Theoretical Rationale and Research Evidence for a Canadian Nurse Residency Program

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Executive Summary

- The theoretical rationale for a proposed Canadian competency-based nurse residency program, and the research evidence supporting their value in the United States, is presented.

- The delivery model for the proposed program is a partnership between the Canadian Association of Schools of Nursing (CASN) and hospitals who wish to use it for the new graduates they hire (S*ee the program description, From Advanced Beginner to Competent RN, of the proposed nurse residency program*).

- The proposed program can be delivered in both French and English.

- Although developed for new baccalaureate nursing graduates, it can be easily adapted for licensed practical nurses.

- The hospital sector was chosen for a nurse residency program because it is where the majority of RNs are first hired.

- The Dreyfus and Dreyfus model of skill acquisition, adopted by Patricia Benner, indicates that the new health professional requires full-time, guided/supervised practice over a sufficient time period (six to 12 months) to become a competent practitioner.

- Boychuk Duchscher's research on transitioning into the nursing workforce demonstrates that new nursing graduates experience high levels of stress for at least six months, and up to a year

- Multiple studies have linked retention issues to transition stress experienced by new graduates.

- Focus groups with staff nurses, nurse managers, and new graduates conducted in English and French across Canada in 2017 identified significant learning gaps among new registered nurses despite a strong knowledge base, good procedural skills, and a well-developed social justice orientation.

- Learning gaps identified include the following: insufficient clinical reasoning and critical thinking skills; inability to prioritize as situations evolve; inability to detect signs of deterioration; inability to take history and context into account when assessing patients; too focused on carrying out tasks while serious clinical situations evolve that need their attention; and difficulties collaborating with the interprofessional team.

- In 2010, the Institute of Medicine (IOM) in the United States specifically recommended nurse residency programs be implemented across all care settings.

- The Commission on Collegiate Education (CCNE) in the United States, which accredits nurse residency programs, states that their purpose is to build on the learning graduates acquire in pre-licensure education to promote successful role transition and competency integration.

- Nurse residency programs have proliferated in the USA and are expanding in hospitals in Australia.

- Hospitals in the United States adopt nurse residency programs to ensure that the new graduate nurses they hire provide safe and effective care in the 21st century complex acute care environment.

- There have also been economic drivers: Nurse turnover costs outweigh nurse residency program costs in the USA. In addition, they offer a recruitment advantage.

- Research in the USA provides strong support. Studies have found that nurse residency programs are associated with higher rates of <u>new-nurse retention</u>, <u>cost savings</u>, <u>organizational commitment</u>, <u>improved patient safety</u>, and <u>decreased stress</u> among new nurses.

- A large study with an experimental design conducted over a six-year period in the United States by the National Council of State Boards of Nursing (NCSBN) reported that new nurses who

completed a nurse residency program of any kind are <u>safer,</u> <u>more competent</u>, and <u>more well-adjusted</u> than those who do not.

- Best practices identified in this study include an orientation to the organization, institutional support of the program, trained preceptors, feedback and reflection on the resident's progress, as well as an educational curriculum on communication and teamwork, patient safety, and clinical reasoning. Each of these have been incorporated in the proposed CASN residency program.
- To summarize: Canadian research indicates that there is a significant need for a nurse residency program to support the successful transition of new nursing graduates into the health care workforce. Studies in the USA demonstrate that nurses who have completed a residency programs are safer and more competent than those who have not. They also demonstrate financial and recruitment advantages to implementing a nurse residency program.

Theoretical Rationale and Research Evidence for a Canadian Nurse Residency Program

The purpose of this document is to outline the theoretical rationale for a competency-based nurse residency program, discuss the value of these programs for the health care institutions that have adopted them in the United States, and provide research-based evidence supporting their adoption. The rationale and evidence for proposing this initiative is presented, and the goals and objectives for the residency program are identified.

About the Nurse Residency Program

The delivery model for the proposed Canadian nurse residency program is a partnership between the Canadian Association of Schools of Nursing (CASN) and hospitals who wish to use it for the new graduates they hire. A detailed description of the nurse residency program is provided in the document titled, *From Advanced Beginner to Competent RN.*

The program has been developed in both French and English and can be delivered in either language. While it was developed for new baccalaureate nursing graduates, it can be easily adapted and piloted with licensed practical nurses as well. The hospital sector was chosen as a starting point for a nurse residency program because it is where the majority of registered nurses begin their professional career. The program could be adapted to other sectors with some modifications if there is a demand for it.

Theoretical Rationale

The Dreyfus and Dreyfus model of skill acquisition provides a theoretical explanation of how professionals develop the abilities they need to become competent practitioners. It has been used extensively to guide the clinical education of nurses, pharmacists, and physicians (Benner, 2004). The model provides a range of competency levels from *novice, advanced beginner, competence, proficient, and expert/master*. Although the essential base of health professional expertise is a solid repertoire of relevant knowledge and skills (Miller, 1990), the Dreyfus and Dreyfus model demonstrates that the trajectory of practice competence from the novice to the expert is driven by accumulating clinical experience (Benner, 2004). While the health professional must possess a solid base of scientific knowledge and procedural skills, clinical experience derived from full-time, guided/supervised practice over a sufficient time-period is necessary for professional competence.

For over a century, nursing education in Canada was provided by hospital training schools, based on an apprenticeship model of learning. Students spent a great deal of time in clinical settings where they were able to progressively integrate knowledge and skills in real-life experiences with hospital patients. Thus, on entering the nursing workforce they had already acquired the guided/supervised full-time clinical experience needed to "hit the ground running" with no difficulty at all. However, the knowledge base and procedural skills they required were far narrower and far less complex than is the case today. Patient acuity, clinical reasoning skills, professional autonomy, and interprofessional collaboration have all increased exponentially. As a result, even though baccalaureate programs are longer than hospital training programs, a great deal more curricular time must be allocated to classroom and simulation-based learning to equip students with the knowledge and skills they will need for safe practice, and far less time is now available for the clinical experience required for competent practice.

Although decades have passed since the last hospital training school closed, expectations that a new graduate will perform at a *competence* level lingers on. Schools of nursing and nursing regulators target the *advanced beginner* level for graduates entering the workforce, which is the level that is typical in other health professions. Patricia Benner's (1984) groundbreaking research, based on the Dreyfus and Dreyfus model, demonstrates that nursing performance at the *advanced beginner level* is only marginally acceptable. At this level, the health professional turns to rules and protocols to determine what actions to take but this is not sufficient for competent care. As a result, as Judy Boychuk Duchscher's studies on transitioning into the workforce demonstrates, new nursing graduates typically experience significantly high levels of stress for at least six months, and up to a year, and often feel totally overwhelmed by the demands of their role (Boychuk Duchscher & Windey, 2018). They experience a critical need for guidance and support because of the multiple uncertainties they face and because of the very serious consequences errors can have on their patients (Boychuk Duchscher & Windey, 2018). It is interesting to note that the Boychuk Duchscher transition studies were conducted in Canada but have been used extensively to provide the theoretical underpinnings of nurse residency programs in the USA and in Australia. Studies in all three countries have linked difficulties in managing the transition stress experienced by new graduates to retention issues (Hansen, 2018).

Residency programs are one among a number of new graduate transition to practice programs. In 2010, the Institute of Medicine (IOM) in the United States, specifically recommended this type of program to address transition issues, advising their implementation across all care settings. They have proliferated in the USA although primarily in the acute care sector (Hansen, 2018). Nurse residency programs have also been expanding in hospitals in Australia.

Despite variations in residency program models, commonalities exist. The Commission on Collegiate Education (CCNE) in the United States, which accredits nurse residency programs, state that the purpose of such programs is to build on the learning graduates acquire in pre-licensure education to promote successful role transition and competency integration. Thus, they are competency-based programs. CCNE defines a nurse residency program as a "series of learning experiences that occur continuously . . . through a collaborative partnership between a healthcare organization and one or more academic nursing programs" (American Association of Colleges of Nursing, 2015, p.5).

Economic and Recruitment Value

Although hospitals in the USA adopt nurse residency programs to ensure that the new graduate nurses they hire "provide safe and effective care in the 21st century acute care environment" (Hansen, 2018, p.2), there has also been a financial driver. Nurse turnover costs outweigh nurse residency program costs in the USA (Hansen, 2018), an important consideration in a country where health care is a for-profit industry.

Another driver has been the recruitment advantage nurse residency programs provide in areas of the country where there are nursing shortages (Hansen, 2018). Regarding this last point, it is worth noting recent warnings from the International Council of Nurses (2021) of an impending international nursing shortage due to the COVID-19 pandemic. Should this occur, it is not inconceivable that American hospitals with a nurse residency program will use it to attract new graduates from other countries such as Canada.

Research Evidence

Research in the USA has provided strong support for nurse residency programs. Studies have found that they are associated with higher rates of new nurse retention, cost savings, organizational commitment, improved patient safety, and decreased stress among new nurses (Meyer Bratt, 2013). A large study conducted over a six-year period by the National Council of State Boards of Nursing (NCSBN) in the United States was the first to use an experimental design with a control and an experimental group (Spector et al., 2015). It found that new nurses who completed a nurse residency program of any kind are safer, more competent, and more well-adjusted than those who do not. Best practices identified in this study include: an orientation to the health care organization, institutional support of the program, trained preceptors, opportunities for feedback and reflection on the resident's progress, as well as an educational curriculum during the residency that includes topics such as communication and teamwork, patient safety, and clinical reasoning. Each of these elements have been incorporated in the proposed CASN residency program.

While Canada has not developed residency programs, an environmental scan supports the need for this. CASN conducted focus groups across the country in 2017, in both French and English to identify perceived learning gaps and strengths of new nursing graduates in acute care hospitals (CASN, 2018). The findings offer important insights regarding the clinical learning needs of new Canadian nurses. The focus group participants included a mix of experienced staff nurses, nurse managers, and recent graduates employed in care settings. Learning gaps identified by every group included insufficient clinical reasoning and critical thinking skills, inability to prioritize as situations evolve, inability to detect signs of deterioration, and inability to take history and context into account when assessing patients. In addition, every group stated that new nursing graduates are too focused on carrying out tasks at the cost of responding to evolving clinical situations that need attention. The ability to collaborate effectively with licensed practical nurses and with other members of the health care team was also identified as problematic across focus groups. Strengths that were consistently identified included good physical assessment skills, a strong nursing knowledge base in general, a good understanding of pathophysiology, respect for diversity, and finally, a well-developed social justice orientation.

Given the research evidence supporting the improvement in the quality of health care delivered by hospitals implementing nurse residency programs and the economic value of nurse residency programs in the United States as well as the recruitment advantage they provide, we believe that there is an urgent need for a national residency program in Canada. We also believe that the impact of the pandemic on clinical courses has compounded this need.

Program Goal, Objectives, Outcomes

The purpose of the proposed nurse residency program is to provide graduates with the guided, preceptored real-life experiences, and the workshop support they need, to transition successfully into the workforce, and to evolve from an advanced beginner to a competent practitioner. The overall objectives of the residency program are for new graduates in care settings to:

1) Experience a successful transition into the registered nurse's role

2) Use the knowledge, skills, and attitudes developed in their pre-licensure education, to respond competently, compassionately, and ethically to multiple, evolving clinical situations in a high acuity care environment.

The learning outcome for the residents on completing the residency program is the integration of a set of predetermined competencies. Competencies are defined as a complex know-act based on combining and mobilizing internal resources (knowledge, skills, and attitudes) and external resources in order to respond appropriately to specific types of clinical situations (Tardiff, 2006). The competencies address the following four key roles of the registered nurse: Evidence-informed Knowledge Worker, Clinician, Communicator and Collaborator, and Health Professional Change Agent (CASN, 2018).

The progressive integration of the competencies can be measured by assessing indicators of the competencies. These are the assessable and observable manifestations of the critical learnings (knowledge, skills, attitudes) that are needed to develop the competencies (Tardif, 2006). Indicators provide the learning to be achieved for each competency at three months (midway) and then at the end of the residency at six months. An evaluation rubric measuring the competency indicators at three months that preceptors may use and another measuring the indicators of the competencies at six months are part of the curriculum framework. The competencies and indicators are provided in the document titled *Competency Framework for the Registered Nurse Residency Program*.

Summary

Research in Canada demonstrates a significant need for a nurse residency program to support the successful transition of new nursing graduates into the health care workforce. While they have mastered the knowledge needed in practice, and possess many of the skills, a progressive workload, guided/supervised practice, and workshop support are essential for at least six months and up to a year. Without such support, many experience high levels of stress jeopardizing retention, and there is an increased risk to patient safety. Studies in the USA demonstrate that nurses who have completed a residency programs are safer and more competent than those who have not. They also demonstrate financial and recruitment advantages to implementing a nurse residency program.

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