Establishing Models of Care Delivery that Promote Safe and Appropriate Care

ARNBC Position:

- Nursing care delivery models¹ have a profound impact on both the safety and well-being of nurses, as well as the patients, residents, families and communities they care for.
- All regulated healthcare providers including Registered Nurses (RNs), Nurse Practitioners (NPs), Licensed Practical Nurses (LPNs), Registered Psychiatric Nurses (RPNs), and Unregulated Care Providers (UCPs) such as Health Care Aides (HCAs) have a role to play in improving the health of British Columbians by providing safe, ethical, and high quality patient care.
- There is no 'one size fits all' approach in determining a nursing care delivery model. Each care delivery unit is situated within its own unique context, and one model that is successful in one context may not be appropriate for another.
- Decisions around care delivery models are complex, and decision makers must be cognisant of the harmful effects that
 inappropriate staffing (skill mix and patient ratios) can have on work environments, nurses' ability to meet standards of
 practice, and patient outcomes.
- Care sensitive outcomes such as nosocomial infections, cardiac respiratory failure, pressure ulcers and 'failure to rescue'2 are at higher rates with fewer regulated nursing staff (CNA, 2004, Harris & McGillis Hall, 2012).
- Decisions regarding nursing care delivery models must be driven by "patient, provider and organizational factors", (Harris & McGillis Hall, 2012) and specifically:
 - The needs of clients, including their "complexity, predictability, acuity and stability", and not confined to cost (Canadian Nurses Association [CNA], 2010).
 - The "context, workload, and communication patterns" of the specific work site (Harris & McGillis Hall, 2012).
 - Nursing work processes and nurses' level of education and experience within the specific setting.
 - Availability of support by other healthcare providers (e.g.: allied health and physicians).
- "At no time should the safety of patients be compromised by substituting less qualified workers when the competencies of a registered nurse are required" (CNA, 2003).
- Nurses experience firsthand the impacts of care delivery models in their day-to-day work environment. Decision makers
 must incorporate nurses' concerns (both direct care nurses and nursing management) about their work environments into
 changes related to staff mix, as nurses' job satisfaction and well-being have significant impacts on patient satisfaction and
 outcomes (Hall et al., 2001).
- Senior management within all care settings must cultivate a culture of openness and trust, and ensure nurses are supported when issues around inappropriate staff mix ratios are raised.
- Decision making around staff mix must be rooted in evidence, rather than being driven by fiscal pressure, with appropriate measures in place for evaluation.



¹ A nursing care delivery model represents both the structural and contextual dimensions of nursing practice, and governs the way in which nurses organize and deliver nursing care (Fowler, Hardy & Howarth, 2006).

^{2 &}quot;Failure to rescue is the term used to identify situations where interventions have not happened in a timely fashion" (CNA, 2004).

Background:

Nursing care delivery models, specifically staff mix have consistently remained an important healthcare issue within British Columbia, and across Canada. Decreased funding within the healthcare sector has resulted in the need for healthcare restructuring since the early 1990s (CNA, 2004). In an effort to maintain efficiency, cost-effectiveness and quality patient care, roles among care providers have been redefined in order to maximize human resources (CNA, 2004). Seen as a "soft target", frequent changes have been made to nursing resources, as reducing nursing staff has resulted in cost savings relatively quickly (Aiken et al., 2014). In B.C., issues around staff mix have gained increased attention within the last few years, with the notable example of Island Health's integration of the Care Delivery Model Redesign (CDMR). Such a model has integrated team based nursing, where RNs, RPNs, LPNs and UCPs work in collaboration, with UCPs assuming a greater role in direct patient care delivery.

Issues in models of care delivery are multifaceted. With an increasingly large number of highly complex patients, combined with the financial constraints within the healthcare system, health authorities across the province continue to face significant pressures in providing high quality and safe patient care (Harris & McGillis Hall, 2012). As a solution, healthcare leaders and policy makers have been constantly redesigning nursing models of care, in order to utilize both regulated and unregulated healthcare providers to their full scope (CNA, 2012). However, ARNBC has heard many stories from nurses across B.C on how issues around inappropriate staff mix, unsafe patient-to-nurse ratios, and being "stretched too thin" has led to poor nursing and patient outcomes.

Historically, four traditional care models have been utilized in the provision of nursing care within in-patient settings (CNA, 2012). These include total patient care, functional or task oriented, team nursing, and primary nursing (Jennings, 2008). Functional or task oriented, as well as team nursing, fall under the category of a shared care model, where a mix of regulated nursing professionals including RNs, RPNs, LPNs, as well as UCPs are utilized (Jennings, 2008; Tran, Johnson, Fernandez & Jones, 2009). In contrast, primary nursing and total patient care fall under the category of a total patient allocation model, primarily focusing on the utilization of RNs to deliver nursing care (Jennings, 2008; Tran, Johnson, Fernandez & Jones, 2009).

All four models have advantages and disadvantages, and are used across care settings, with some being more effective depending on the context. Total patient care requires nurses, usually RNs, to assume full responsibility for their patients, and is favoured due to the consistency in high quality care provided by more qualified staff (Duffield, Roche, Diers, Catling-Paull, & Blay, 2010). However, criticisms of this model include lack of supervision to ensure work is completed, and reduced communication among staff (Tiedeman & Lookinland, 2004). Primary nursing, also renamed



as relationship-based care in some countries, has been frequently used in magnet hospitals, and involves assigning only one nurse to a patient for the duration of the patient's case (Duffield et al., 2010).

Functional or task oriented nursing divides tasks by matching complexity to skill level, with RNs taking on the more complex tasks (Duffield et al., 2010). However, fragmentation leads to a lack of continuity, accountability and holistic care, which have been the main criticisms of this model (Duffield et al.,2010; Harris & McGillis Hall, 2012). Last, team nursing involves a team of nurses that provide all care to a group of patients, with the RN team leader functioning more as a supervisor, completing more complex tasks than less trained providers (Duffield et al.,2010; Harris & McGillis Hall, 2012). Criticisms of this model include the heavy responsibility placed on the RN for constant supervision, as well as fragmentation (Tiedeman& Lookinland, 2004).

While numerous studies have shown the success of utilizing one model over another, outcomes such as quality of care, satisfaction and cost vary due to the different patient populations and settings within research studies (Tiedeman& Lookinland, 2004). Due to a plethora of factors that influence these outcomes, this suggests that findings from studies cannot be used to make generalizations, and decisions around staff mix must be heavily based on the context of the hospital's units and organization (CNA, 2012). Moreover, the variability in results may indicate that positive patient and nursing outcomes are significantly influenced by the ability of a unit to promote or preserve features such as communication among team members, continuity of care (Tiedeman& Lookinland, 2004), as well as a positive workplace culture (Francis, 2013). As a result, the decisions around adopting a specific care delivery model must place significant weight on the level of experience of nurses on a unit, how the staff mix will impact the culture of a unit, as well as the communication and interactions among team members (Harris & McGillis Hall, 2012), rather than solely basing the decision on what has worked in another care setting.

While the success of a care delivery model has been shown to be highly dependent on the context of a specific hospital unit, what remains consistent throughout the literature is that patient outcomes are sensitive to the type of nursing staff mix that is adopted (Harris & McGillis Hall, 2012). Specifically, care sensitive outcomes such as nosocomial infections, cardiac respiratory failure, pressure ulcers and 'failure to rescue' are at higher rates with fewer regulated nursing staff (CNA, 2004, Harris & McGillis Hall, 2012). Research has also shown decreased mortality rates with a higher proportion of bachelor degree prepared nurses (Aiken et al., 2014). Moreover, studies have indicated that while there are increased costs associated with more RN staff within the mix, these costs are offset by productivity gains and cost savings from other areas such as decreased length of stay and reduced rates of readmission (CNA, 2004; Aiken et al., 2014).



In general, trends in staff mix are moving towards increased teamwork and task shifting, with greater inclusion of UCPs within the workplace (Harris & McGillis Hall, 2012; CNA, 2004, CNA 2012). The impetus behind increasing the utilization of UCPs has been to free up RNs from carrying out tasks such as providing basic personal care. However, when not implemented properly, nurse-to-patient ratios are effected, and safe patient care may be compromised. Staff mix decisions have significant impact on nurses' job satisfaction and perceptions of quality patient care, stress levels, role conflict and ambiguity (McGillis Hall & Doran, 2001; O'Brien-Pallas, Murphy, Shamian, Li, & Hayes, 2010). There is also evidence that shows the alarming effects on patient care when decisions by management around care delivery models are made around financially driven care targets (Hayter, 2013), and the contributions this makes to a negative culture that erodes trust, accepts substandard care, and fails to put patients first (Francis, 2013). Further, decisions around care delivery models can negatively impact nurses' work satisfaction and well-being which contributes to increased illness and attrition rates among nursing staff and has significant implications on costs in the long run.

While nursing care delivery models ultimately impact nurses and patients, decisions around staff mix continue to be made without consultation with direct care nurses and nursing management, who experience the challenges of inappropriate staff mix decisions on a daily basis. Through ARNBC's engagement with nurses across B.C, nurses have proven that they have strong scientific and practical knowledge and are in the best position to inform decision making. The BC Nurses' Union has also done substantial work in studying, analyzing and making recommendations around the impact of care model changes, and has developed a number of tools, resources and campaigns designed to support nurses in making informed decisions.

With the complexity in decision making around nursing care delivery models, the use of frameworks can help guide work settings in implementing models that ensure efficiency and cost-effectiveness without undermining nurses' satisfaction and ability to meet practice standards and this can improve patient outcomes. In 2012, the CNA released a document entitled *Staff mix: Decision-making framework for quality nursing care.* Guided by a set of principles, this framework is an evidence-informed tool that decision makers at all levels can use to assess, plan, implement and evaluate staff mix. Utilizing such a framework can help health authorities across the province make decisions around staff mix by basing decisions around client needs, involving front-line nurses and nursing management, sustaining implementation with organizational and leadership components, and supporting decisions with information systems (CNA, 2012).



Conclusion

ARNBC recognizes the impact that inappropriate care delivery models can have on nurses' abilities to meet practice standards, and the resulting harmful consequences on patient outcomes. It is the goal of the association to ensure that safe patient care is the centre of all decision making around staff mix and care delivery models. Specifically, direct care nurses must be involved in the decision making process, and decisions must be based on evidence, with measures for evaluation after implementation. ARNBC is committed to working collaboratively with all stakeholders, including government and health authorities to ensure accountability and transparency for decisions that are made. We will continue to support BC RNs so that their work environments are conducive to safe patient care, and their well-being is not compromised when new models of care are introduced.

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