Specialty guides for management during the coronavirus pandemic

Coronavirus: principles for increasing the nursing workforce in response to exceptional increased demand in adult critical care

25 March 2020 Version 1

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

A surge of coronavirus patients will require increased critical care bed capacity. Therefore, a review of staffing due to the need to increase bed capacity, potential staff absence and staff movement from other areas is necessary\(^1\). 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.

The principles and guidance in this guide will assist critical care staff to effectively deploy nursing staff to meet critical care capacity surge.

This document assumes elective activity has been stepped down in line with national surge processes, which will facilitate the time to complete the necessary training.

It aims to:

\(^1\) Available at: https://www.rcn.org.uk/clinical-topics/infection-prevention-and-control/novel-coronavirus/rcn-guidance-on-redeployment-covid-19 Accessed 22/03/2020
• 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
Currently critical care has a vacancy factor of almost 10% and normal business is maintained using bank and agency nurses. Opening additional beds in surge is therefore a challenge to staffing capacity.

Under business as usual, all nurses are required to complete Step 1 of the National Competency Framework for Registered Nurses in Adult Critical Care. Timeframe to completion is usually 12 months, with the supernumerary component taking a minimum of 6 weeks.

Potential groups of staff to provide critical care nursing
As the coronavirus pandemic is an unprecedented situation, we recognise that nursing competency work in critical care surge will need to be altered for the duration of the pandemic to preserve life using every available resource.

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:

• Nurses with recent/previous critical care experience or allied healthcare workers who possess some transferable skills.
  – anaesthetic, recovery, theatre staff, operating department practitioners (ODPs)
  – nurses in different roles who have recently left critical care (not critical care outreach (CCO), advanced critical care practitioners (ACCPs) or advanced care practitioners (ACP)s
  – nurses working in Level 1 areas (eg post-anaesthetic care units, etc)
• Registered nurses with no critical care skills
• Nursing support workers
  – critical care healthcare assistants
  – general ward healthcare assistants
  – theatre porters

2 Available at: www.nmc.org.uk/news/coronavirus/how-we-will-regulate Accessed 14/03/2020
- allied healthcare professionals (AHPs) working in critical care, eg physiotherapists
- healthcare professionals with no critical care skills, eg 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 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 versus the benefit of providing additional support to critical care surge. 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 whether they have level 3 experience.

**Nursing staff deployment**

A flexible pragmatic and staged approach with an emphasis on team-working rather than a ratio approach should be considered. Healthcare staff deployed to critical care surge areas will be required to work outside their normal practice area and this will cause anxiety for many, including the critical care nurses who will be supervising them. Any changes in working practice will need to be supported to ensure safe practice, safe patient care and staff wellbeing, appropriate supervision and delegation of care. Orientation to and support in the critical care environment are key. Skills will develop with day-to-day supervised practice, using the Step 1 competencies to guide practice and ensure a level of safety.

Training and consistency of the workforce is a key component. Non critical care nurses ideally should receive condensed critical care training appropriate to their role in preparation to work in the critical care setting. This training should be organised and delivered by critical care nurses/educators and other appropriately qualified healthcare professionals.

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

**Nurses/AHPs 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.  

**Registered nurses with no critical care skills (Category ‘B’)**
Training should be designed for non-critical care staff in critical care using Non-critical care staff in critical care - emergency induction document.

**Nursing support workers (Category ‘C’)***
Training and simulation to focus on team working for turning/washing/pronning.

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 multiprofessionals working in unfamiliar situations.

**Expanding the critical care nursing workforce**
Expanding the critical care nursing workforce should be undertaken in a phased response. These examples are not exhaustive and may not happen sequentially. Individual units are responsible for determining an appropriate mix of staffing that plays to the skill set of their staff.

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

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 HCAs can buddy with critical care HCAs to familiarise themselves with the environment and procedures)

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4 National Competency Framework for Adult Critical Care Nurses: Step 1 Available at www.cc3n.org.uk
5 Non –Critical Care Staff in Critical Care - Emergency Induction” www.cc3n.org.uk/covid-19-resources--guidance.html Accessed 22/03/2020
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, eg 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.**

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<thead>
<tr>
<th></th>
<th>Patients</th>
<th>Trained critical care nurse</th>
<th>Staff A</th>
<th>Staff B</th>
<th>Staff C</th>
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<tbody>
<tr>
<td>Phase 1 training</td>
<td>1</td>
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<tr>
<td>Phase 2 (double capacity)</td>
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<td>1-2</td>
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<tr>
<td>Phase 3 (treble capacity)</td>
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<td>1</td>
<td>2</td>
<td>1</td>
<td>Team of 4</td>
</tr>
<tr>
<td>Phase 4 (quadruple capacity)</td>
<td>6</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>Team of 4</td>
</tr>
</tbody>
</table>

Other considerations

Geography and layout of the unit need to be considered (ie side rooms) and may need non critical care nurses to work in pairs to provide adequate mutual support so they are not isolated in the first instance.

Each designated critical care unit (established and newly formed surge units) should provide a designated critical care trained nurse-in-charge for each shift. This nurse must be supernumerary for the effective provision of supervision, advice, support and co-ordination.

**Accountability and responsibilities**

It is acknowledged that a period of pandemic such as coronavirus will place pressures on and challenges to providing safe, effective, quality care to the critically ill patient. The NMC supports registered nurse in this unique challenge to work co-operatively with colleagues to keep people safe, to practise in line with the best available evidence, and to recognise and
work within the limits of their competence.(NMC (joint statement)) and NHS England and NHS Improvement.

**Staff health and wellbeing**

It is important to be aware of the wellbeing of your staff both physically and mentally. This pandemic will be physically and mentally challenging for all staff and it is vital that they feel supported and cared for throughout. Ensure all staff are aware of guidance to self-isolate and inform their management if they feel unwell. It is highly likely that staff will spend long periods wearing personal protective equipment (PPE) and it is therefore crucial that staff welfare focuses on regular breaks to remove PPE, rehydrate and eat.

Advice for sustaining staff well-being in critical care during and beyond coronavirus can be found on the ICS website.

**Further resources**

Emergency orientation to critical care and other educational resources: [www.cc3n.org.uk/covid-19-resources--guidance.html](http://www.cc3n.org.uk/covid-19-resources--guidance.html)

Resources for nurses redeployed to critical care: [www.rcn.org.uk/covid-19](http://www.rcn.org.uk/covid-19)

Other resources BACCN: [www.baccn.org/](http://www.baccn.org/)

**Acknowledgments**

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

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