Staff Mix

Decision-making Framework for Quality Nursing Care

CANADIAN NURSES ASSOCIATION

CCPNR
Canadian Council for Practical Nurse Regulators

RPNC
Registered Psychiatric Nurses *of* Canada
providing leadership for the profession of psychiatric nursing

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Funded by the Government of Canada's Foreign Credential Recognition Program.

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March 2012

ISBN 978-1-55119-363-2

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Acknowledgments

The Canadian Nurses Association (CNA), the Canadian Council for Practical Nurse Regulators (CCPNR), and the Registered Psychiatric Nurses of Canada (RPNC) gratefully acknowledge the dedication, commitment and contributions of the members of the Staff Mix: Regulated Nurses and Unregulated Care Providers Working Group:

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Glossary

These definitions of key terms will help users understand and assess their staffing model with the *Staff Mix Decision-making Framework for Quality Nursing Care*. They may differ from those used by nursing regulatory bodies and professional associations, employers across sectors and practice settings, and individual care providers. Note that this is not an exhaustive list of all the terms that relate to staff mix.

Acuity: "The degree of severity of a client's condition and/or situation" (College of Registered Nurses of British Columbia [CRNBC], 2011, Acuity).

Competency: "The integrated knowledge, skills, judgment and attributes required of [a nurse] to practise safely and ethically in a designated role and setting" (Canadian Nurses Association [CNA], 2007, p. 26).

Complexity: "The degree to which a client's condition and/or situation is characterized or influenced by a range of variables (e.g., multiple medical diagnoses, impaired decision-making ability, challenging family dynamics)" (CRNBC, 2011).

Continuity of assignment: The assigning of a caregiver to the same client each time the care provider works.

Continuity of care: Consistent, coordinated care provided to the client at the point of care and provided at the organization and system levels over the entire care process.

Continuity of care provider: The assigning of a client to the same care provider each time the client accesses the health-care system.

Dependency: The level of assistance required by a client to accomplish activities of daily living.

Evidence: "Information acquired through research and the scientific evaluation of practice.... Evidence also includes expert opinion in the form of consensus documents, commission reports, regulations and historical or experiential information" (CNA, 2010, p. 1).

Nurse: A care provider who is registered or licensed by a nursing regulatory body; includes registered nurses (RN), nurse practitioners (NP), licensed/registered practical nurses (LPN) and registered psychiatric nurses (RPN).

Nursing care delivery model: A system for organizing and delivering nursing care to clients and their families. It represents both the structural and contextual elements of nursing practice (Fowler, Hardy, & Howarth, 2006).

Patient safety incident: "Event or circumstance that could have resulted, or did result, in unnecessary harm to a patient" (World Health Organization, 2009, p. 15).

Predictability: Degree to which outcomes can "reasonably be expected to follow an anticipated path with respect to timing and nature" (College of Nurses of Ontario, 2009, p. 17).

Scope of employment: Activities that unregulated care providers are educated to perform, as set out in employer-defined roles and responsibilities.

Scope of practice: "Activities that [nurses] are educated and authorized to perform as set out in legislation and complemented by standards, guidelines and policy positions of provincial and territorial nursing regulatory bodies" (CNA, 2007, p. 13).

Stability: The degree to which a "client's health status can be anticipated and the plan of care readily established" and the degree to which it is "managed with interventions that have predictable outcomes" (CRNBC, 2011).

Staff mix: The combination of different categories of health-care personnel employed for the provision of direct client care (McGillis Hall, 2004) in the context of a nursing care delivery model.

Staff mix decision-making: The act of determining the mix of the different categories of health-care personnel employed for the provision of direct client care.

Unregulated care provider: Paid health-care providers who are not registered with a regulatory body. They have no legally defined scope of practice, may or may not have a mandatory education requirement and do not have established standards of practice (College of Registered Nurses of Manitoba, 2010). They "provide care that supports the client under the...[direct or indirect] supervision of a regulated nurse" (College and Association of Registered Nurses of Alberta, College of Licensed Practical Nurses of Alberta & College of Registered Psychiatric Nurses of Alberta, 2010, p. 2) "and are accountable for their individual actions and decisions" (College of Registered Nurses of Nova Scotia, 2004, p. 10).

Variability: "The degree to which a client's condition or situation changes or is likely to change. Considerations include predictability, stability and patterns of change" (CRNBC, 2011).

Introduction

Health-care providers and organizations strive to deliver safe, competent, ethical, quality, evidence-informed care, which includes meeting their clients' needs across the continuum of care and bringing about positive health outcomes for them. Researchers and decision-makers have long recognized the role of nurse staffing in the delivery of safe and competent client care, and many individuals and organizations are actively re-evaluating and re-designing staff mix to optimize the use of health human resources so as to respond to the changing health-care context. Determining a suitable mix of staff education, competencies and experience in order to optimize client, staff and organizational outcomes continues to be a complex and challenging process.

Staff mix is a component of nursing care delivery models that currently includes a greater emphasis on teamwork and collaboration. Current research has extended the field of knowledge regarding nursing care delivery models. It provides evidence of the need to capture data on other aspects of care, such as the extent to which coordination of care, communication and continuity exist, in studies linking nurse staffing to client outcomes. Evidence supports the contention that a variety of elements — including client, staff and organizational factors — should guide staff mix decision-making.[1]

The *Staff Mix Decision-making Framework for Quality Nursing Care* is a comprehensive and evidence-informed resource presenting a systematic approach to staff mix decision-making that can be used in all clinical practice settings. Decisions concerning staff mix must reflect nurses' scope of practice and unregulated care providers' (UCP) scope of employment and must conform to legislation, professional standards and organizational policies. Administrators and researchers are encouraged to use outcome measurement data in a rigorous manner to inform decision-making regarding safe and effective staffing practices.

Health-care teams often comprise numerous providers; however, the aim of this framework is to support evidence-informed decisions when the staff mix for the specific practice setting is composed of various categories of nurses working together and/or various categories of nurses working in conjunction with UCPs. The framework also supports decisions regarding staff mix in which nurses may belong to the same category but possess differing levels of education and experience.

Nurses and UCPs work together to optimize their clients' health outcomes. Collegiality, trust and mutual respect are vital components of all staff mix configurations and help to foster healthy work environments, which influence client, staff and organizational outcomes.

[1] For a summary and discussion of research on the topic of staff mix decision-making, see: *Evidence to Inform Staff Mix Decision-making: A Focused Literature Review*, (Harris & McGillis Hall, 2012); *Client Centred Care*, (Registered Nurses' Association of Ontario [RNAO], 2002); *Developing and Sustaining Effective Staffing and Workload Practices*, (RNAO, 2007); *Collaborative Practice Among Nursing Teams*, (RNAO, 2006).

Background

In February 2010, the Canadian Nurses Association (CNA) established the Staff Mix: Regulated Nurses and Unregulated Care Providers Working Group. The pan-Canadian group comprised registered nurses (RN), licensed practical nurses (LPN),[2] registered psychiatric nurses (RPN),[3] UCPs and a research consultant. The names and primary affiliations of the working group members are listed in the Acknowledgments.

The working group was asked to review and update the *Evaluation Framework to Determine the Impact of Nursing Staff Mix Decisions* (CNA, Canadian Practical Nurses Association, Canadian Council for Practical Nurse Regulators & Registered Psychiatric Nurses of Canada, 2005). To support this project, CNA hosted in-person and teleconference meetings of the working group. In addition to drawing on their own knowledge and experience, working group members:

1. consulted a literature review of evidence related to staff mix decision-making (Harris & McGillis Hall, 2012);
2. undertook an extensive consultation process (CNA, 2012a) composed of the following components:
   - pan-Canadian surveys and focus groups involving nurses and UCPs,
   - expert small-group discussions held at the invitational round table on nursing care delivery models and staff mix (CNA, 2011), and
   - commentary and advice from the members of the CNA task force on evidence-informed nursing care delivery models across the continuum of care (CNA, 2011); and
3. drew on the results of a pan-Canadian Delphi survey for the purpose of achieving consensus on principles to guide decision-making about nursing care delivery models, including the determination of optimal staff mix (see Appendix 1).

This document is the culmination of the above research and activities. It is expected that the framework will continue to evolve as a result of further research, as well as feedback from those who use it to make staff mix decisions.

[2] Licensed practical nurse or LPN is a term used in most of Canada. This category is called registered practical nurse in Ontario and infirmier auxiliaire/infirmière auxiliaire in Quebec. LPN as used in this paper includes these two categories.

[3] Registered psychiatric nurses are registered to practise only in the following jurisdictions: Alberta, British Columbia, Manitoba, Saskatchewan and the Yukon.

Guiding Principles

The five guiding principles for staff mix decision-making below incorporate the main elements of the 10 guiding principles of nursing care delivery models outlined in Appendix 1. Note that the 10 principles are central to staff mix because staff mix decision-making is both informed by and integral to nursing care delivery models.

- Decisions concerning staff mix respond to clients' health-care needs and enable the delivery of safe, competent, ethical, quality, evidence-informed care in the context of professional standards and staff competencies.
- Decision-making regarding staff mix is guided by nursing care delivery models based on the best evidence related to (1) client, staff and organizational factors influencing quality care and work environments, and (2) client, staff and organizational outcomes.
- Staff mix decision-making is supported by the organizational structure, mission and vision and by all levels of leadership in the organization.
- Direct care nursing staff and nursing management are engaged in decision-making about the staff mix.
- Information and knowledge management systems support effective staff mix decision-making.

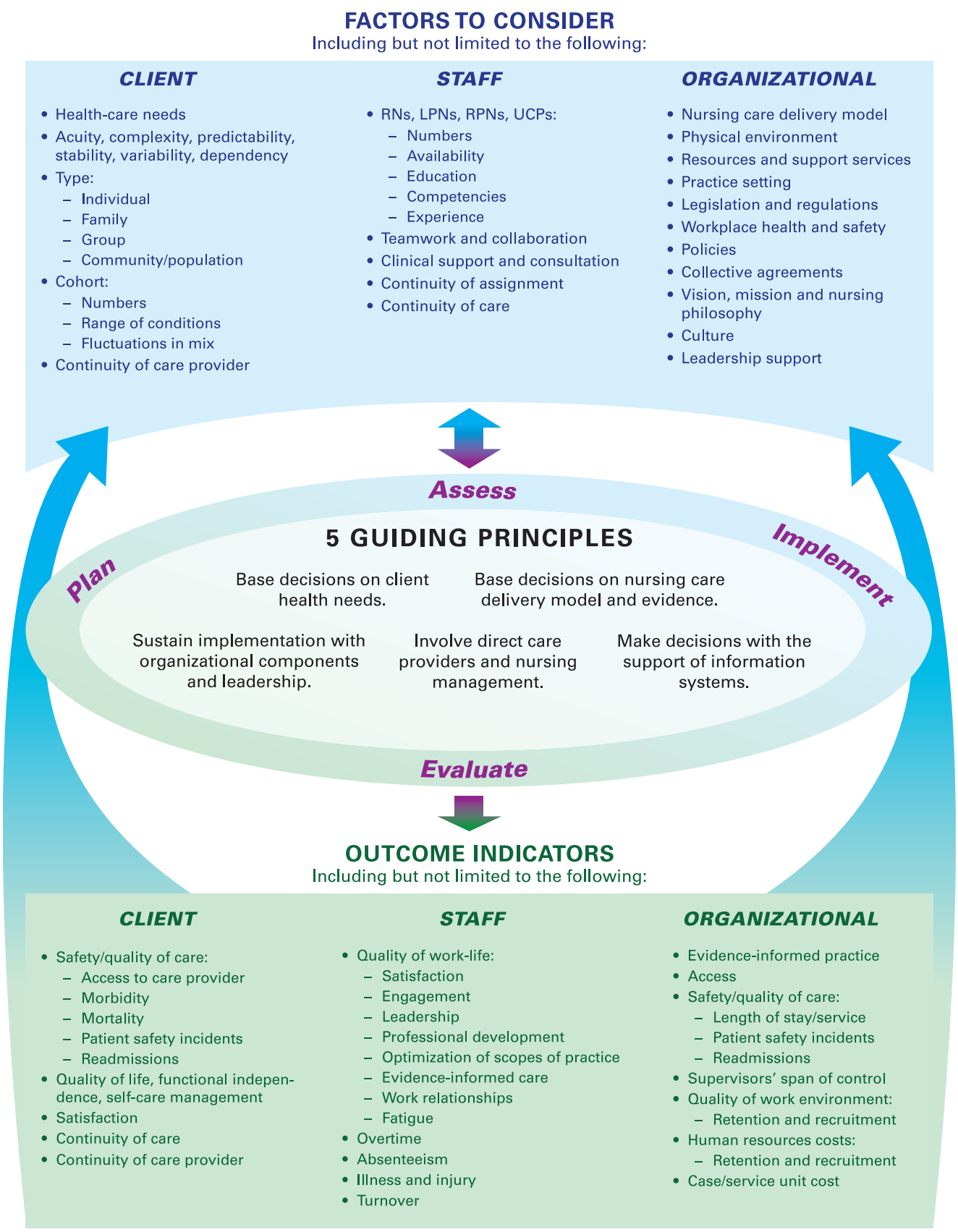
Staff Mix Decision-making Framework

This framework is intended to guide decision-making about staff mix through four phases: assessment, planning, implementation and evaluation. Staff mix decision-making is an ongoing process, and the evaluation of outcomes will continually provide new insights and, possibly, the need for adjustments.

The framework outlines key client factors, staff factors, organizational factors and outcome indicators to be considered when assessing, planning, implementing and evaluating staff mix decisions. The list of factors and outcomes is not exhaustive, and not every practice setting will include all types of care providers that are identified.

The framework is useful for a variety of stakeholders, including nurse managers, direct care staff and others involved in making staff mix decisions. The framework is also informative for nurse executives, health-system executives and policy-makers, and may serve as a resource for a broad range of education and staff development initiatives.

Staff Mix Decision-making Framework



Applying the Framework

This framework is designed to be flexible. It is based on the five guiding principles stated above and is intended to guide decision-making in all clinical practice settings across the continuum of care. In addition, it presents a process for making staffing decisions on a day-to-day basis and over the long term. Users are encouraged to assess their staffing models and apply the framework to their specific jurisdiction, sector and practice setting and within the context of the nursing care delivery model used in that setting. This framework is also meant to be used in conjunction with legislation, regulations, standards and guidelines, which have been published in many jurisdictions.

To begin making staff mix decisions, users should first review the organization's nursing care delivery model, and then use the five guiding principles of this framework to assess, plan, implement and evaluate staff mix decisions within the context of the organization's nursing care delivery model.

The following sections present questions that will assist in carrying out staff mix decision-making in each phase of the process. Users are encouraged to develop additional questions specific to their practice setting.

Assessment

Assess baseline client, staff and organizational factors and outcomes.

1. Has a full assessment of each of the client, staff and organizational factors and outcomes been carried out in order to determine the need for staff mix decisions and the nature of any such decisions made?
2. Are client health-care needs (e.g., acuity, complexity, stability, variability and number) informing staff mix decisions?
3. Have the relevant legislative requirements (e.g., workers' compensation, hospital act, workplace health and safety) been considered?
4. Have the relevant regulatory requirements (e.g., professional regulations, professional standards of practice) been considered?
5. Have relevant human resources (e.g., collective agreements, staff availability) been considered?
6. Have organizational policies concerning interdisciplinary teams been considered?
7. Have nursing management and direct care staff been involved in staff mix decisions?
8. Are there sufficient resources (e.g., time, administrative/technical support) to assess, plan, implement and evaluate staff mix decisions?
9. Are the respective roles and responsibilities of nurses and UCPs clearly articulated in organizational policies and role descriptions?
10. Do those policies and role descriptions enable nurses to work to their full scope of practice/competencies and UCPs to work to their full scope of employment?
11. Is there a process for developing and/or identifying and incorporating evidence to inform staff mix decision-making?

12. Do staff mix decisions take into consideration continuity of assignment, continuity of care and continuity of care provider?

13. Are processes in place for an evaluation that will provide baseline data for client, staff and organizational factors and outcome indicators?

14. Are tools readily accessible to measure nurse, client and organizational indicators related to staff mix decision-making?

15. Is there an existing assessment of client, staff and organizational factors and outcomes that can be used to measure the effectiveness of staff mix decisions?

16. Have organizational structures and processes that are based on an environmental assessment been considered?

Planning

Plan your staff mix, taking into consideration your assessment of client, staff and organizational factors and outcomes.

1. Do the staff mix decisions support desired client, staff and organizational outcomes as depicted in the framework illustration?

2. Are direct care staff and management involved in staff mix decision-making?

3. Is there a plan in place that is consistent with the nature of the proposed staff mix change?

4. Do the data obtained from the assessment phase support the staff mix decision-making plan?

5. Is the planning process for making staff mix decisions evidence-informed, open, transparent and accountable?

6. Have workload, productivity, availability, number and employment status (full time, part time, casual) been considered in the staff mix?

7. Has a change management strategy been incorporated to support the implementation of the staff mix decisions?

8. Is there broad leadership support for the staff mix decision-making process?

9. Does a policy exist that provides for staffing contingency plans that anticipate crises and enable the management of required alterations in staffing?

10. Is a work plan (containing, for example, milestones, communication strategy, timeline) in place to support the staff mix decision-making process?

11. Are the competencies and experience of nursing staff (as individuals and as a group) being taken into account in the staff mix decision-making process?

12. Are relevant stakeholders involved in staff mix planning discussions?

Implementation

Implement your staff mix plan.

1. Is there a pilot implementation stage to test the impact of your staff mix plan on client, staff and organizational outcome indicators?
2. Is a change management strategy being used to support a smooth transition to the new staff mix plan?
3. Are the client, staff and organizational factors and outcome indicators of the framework being considered throughout the implementation process?
4. Are there opportunities for discussion, feedback and alterations, as necessary, throughout the implementation process?
5. Do the decisions made about the staff mix allow flexibility in response to client acuity, complexity, stability, variability and number?
6. Do staff members have ongoing input into staff mix decisions?

Evaluation

Evaluate your staff mix plan with respect to relevant client, staff and organizational outcomes. Use this information to refine your staff mix plan.

1. Has the staff mix plan been implemented as expected?
2. Are the outcomes of staff mix decisions from client, staff and organizational perspectives being monitored using the best available measures on a regular basis according to the plan?
3. Is the evaluation of the impacts of the staff mix changes being compared with baseline data?
4. Were direct care staff members involved in the process of planning and implementing the staff mix decisions?
5. Do direct care staff members have ongoing input into the evaluation of the staff mix decision-making process and outcomes?
6. Are relevant stakeholders involved in evaluating the staff mix decision-making process and outcomes?
7. Have the targets, milestones and timeline been met? If not, what resources/strategies are available to support efforts to meet them?
8. Are the results from the ongoing evaluation of client, staff and organizational outcomes used to continuously improve staff mix decisions?
9. Is the team regularly using this staff mix framework?

Conclusion

Staff mix decision-making is a complex and systematic process developed according to guiding principles and carried out after a careful assessment of client, staff and organizational factors and evaluation of client, staff and organizational outcomes. The *Staff Mix Decision-making Framework for Quality Nursing Care* incorporates key client, staff and organizational factors and outcome indicators that, when addressed within the context of current evidence and nursing care delivery models, contribute to effective staff mix decision-making. The ultimate goal of the framework is to achieve positive outcomes for clients, staff and organizations.

Appendix 1: Guiding Principles for Nursing Care Delivery Models

In 2011, CNA led a project designed to achieve consensus on a list of principles to guide policy-makers and managers in decision-making about nursing care delivery models, including the determination of staff mix. This process (CNA, 2012b) involved more than 2,200 nurse respondents across Canada and resulted in high levels of agreement on the following ***10 principles***:

- Responding to the health-care needs of clients, families and communities is integral to the nursing care delivery model.
- Staff competencies (knowledge, skills, abilities, attitudes) are a part of the nursing care delivery model.
- The nursing care delivery model reflects an organization's client population, best practices, professional standards and research evidence.
- Front-line nursing staff and nursing management are engaged in decision-making about the nursing care delivery model.
- The nursing care delivery model promotes quality and safe care, which is cost-effective and sustains the system.
- Systematically-collected data about client outcomes and nursing human resources inform decisions about the nursing care delivery model.
- A formal plan for the nursing care delivery model, including communication and educational strategies, considers client and staff needs as well as the organizational mission.
- Organizational structure and leadership across all levels support the nursing care delivery model.
- Staff mix based on client care needs is a component of the nursing care delivery model.
- Technology is a required component for implementing the nursing care delivery model.

The nursing care delivery model informs staff mix decision-making. Therefore, the majority of these principles have been incorporated into the five guiding principles presented in the *Staff Mix Decision-making Framework for Quality Nursing Care*.

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