COVID-19: Principles for increasing the nursing workforce in response to exceptional increased demand in Adult Critical Care

Introduction

This document has been produced at assist critical care staff in surge response to COVID-19 surge. We acknowledge that depending on the situation, such as that experienced in COVID-19, a dynamic response is required and the document will require review and updating.

A surge of COVID-19 patients will require a review of staff mobilisation due to the need to increase bed capacity, potential staff absence and staff movement from other areas[1]. Staff moved from other areas may have limited or no knowledge of acute and critical care services and will be required to support increases in critical care activity. This document provides nursing staff with principles and guidance to consider effectively deploying nursing staff to deal with a surge in critical care capacity.

This document assumes elective activity has been step-down in line with national surge processes which will facilitate the necessary training programme to be completed. (If non-emergency surgery is suspended it releases the potential of 4 registered nurses per theatre.)

Aims

This document aims to:

- Assist with nursing staff deployment within adult critical care during a surge in critical care capacity.
- Provide guidance for nursing staff on the professional and workforce issues that may affect them in this period of extraordinary circumstances.[2]

Current Picture in Critical Care

At the time of writing this document Critical Care in England has a vacancy factor of almost 10% (CC3N nursing workforce survey 2019) and normal business is maintained utilising bank and agency nurses, opening additional beds in surge is therefore a challenge.

To note the completion of Step 1 of the National Competency Framework for Registered Nurses in Adult Critical Care usually takes 12 months with the supernumerary component taking a minimum of 6 weeks.

[1] Available at: www.rcn.org.uk/get-help/rcn-advice/being-moving-staff. Accessed 14/03/2020
[2] Available at: www.nmc.org.uk/news/coronavirus/how-we-will-regulate Accessed 14/03/2020

Potential groups of staff to provide critical care nursing.

During peak periods it is envisaged that non-critical care staff will be required to deliver nursing care under the supervision of critical care trained nurses.

The types of staff available to care for the critically ill may be categorised as follows and identified by organisation:

A. Nurses with recent/previous critical care experience of some transferable skills.
    - Anaesthetic, recovery, theatre staff, ODPs
    - Nurses in different roles who have recently left Critical Care (not Outreach, ACCP /ACP)
    - Nurses working in Level 1 areas (e.g. PACU etc.)

B. Registered Nurses with no critical care skills

C. Assistants / helpers
    - Critical Care healthcare assistants
    - General ward healthcare assistants
    - Theatre Porters
    - Multi-professionals working in critical care, e.g. Physiotherapists
    - Healthcare professionals with no critical care skills, e.g. Pharmacists

Pharmacists

Pharmacy staff may be able to provide support with the preparation and/or administration of medicines. Where capacity allows a Trust may choose to use aseptic dispensing unit (ADU) to bulk manufacture intravenous medicines such as noradrenaline or insulin. Intravenous medicines may alternatively be prepared by suitably competent members of the pharmacy team on an individual patient basis at a ward level. [3]

Again, where appropriate, pharmacists may be trained to administer medicines. Both the preparation and administration of medicines are time consuming technical skills that if completed by pharmacy staff may free up significant nursing time to focus on other tasks.[2]

Critical Care Outreach

The redeployment of Critical Care Outreach (CCO) staff to help in Critical Care should be carefully considered and the risk/benefit thought through. Considerations should be given to the risk of leaving ward-based areas and deteriorating patients unsupported at the benefit of providing additional support in critical care. CCO may also be required to lead/support expert transfer of critically ill patients intra/inter-hospital. Crucial to redeployment decisions will be consideration of how recent the CCO practitioner's critical care experience is, and not all CCO have level 3 experience.

[3] Available at: www.nmc.org.uk/news/coronavirus/how-we-will-regulate Accessed 14/03/2020

Nursing Staff Deployment

A flexible pragmatic staged approach with an emphasis on team working rather than a ratio approach should be considered. Staff will be required to work outside of their normal practice area, any changes in working practice will need to be supported to ensure success and safe patient care; this will also ensure nurses working in different ways and are appropriately supervised and delegated care.

Training and consistency in work force is a key component. Non critical care nurses ideally should receive critical care training and preparation work in the critical care setting. Critical care training should be organised and delivered by critical care nurses/ educators.

Nurses with recent/previous critical care experience of some transferable skills. (Category "A")

Suspension of elective surgery will allow the delivery of training programmes including simulation training, which should be designed using the supernumerary competencies from the Step 1: National Competency Framework for Registered Nurses in Adult Critical Care. [4]. - Approx. 3-4 weeks.

Registered Nurses with no critical care skills (Category "B")

Non-critical care Staff in Critical Care – Best practice guidelines - Approx. 2 weeks

Assistants / helpers (Category "C")

Teams turning teams / washing teams / proning teams (Approx. 1 week) Simulation training, turning, positioning patients and orientation to area.

Additional education resources such as clinical contact details, clinical guidelines and education packages should be easily available and readily accessible across the hospital for nurses and multi-professionals working in unfamiliar situations.

Training should be done sequentially so the critical care nurses can concentrate on upskilling the theatre nurses in the first instance.

Expanding the Critical Care Nursing Workforce

Expanding the critical care nursing workforce should be undertaken in a phased response. Examples of how this is to achieved are provided below.

Examples:

Taking a 20 bedded unit (10 Level 3, 10 Level 2 = 15 nurses), to increase Level 3 capacity by 100% there is a need for 5 additional nurses for each shift)

[4]National Competency Framework for Adult Critical Care Nurses: Step 1 Available at www.cc3n.org.uk

These potential examples are not exhaustive and may not happen sequentially the responsibility is with individual units to determine an appropriate mix of cases.

Phase 1: Training and preparation 1x critical care nurse with 1 x '**A'** staff and or 1x '**B'** staff. + 1 healthcare staff per 4 patients (theatre HCA's can buddy with Critical Care HCA's to familiarise themselves with the environment and procedures)

Phase 2 (Double Capacity): 1x critical care nurse with 1-2 x '**A'** staff (2 patients)
+ 1 healthcare staff per 4 patients

Phase 3 (Treble Capacity): 1x critical care nurse with 2 x '**A'** staff, 1x '**B'** staff (4 patients)
At this phase consider the introduction of task orientated teams (Team of 4x 'C' staff) to assist with care activities, e.g. turning / washing / proning. This allows the experienced critical care staff to concentrate on the technical/clinical aspects of care delivery.

Phase 4 (Quadruple Capacity) 1x critical care nurse with 2 x '**A'** staff, 2x '**B'** staff (6 patients) + Team of 4x 'C' staff

NB: Skills and competence will develop with day to day supervised practice, using the Step 1 competencies to guide practice ensure a level of safety.

	Patients	Trained Critical Care Nurse	STAFF A	STAFF B	STAFF C
Phase 1 Training	1	1	1	1	
Phase 2 (Double Capacity)	2	1	1-2	1	
Phase 3 (Treble Capacity)	4	1	2	1	Team of 4
Phase 4 (Quadruple Capacity)	6	1	2	2	Team of 4

Other considerations

Geography and layout of the unit needs to be considered (i.e. siderooms) and may need non critical care nurses to work in pairs to provide support so they are not isolated in the first instance.

Each designated Critical Care Unit should provide a designated critical care trained Supernumerary Nurse-in-Charge of each shift for supervision, advice, support and coordination including the new or established cohorted critical care areas.

Accountability and Responsibilities

It is acknowledged that a period of pandemic such as COVID-19 will place pressures and challenges to providing safe, effective, quality care to the critically ill patient. Registered nurse's primary objective will still be to act in the best interest of both patients and the public professional guidance is available from NMC (Joint Statement)[2] and NHSE/I[5]

Staff Health and Well-being

It is important to be cognisant of the well-being of your staff both physically and mentally. Ensure all staff know the process in place if they are unwell.

Advice for sustaining staff well-being in critical care during and beyond COVID-19 can be found on the ICS website. [6]

Further Resources

Emergency Orientation to Critical Care & other educational resources: https://www.cc3n.org.uk/covid-19-resources--guidance.html

Resources for Nurses Redeployed to Critical Care - https://www.rcn.org.uk/covid-19

Other resources - https://www.baccn.org/

Acknowledgments

[5] Available at: www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/joint-nm-letter-12-march-2020.pdf Accessed 14/03/2020

[6] Available at: www.ics.ac.uk/ICS/Education/Wellbeing/ICS/Wellbeing.aspx?hkey=92348f51-a875-4d87-8ae4-245707878a5c Accessed 14/03/2020