

"A contemporary and complementary workforce approach to creating and supporting surge critical care nursing capacity within the South Australian context"



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### **Foreword**

It is a pleasure to launch the 2020/2021 Critical Care Surge Nursing Workforce Strategy COVID-19.

Without doubt, 2020 challenged each one of us: as individuals, as nurses and healthcare team professionals and as family and community members. The immediate and longer term impacts of the COVID-19 pandemic continue to emerge, as we navigate the volatile, complex and rapidly changing health, social, political and economic environment. Specifically, surge demand on critical care unit resources as a consequence of the COVID-19 pandemic has been recognised as a local, national and global issue.

The 2020/2021 Critical Care Surge Nursing Workforce Strategy COVID-19 (the Strategy) was initially conceptualised to meet anticipated surge demand on critical care unit resources as a consequence of the COVID-19 pandemic. While addressing these needs, the Strategy also has application to future mass disasters impacting on state-wide critical care surge demand, with strategies and initiatives identified for crucial preparedness and readiness and enabling an agile, diverse and sustainable critical care nursing workforce.

As a framework, the Strategy intends to leverage and strategically unlock existing workforce roles to optimise the critical care nursing workforce capacity to absorb surge impact and respond to rapidly evolving priorities. Importantly, the Strategy provides a vision to positively influence and change the way in which care is delivered, starting with strong authentic leaders informing, preparing and guiding the critical care nursing workforce. It addresses key elements that are vital to building a sustainable critical care nursing surge workforce; including education approaches and system enablers.

It is acknowledged that wholesale change cannot happen immediately. However, incremental action and adapting as new evidence and practices evolve will support the achievement of a critical care nursing workforce providing safe and effective nursing care during peak surge demand times.

As Chief Nurse and Midwifery Officer for SA Health, I am privileged to launch the Strategy and look forward to the realisation of the vision.

Adj Assoc Prof Jennifer Hurley

Chief Nurse and Midwifery Officer

# Background

The coronavirus (COVID-19) pandemic has posed unique and complex challenges for health systems across the world as they grapple with the overwhelming demand on providing adequate health care services. An unprecedented demand for critical care resources internationally has resulted in critical care units being overwhelmed and their resources stretched to breaking point, with the international experience seeing 5-16 % of patients with laboratory confirmed COVID-19 requiring admission to critical care units. International and local experience indicates that early and targeted management of acute respiratory failure (including extended mechanical ventilation) and associated complications are keys to achieving optimal outcomes in patients affected by COVID-19. The unparalleled demand on critical care beds, coupled with increased clinical complexity and scarce critical care trained nursing resources, places extraordinary pressures on critical care units, including limited capability to surge workforce resources in response to sudden increases in demand. The evidence indicates that traditional approaches to critical care unit nursing models of care fall short in enabling frontline staff to be prepared to coordinate care for critically ill patients at all levels of surge seen during the COVID -19 pandemic.

The projected Australian demand on critical care unit beds associated with a pandemic has been presented in a recent Australian scoping study (Litton, Bucci, Chavan, Ho, Holley et al 2020), which predicts that a maximal surge in requirements for critical care beds would require a 191% increase in commissioned critical care beds in Australia. This surge in critical care unit activity in the context of traditional critical care models of care would require a 279% increase in critical care trained nurses (over baseline) to provide nursing care. Achieving this increase in critical care trained nurses is not feasible.

Contemporary critical care nursing education pathways support the development of critical care registered nurses (CCRNs) in Australia and include programs such as graduate certificate/diploma in critical care nursing which are underpinned by specialised workplace clinical practice exposure and experience over a period of up to 24 months. The combination of education and clinical experience are not quickly replicated and it is imperative that alternative approaches to providing critical care nursing expertise during periods of surge demand are considered.

What remains central to providing safe care is conserving and optimising the CCRN role to ensure that their expertise is diverted specifically to areas of greatest need, including providing professional leadership and team based clinical support in the critical care unit.

The South Australian experience has included a state-wide approach to logistical planning of critical care unit resources – extending critical care unit bed capacity; procuring vital equipment such as Personal Protective Equipment (PPE) and ventilators; and staff training and upskilling programs. The next step is incorporating innovative and carefully considered approaches to managing surge demand of critical care unit resources into meaningful pandemic plans. These plans need to include realistic and sustainable approaches to pandemic critical care staffing and practice models, focused on safety, well-being and supporting a sustainable and resilient nursing workforce.

The Strategy was developed to provide practical guidance in this, an unchartered world arising from unprecedented demand. It describes an innovative, integrated, tiered and supported approach to building and sustaining responsive critical care nursing workforce capacity. The Strategy provides strategic and operational guidance to health services in considering and planning for critical care unit surge demand as part of organisational disaster planning processes.

Whilst this Strategy was developed to meet the anticipated surge demand on critical care unit resources as a consequence of the COVID-19 pandemic, the approach intends to provide workable approaches to managing critical care unit surge demand due to other pandemic or mass casualty disaster scenarios.

It is important to note that whilst the approach is supported by International and Australian literature and evidence, the surge management approaches described within this document need to be tested and evaluated within a local context and should not be openly applied without judicious consideration.

# Vision

The critical care nursing workforce is adequately prepared, equipped and supported to provide safe, confident and capable critical nursing care to the South Australian community through unprecedented times of extraordinary state-wide critical care unit surge demand.

## Aim

To invest, support and enable an agile, diverse and sustainable critical care nursing workforce which innovatively and courageously responds to providing safe and effective nursing care during peak surge demand times.

# Methodology

This work has been led by the Chief Nursing and Midwifery Officer and Nursing and Midwifery Office (NMO), in collaboration with the key stakeholders including South Australian Local Health Networks.

The development of the Strategy

- is informed by international experiences and learnings;
- > aligns to the Commonwealth policy context
- acknowledges Local Health Network (LHN) capacity and capability planning, preparation analysis and skills investment;
- incorporates World Health Organisation (WHO COVID-19 policy recommendations;
- > is focused on safety; and
- acknowledges the imperative for innovative and courageous approaches to providing safe critical care nursing care during a pandemic

2020/2021
Critical Care
Surge Nursing
Workforce
Strategy
COVID-19

The Strategy is built around the following four vital elements; Leadership, Models of Care, Education, Research and Innovation, and Support Structures. These elements are extricably linked and leverage each other to build and sustain an agile and invested critical care nursing workforce that is equipped to respond during times of state-wide critical care unit surge demand.



#### Leadership

Thoughtful, conscious and strategic leadership to position, prepare and guide the critical care nursing workforce to transform and respond

**LEADERSHIP** 

### **CRITICAL CARE SURGE WORKFORCE**

**EDUCATION. RESEARCH AND INNOVATION** 

#### **Models of Care**

Creating capacity through collaboration, targeted education, and partnerships to develop contemporary and innovative approaches to team based care delivery

**SUPPORT STRUCTURES** 

Prepared, equipped, supported

**MODELS OF CARE** 



#### **Education. Research** and Innovation

Providing tailored learning journeys to close critical skill gaps through reskilling, upskilling, adapting and developing the workforce

#### **Support Structures**

Strategies that prioritise workforce safety, promote wellbeing, build workforce resilience and reduce moral distress

### **Key elements**

The Strategy, within its four key elements has informed the development of the following strategies with identified enablers for success.

# **Key element 1: Leadership** Thoughtful, conscious and strategic leadership to position, prepare and guide the critical care nursing workforce to transform and respond

workforce to transform and respond			
Strategies		Enablers	
1.1	Foster a shared purpose	1.1.1	Utilise global evidence and relevant pandemic expertise and experience as a platform for transformation and response
		1.1.2	Establish demand escalation framework <u>STEP</u> and pre-emptive phased contingencies aligned to <u>state COVID-19 management plans</u>
1.2	Mobilise collective effort	1.2.1	Provide credible, timely information to build a shared understanding of the overarching purpose
		1.2.2	Support team awareness about the required individual and collective responses to building workforce capacity and help the team make sense of how they will individually and collectively contribute to the response
		1.2.3	Demonstrate empathetic concern and appreciation of the anticipated impact for staff
1.3	Investment in a coping-enabling environment	1.3.1	Adopt a <u>deliberately developmental</u> approach to creating an 'everyone culture', which supports all individuals in the team to grow and thrive
		1.3.2	Create an environment which supports creative problem solving
		1.3.3	Learn from experience to inform the development of robust and sustainable improvements which position organisations for effective future responses

#### **Key element 2: Models of Care** Creating capacity through collaboration, targeted education, and partnerships to develop contemporary and innovative approaches to team based care delivery **Enablers Strategies** 2.1 Ensuring workforce expertise and experience is 2.1.1 A suite of tools that enable frontline staff to be prepared to coordinate care for critically ill channelled to areas of greatest need patients at all surge levels; > Define 'normal' safe staffing and skill mix capacity > Define the necessary critical care skill set > Define an enhanced skill set > Develop state wide critical care unit capacity and structures to allow staff to work across sites and jurisdictions > Develop state "worst case scenarios" management plans > Foster Department for Health and Wellbeing/Local Health Networks/State Health sector partnerships to develop surge workforce Innovatively leverage critical care unit workforce in a phased approach; > Maintain usual nurse to patient ratios during minor surges (up to 15% the normal capacity) > Redirect/reintegrate CCRN resources back into the existing critical care unit team > Utilise DHW critical care unit surge workforce to release existing CCRNs to upskill to work at the top of their specialist practice (Dialysis, ACCESS Nurse, Coordinator) > During moderate surges (requiring LHNs collaboration) drive efficient use of CCRN resources as clinical supervisors for aspects of care for multiple patients rather than managing complete episodes of care for one > Consider transitioning to non CCRN Medical Emergency Teams with downstream benefits of improved care for patients who are deteriorating or remaining in non-critical care areas > Build longer term workforce agility, adaptability and resilience

### **Key element 2: Models of Care**

Creating capacity through collaboration, targeted education, and partnerships to develop contemporary and innovative approaches to team based care delivery

Strateg	ies	Enable	rs
2.2	Transition to team based care in surge > 115% capacity with priority on patient safety, staff safety and well-being	2.2.3	A range of approaches to strategically unlock team capability;  Supported by Nursing and Midwifery Board APHRA framework  Enhance critical support staff  Utilise CCRN workforce as supervisors of teams delivering care  Determine skill set and expertise of team members and establish tasks appropriate to team members' knowledge set, skills, experience and scope of practice  Determine appropriate training, supervision and protection of team members  Utilise regular team huddles  Access to telehealth services for specialist clinical advice and information (ie wound specialists)  Support increased capacity with organisation of care delivery bundles/pathways/workflows that focus on;  stabilisation and safety  setting goals of care early, discussing with patients and families and incorporating into treatment and end of life planning and care (if appropriate)  high priority care/ interventions  minimising exposure through altered care schedules  minimising extraneous human interfacing through an integrated environment where medical devices/technologies work in sync with EMR and digital health applications  optimising access to critical equipment/interventions  avoiding inappropriate critical care unit referrals/ admissions  consider E-monitoring of patients by critical care nurses in offsite facilities

### **Key element 3: Education, Research and Innovation**

Providing tailored learning journeys to close critical skill gaps through reskilling, upskilling, adapting and developing the workforce

Strategies		Enable	Enablers	
3.1	Target clinical upskilling for CCRNs	3.1.1	Tailored CCRN learning journeys;  > Deep dive short programs for specific COVID-19 rescue therapies  > Upskilling newly qualified CCRNs for full specialist practice; ECMO  > Rapid upskilling for triage and supervision  > Change champion training  > Refresher training  > Equipment and device use  > DHW/education sector partnerships for the rapid upskilling of nurses to critical care unit level care  > On line skills platforms, Commonwealth supported critical care unit eLearning, Elsevier COVID-19 critical care unit rapid upskilling resources, Lippincott COVID-19 19 Rapid on boarding module  > Staggered, supported supernumerary shifts	
3.2	Identify and implement key educational processes to establish an enhanced skill set	3.2.1	<ul> <li>Appropriately leverage wider workforce for specific team and patient assist skills;</li> <li>Focus on cross functional skills training rather than on roles for times of severe staffing shortages</li> <li>Consider developing enhanced skill sets for non-critical trained nurses for front line care</li> <li>Safely task share high end specialist interventions; pronation teams, PPE buddy system, tracheostomy teams</li> <li>Consider alternate workforce to undertake appropriate tasks to relieve capacity</li> </ul>	

Key element 3: Education, Research and Innovation		vation	Providing tailored learning journeys to close critical skill gaps through reskilling, upskilling, adapting and developing the workforce
Strategies Enablers		Enable	rs
3.3	High level collaboration	3.3.1	Collaborate across ICU communities to deal with issues related to the management of critically ill COVID-19 patients;  > Corona virus CICM  > ACCCN COVID-19 updates  State-wide research collaboration to ensure smart response underpinned by latest evidence
3.4	COVID-19 Innovation	3.4.1	Tracking COVID-19 related innovation Innovative thinking across disciplines

#### **Key element 4: Support Measures** Strategies that prioritise workforce safety, promote well-being, build workforce resilience and reduce moral distress **Strategies Enablers** Workforce safety 4.1.1 4.1 Enforce compliance through appropriate practices and practical measures; > Minimise workforce exposure to COVID-19 through environmental risk assessments COVID-19 Risk Mitigation Plan, COVID-19 readiness checklist > COVID-19 safe workplace arrangements according to social distancing guidelines > Monitor staff <u>surveillance</u> testing and absence due to illness > Management of patients with acute behavioural disturbance Infection control and prevention; > Strengthen Infection Prevention and Control programs (compliance, implementation of standards, education infrastructure) International Council of Nurses COVID-19 portal Provision of PPE; > Rational use of PPE > Guidelines for health care worker attire > Infection control and PPE advice 4.2 Prioritise staff well-being, resilience and sustainability 4.2.1 Consider mental health implications with additional psychological safety and wellbeing efforts; > Mental health COVID-19 Virtual support network > In situ psychological support plan > Access to employee support programs > Mental health well-being programs > Mindfulness and resilience training > Digital psychological support > Provision of pre and post shift and incident management debriefing

	Strategies that prioritise workforce safety, promote well-being, build workforce resilience and reduce moral distress			
Strategies		Enablers		
		Develop COVID-19 Readiness Planning Toolkit to prepare and support the critical care unit to navigate the COVID-19 pandemic, continue to provide services, help build resilience and find key information as the situation continues to change.		
	4.2.2	Clearly documented COVID-19 decision making traffic light systems and triage tools for critical care unit admission, decision support tools and management guidelines  Systems to support staff to focus on care  Communication platforms		

Worldwide experience has demonstrated the unparalleled burden COVID-19 adds to critical care settings struggling to provide services during the pandemic. It is essential the clinical practice arising from the COVID-19 experience shapes and informs new critical care models of care, workforce roles and work practices in response to an emerging patient group during and post intensive care episodes. The emergent high risk COVID-19 patient group has increased the pressure on and expectations of the critical care nursing workforce globally. The demand for critical care unit beds and resources is likely to exceed supply in a pandemic and it is incumbent on Critical Care Services to have robust plans and systems in place that allow the services to respond effectively. The Strategy provides a template for South Australian Health services to invest in and plan for surges in unprecedented demand. It offers an alternative tiered model of care where critical care nurse expertise is used to oversee provision of advanced care and to develop a responsive, agile, adaptable and resilient critical care workforce.

# **Next Steps**

### **Supporting Resources**

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