

The Canadian Association of Critical Care Nurses



Position Statement

Models of Nursing Care in the Critical Care Unit

Background

Critical Care is a specialty that cares for patients who are experiencing, or are at high risk to develop, a life-threatening health crisis. The level of care required is variable. Most critical care units in Canada have mixed populations and age groups, with patients admitted for a range of general and/or specialized medical or surgical care. The complexity of care and patient acuity varies between units (e.g., academic referral centre versus community hospital), and within units throughout an individual patient's admission trajectory. This creates operational challenges for establishing nurse staffing needs based on fluctuating acuity levels.

CACCN Position

The CACCN believes it is essential that critical care units match the unique needs of each patient with a Registered Nurse (RN) who has completed additional education in critical care (Critical Care RN). The model of nursing care required to staff a critical care unit is dependent on three factors: the patient, the nurse, and the environment.

- The Patient: The medical stability and nursing care complexity of the patient's condition must be considered when determining appropriate staffing. Patients with advanced single system conditions, multisystem organ dysfunction or rapidly changing medical conditions are at imminent risk for negative clinical outcomes. Delirium frequently complicates the management of critically ill patients and changing practice standards (e.g., least restraint policy, early mobilization of patients receiving life-support) adds to the nursing demands. In addition to the nursing care requirements to support the patient's physiological needs, critically ill patients and their families often require extensive nursing support to cope with the risk for, or reality of, prolonged illness, reduced quality of life or death. Cultural considerations, language barriers and mental health issues can increase the nursing support requirements.
- The Nurse: An RN with specialty education in critical care is necessary for the care of all critically
 ill patients. The ability to think critically, anticipate and recognize subtle changes, and manage
 complex fluctuations in a deteriorating patient's status is paramount, and requires the advanced
 assessment skills and knowledge of pathophysiology and life-support interventions obtained
 through critical care education.

The Critical Care RN provides holistic and continuous 24-hour care and support to the patient and family. Expertise as a Critical Care RN develops over time with repeated experiences,

mentoring and ongoing education. The expertise among Critical Care RNs within any given unit usually ranges from beginners to experts. Individual Critical Care RNs may demonstrate different levels of expertise in different clinical situations. The Critical Care RN expertise must be considered when determining appropriate nurse: patient ratios.

Ongoing education is required to maintain best practices and competency in this rapidly changing specialty. This can be supported through Canadian Nursing Association (CNA) certification in critical care.

The Critical Care RN is the primary care provider for the critically ill patient and family; however, this role is supported and strengthened by the interprofessional collaboration with other healthcare providers. These other healthcare providers may include, social workers, physiotherapists, physicians (intensivists and other specialities), pharmacists, respiratory therapists, and other non-RN nursing roles, where and when appropriate.

The Environment: The critical care environment has a significant impact on the staffing of a critical care unit, and can be broken down into three elements: the critical care environment, the overall patient acuity and nursing skill, and the hospital environment:

- The physical layout of the unit, including visibility and access to the patients must be considered when determining safe staffing levels.
- The overall combined acuity of patients and the skill mix of all on-duty Critical Care RNs must be considered when determining staffing needs. A nurse: patient ratio of >1:1 is often required when patients are very unstable. If the percentage of unstable patients is high, a higher nurse: patient ratio may be needed for low acuity patients in order to mobilize additional nursing support. Nurse: patient ratios may need to be augmented if there is a high proportion of inexperienced nurses. As well, staffing ratios must be able to support the mentoring of new nurses and provide opportunities to develop experienced staff as they take on new skills (such as advanced technical or charge nurse skills).
- The hospital environment is often supported by the critical care team. Each hospital has specific policies and plans for code blue support. Rapid access teams (formal or informal) may be required to support unpredicted patient deterioration on general inpatient units. Staffing levels will need to support the activity of the code blue team and outreach team as they support the overall functioning of the hospital. Other factors that may need to be considered include the services available at each individual site (e.g. availability of 24-hour support services, such as pharmacy, respiratory therapy, etc.), and the possible need to transport patients off site for additional diagnostic tests or therapies, thereby requiring critical care RN escort of the critically ill patient.

In general, most critical care patients will require a ratio of one Critical Care RN to one patient, however there will be times when higher (2 Critical Care RNs to 1 patient) or lower (1 Critical Care RN to 2 patients) ratios are appropriate as long as the above 3 factors (the patient, the nurse and the environment) have been sufficiently and safely addressed. CACCN acknowledges that many critical care units are comprised of a variety of different levels of patients and staff, and therefore a standard staffing ratio is difficult to determine and should always be contextually based. Staffing models should be developed that can be flexed up or down as required in response to local unit variability in census and acuity.

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