requirements
- Additional PPE requirements
- Minimising risk of exposure to vulnerable people
- Adjusting staff rosters to minimise risk to patients and/or exposure of other staff (e.g., exposed workers tending to COVID-19 cases)

In determining the recommended work permissions and restrictions, the assessment team should also consider the work environment and individual circumstances of the worker. Adjustments to work permissions and restrictions may be required, and in some circumstances, this may involve adjusting the minimum requirements as outlined in Table 3. For example, in regional settings it may not be feasible to require daily saliva testing (recommended for high risk). In these circumstances, the assessment team may consider removing this requirement or implementing alternative arrangements.

Where the final recommended work permissions and restrictions deviate from the recommended minimum requirements (Table 4), this must be approved by the relevant delegate or Chief Health Officer. Decisions regarding the recommended work permissions and restrictions for the worker in a healthcare setting should be carefully documented. Decisions should be regularly reviewed in the context of the evolving local epidemiological and public health situation. If an outbreak escalates, it may be necessary to review the recommended restrictions to facilitate continuation of essential health service.

Table 4: Recommended work permissions and restrictions as determined by risk

Note: This table represents minimum national recommendations, noting that adjustments may be made based the individual assessment (step 1) and consideration of impacts (step 2). Jurisdictions may implement additional requirements above these minimum national recommendations.

	LOW RISK	LOW TO MODERATE RISK	MODERATE RISK	HIGH RISK
Work restrictions	Continue to work.	Continue to work.	Isolate until Day 2 RT-PCR test. If test result negative can return to work. Whilst at work, restricted from break rooms and other locations where there is potential to remove mask. Recommended to eat or drink in a separate designated area.	**Work restrictions** **Leave workplace immediately**. **Isolate** as a primary close contact **Potential to return to work early** if Day 5 test result is negative. Whilst at work, restricted from break rooms and other locations where there is potential to remove mask. Recommended to eat or drink in a separate designated area.
Testing	Be alert to mild symptoms, test if symptomatic	**Day 2 RT-PCR** test **Day 5 RT-PCR** test.	**Day 2 RT-PCR** test • If test result negative may return to work. **Day 5 RT-PCR** test **Day 13 RT-PCR** clearance test.	**Day 2 RT-PCR** test. **Isolate**. **Day 5 RT-PCR** retest. **Isolate while result pending**. **Day 13 RT-PCR** clearance test.
		Any staff who develop symptoms must get a throat-nose swab and **isolate** until their result is known and symptoms have resolved.		
Return to work	N/A	N/A	**Work permissions. If Day 2 test is negative may return to work.** Workplace to consider need for additional surveillance testing; • Daily or less frequent saliva testing	**Work permissions. If Day 2 test and Day 5 test are negative**, may return to work at a single site, with additional surveillance testing; • daily saliva tests and; • clear **RT-PCR retest day 9 and 13.** Additional: • Be alert to mild symptoms • Test if symptomatic • Limit work to a single site/area .
Additional PPE Requirements on return to work?	**Wear a surgical mask at all times** in indoor spaces including staff only spaces, unless eating or drinking.	**Wear a surgical mask at all times** in indoor spaces including staff only spaces, unless eating or drinking. Continue until clearance following **Day 13 RT-PCR test.**	**Wear a surgical mask at all times** in indoor spaces including staff only spaces. Continue until clearance following **Day 13 RT-PCR test.**	**Wear a surgical mask at all times** in indoor spaces including staff only spaces. Continue until clearance following **Day 13 RT-PCR test.**
Work across sites?	**In general, Yes**. Inform all employers of cross-site details. **If there is an outbreak at a workplace**—i.e. if there is previously demonstrated transmission—even low-risk exposures should limit work to a single site. **Workers in COVID Streaming Areas** must follow any jurisdiction workplace directions from the Chief Health Officer.	**In general, Yes**. Inform all employers of cross-site details.	**No.** Consider limiting work to a single site/area. Exclude from work with high risk patients, where possible (e.g. oncology wards). **Consider redeployment** if work in with vulnerable persons.	**No.** Limit work to a single site/area. Exclude from work with high risk patients, where possible (e.g. oncology wards). **Consider redeployment** if work is with vulnerable persons.

Attachment A8: AHPPC STATEMENT: MANDATORY VACCINATION OF ALL WORKERS IN HEALTH CARE SETTINGS

AHPPC recommends mandatory vaccinations for all workers in health care settings as a condition of work. Further, AHPPC recommends the first dose of a TGA approved COVID-19 vaccine by 30 October 2021 and a second dose by 15 December 2021.

AHPPC also recommends that all jurisdictions accept a national definition of health-care settings in their relevant legislation to ensure consistency. This national definition will include:

- Public health settings including public hospitals, public health clinics, ambulance services, patient transport services, correctional health facilities and other health services managed by a jurisdiction.
- Private health facilities, such as private hospitals or day procedure centres, or specialist outpatient services.
- Private provider facilities, such as general practitioners, private nurse offices and consulting offices, pharmacies and private pathology centres.
- Education settings that manage health care student placements, registration, and/or internships in clinical settings.
- Department of Defence health settings including Garrison health centres, deployed and exercise health support and clinical health training settings.

These settings are intended to capture all health professions, including:

- those in the National Registration and Accreditation Scheme,
- all self-regulated allied health professions as published on the Australian Government Department of Health website[1], and
- and all other individuals who work in these settings

AHPPC notes the regulatory mechanism with which to mandate health-care settings may vary in the jurisdictions Noting the scope of health care settings in this Statement, jurisdictions may need to implement a staged approach to mandating vaccination for health care workers.

AHPPC notes that Defence manages vaccination requirements for Defence members and employees internally due to the unique operating environments.

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[1] https://www.health.gov.au/health-topics/allied-health/about

AHPPC recommends an exemption for contractors is when they are responding to an emergency. In these cases, AHPPC recommends putting risk mitigation strategies in place to ensure unvaccinated contractors abide by COVID-safe practices.

A substantial health workforce has been necessary to roll out testing, training, vaccination, quarantine, and treatment of COVID-19 patients in the public and private health sectors. Hospitals and health services have been particularly vulnerable to outbreaks resulting in transmission risk in the hospital to staff and patients. This includes the furlough of staff and reduction in health system capacity. Although identified as a priority group for vaccination, there are still workers in health care settings who are unvaccinated.

Vaccination of persons entering health care settings is an important mechanism to protect the public, staff, and patients in these settings. AHPPC has consistently noted that vaccinated individuals are less likely to be significant drivers of spread, and that unvaccinated people dominate community transmission. AHPPC also notes increased rates of community transmission, with the Delta variant present in Australia. This poses an increased risk of exposure to both staff and patients in health care settings.

AHPPC notes that mandating vaccination for this cohort could have unintended consequences, including on the availability of the workforce. This could place increased pressure on a jurisdiction's capacity to meet demand. However, the benefits of a highly vaccinated workforce will ensure minimal transmission in healthcare settings and minimise the need to quarantine and furlough staff.

AHPPC recognises that not all facilities are capable of being monitored for compliance with the proposed vaccine mandates. However, it is considered that these mandates will assist employers in these settings better manage vaccination requirements for employees.