

September 2021

Intensive care capacity

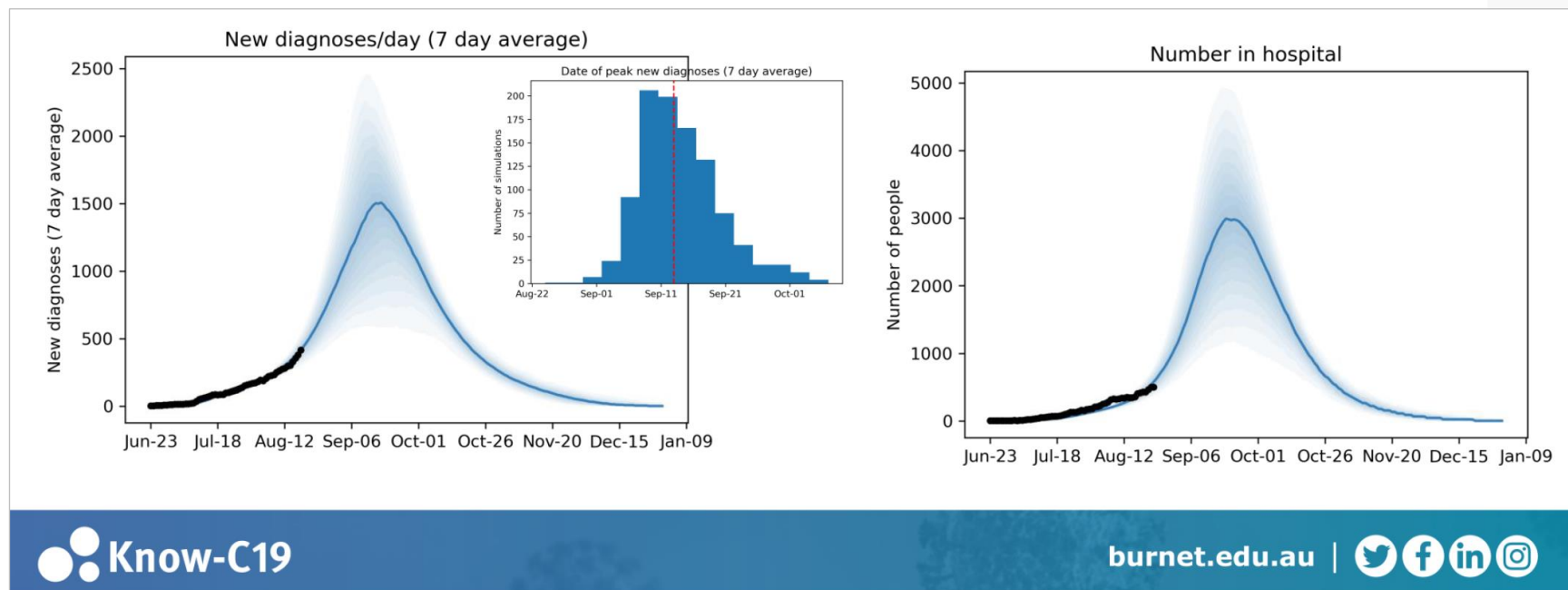


Health

NSW Health Demand Modelling

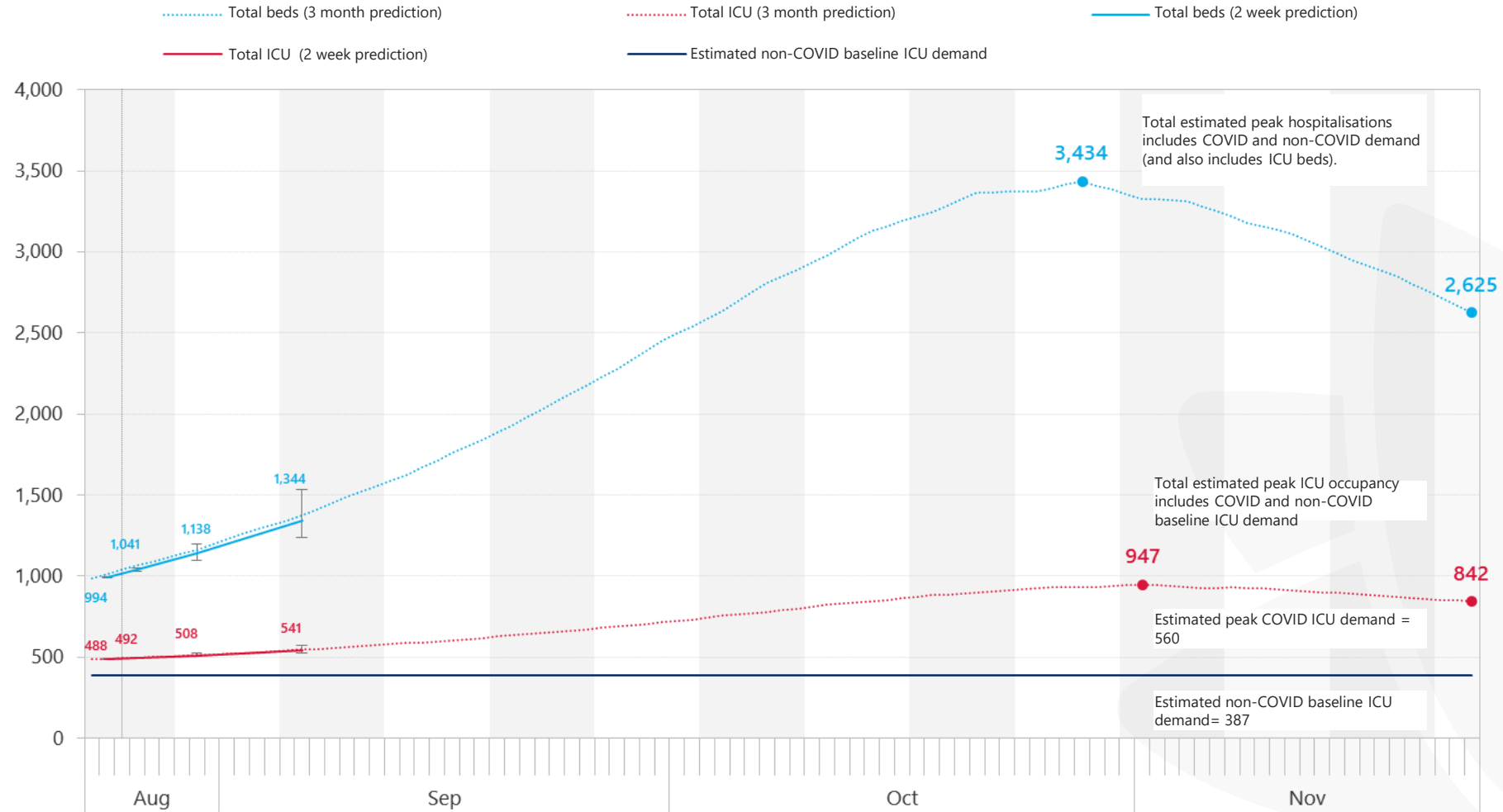
Overview

- ▶ Within the LGAs of concern, cases are expected to continue increasing until mid-September (range of 1,100 to 2,000 per day), when sufficient vaccine-acquired immunity kicks in (alongside maintained restrictions).
- ▶ A peak in hospital and ICU utilisation will follow. It is anticipated that between 2,200 and 3,900 people will require hospitalisation.
- ▶ Achieving uniform vaccination in the LGAs of concern is critical as vaccination rather than reduced infection numbers will be the intervention that leads to a fall in hospitalisations.



ICU Demand and Capacity Modelling

Released on:	Wednesday 25 th August, 8am
Data as at (unless otherwise stated):	Monday 23 th August 4:00 pm

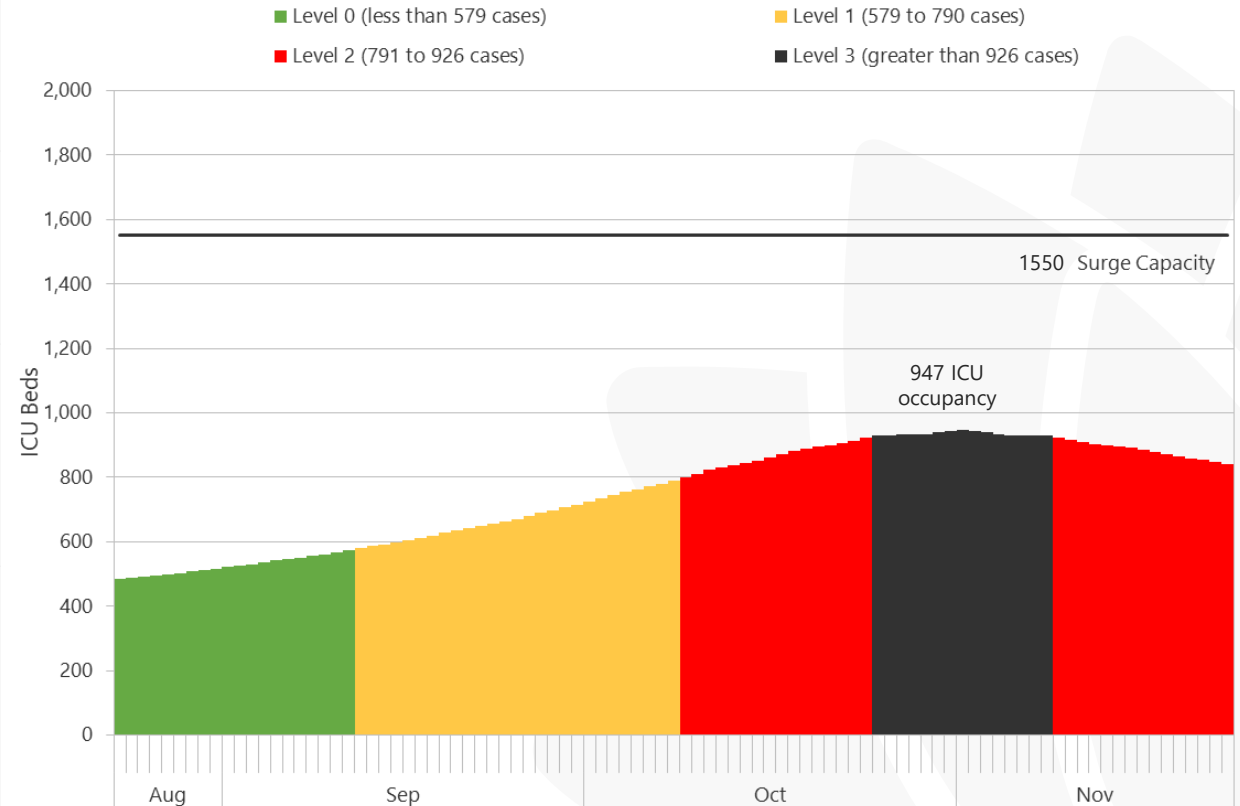


Key components to the strategy

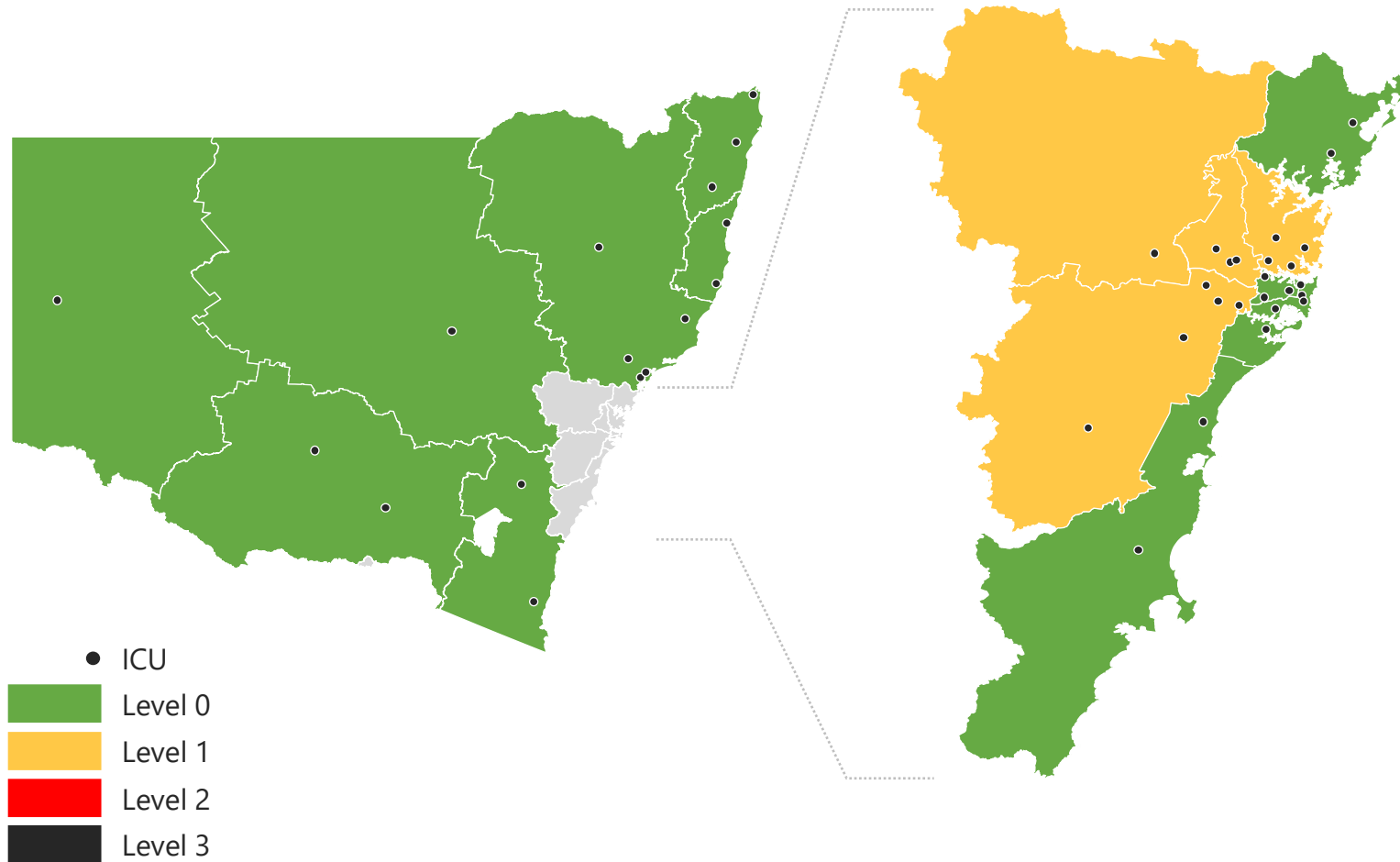
Activity is monitored in real-time through our Ambulance Arrivals Board , and Patient Flow Portal providing visibility and coordination across system	Intensive Care Unit (ICU)
<ul style="list-style-type: none">▶ Ambulance demand▶ Transfer of Care▶ Out of Hospital Care activity▶ Community COVID-19 cases▶ Emergency Department activity and Short Term Escalation Plan (STEP)▶ Hospital Activity and STEP level▶ ICU Activity and STEP level	<ul style="list-style-type: none">▶ Monitoring and coordination of ICU capacity and demand▶ Ventilator management and distribution▶ Equipment, consumables, pharmaceutical monitoring and distribution▶ ICU staff deployment▶ ICU Pandemic Short Term Escalation Plan▶ Intensive Care Advisory Service (ICAS)- virtual support▶ Temporary hospital solutions

STEP plan for the current trend model - ICU

Level	Impact on ICU Operations	Recommended strategies
0	Minimal impact on daily operations of ICU	<ul style="list-style-type: none"> ICU surge plans (bed spaces, equipment) developed and recorded in PFP Critical care networking arrangements confirmed ICU workforce surge plan developed to identify additional workforce for surge levels 1-3
1	Moderate impact on daily operations of ICU ICU approaching maximal operational capacity	<ul style="list-style-type: none"> Care delivery for ICU2 patients in other areas Escalate additional resource needs Transfer of critically ill patients to other facilities as appropriate Activate Level 1 ICU workforce strategies
2	Severe impact on daily operations of ICU Overall demand for critical care exceeding ICU operational capacity	<ul style="list-style-type: none"> Care delivery for ICU1 and ICU2 patients in additional areas Escalate additional resource needs Transfer of critically ill patients to other facilities as appropriate Activate Level 2 ICU workforce strategies e.g. higher number of patients per staff member, team nursing
3	Overwhelming impact on usual daily operations of ICU Demand for critical care services significantly exceeds organisation-wide capacity	<ul style="list-style-type: none"> Activate NSW Pandemic Resource-based decision making Care delivery for ICU1 and ICU2 patients in alternative areas such as operating theatres Escalate additional resource needs Activate Level 3 ICU workforce strategies Includes use of private hospitals and alternative workforce models e.g. higher number of patients per staff member



Pandemic ICU STEP levels by Local Health District



COVID Patients in ICU		
Sydney	23	Level 0
South Western Sydney	35	Level 1
South Eastern Sydney	29	Level 0
Illawarra Shoalhaven	6	Level 0
Western Sydney	40	Level 1
Nepean Blue Mountains	14	Level 1
Northern Sydney	15	Level 1
Central Coast	1	Level 0
Hunter New England	0	Level 0
Northern NSW	0	Level 0
Mid North Coast	0	Level 0
Southern NSW	0	Level 0
Murrumbidgee	0	Level 0
Western NSW	3	Level 0
Far West	0	Level 0
Sydney Children's Hospital Network	3	Level 0
St Vincent's	8	Level 0