Nurse Residency Programs in Canada: A National Needs Assessment

Bezawit Alamerew
Thompson Rivers University, bezaalamerew1@gmail.com

Judy Boychuk Duchscher
judy.duchscher@me.com

Catherine Ringham
Thompson Rivers University, cringham@tru.ca

Newly graduated registered nurses (NGRNs) are eager to put their theoretical knowledge into practice, but they face numerous challenges in transitioning to their initial professional setting (Hofler & Thomas, 2016; Masso et al., 2022; Woo & Newman, 2019). These challenges include differences between nursing education and clinical practice, high workloads, navigation of interpersonal and professional relationships, and a novice level of nursing competency and skills (Chen et al., 2021). Additionally, issues related to competencies needed to provide safe patient care have been noted by NGRNs and nurse managers (Letourneau & Fater, 2015). The health care system in Canada has also struggled with increasing patient acuity and numbers, further obstructing the flow of patients. Moreover, the COVID-19 pandemic has exacerbated these challenges by disrupting nursing education and practice.

The transition from student to practising nurse is influenced by intrinsic, interpersonal, and organizational factors. Intrinsic factors include mental health and resilience, while interpersonal factors involve working relationships with colleagues (Masso et al., 2022). Organizational factors encompass the formal support provided by employers and the overall organizational environment (Masso et al., 2022). Organizational support, including mentorship and feedback from senior nurses, is crucial for the NGRNs' growth and development (Doughty et al., 2021; Masso et al., 2022; Perron et al., 2019; Regan et al., 2017; Rush et al., 2019). Nurse residency programs have been shown to mitigate some of these challenges and enhance retention rates and professional commitment among NGRNs (Doughty et al., 2021; Perron et al., 2019; Regan et al., 2017; Rush et al., 2019). These programs typically last between 6 and 12 months and include classes, lab skills scenarios, and supervised clinical concept application (Letourneau & Fater, 2015; O'Conner, 2018; Rush et al., 2019).

In Canada, the Canadian Association of Schools of Nursing (CASN, 2022a) has proposed implementing a 6-month national nurse residency program (NNRP) to help standardize the support approaches for NGRNs transitioning into clinical practice in acute care settings. This program aims to provide structured support for NGRNs by pairing them with experienced nurse preceptor-mentors employed by partner hospitals. The goal of the NNRP is to address the challenges NGRNs face and improve their readiness for professional practice. To better understand the perspectives of clinical leaders, we conducted a needs assessment to examine current practices in Canadian hospitals related to NGRN transition and assess the willingness of NGRN employers to participate in such a program, while also identifying potential barriers to its successful implementation.

Literature Review

Transition to Practice in Nursing

The process of NGRNs transitioning into professional practice has been extensively examined. Initially introduced by Kramer (1974), the concept of "reality shock" describes the shock-like responses NGRNs experience when they realize they are unprepared for the work environment they spent years preparing for. Kramer identified four phases in this transition: the honeymoon phase, in which positive aspects are selectively identified; the shock or rejection phase, in which conflict between school practices and clinical expectations leads to self-doubt and hostility; the recovery phase, in which NGRNs adjust and acquire competencies; and the resolution phase. Duchscher (2009, 2012) expanded on this with "transition shock," emphasizing the disconnect between the student role and clinical practice. This concept is embedded in the stages of transition: doing, being, and knowing. *Doing* involves initial excitement followed by doubt; *being* sees skill advancement and comfort, and then a reemergence of doubt; and *knowing* marks

NGRNs becoming professionals but facing work–life balance concerns. Progression through these stages is non-linear, with periods of regression and advancement influenced by support, workplace violence, and performance expectations (Duchscher et al., 2021).

Gaps and Supports

NGRNs face challenges in transitioning to clinical practice, including gaps in theoretical versus clinical knowledge and concerns about hostile work environments (Chen et al., 2021). The successful transition to practice for NGRNs is of great importance to health care systems and the nursing profession, and critical to the provision of quality patient care (Kenny et al., 2021). The experiences NGRNs have had during their transition to practice has been described as a challenging period (Chen et al., 2021; Hofler & Thomas, 2016; Wildermuth et al., 2019). A positive correlation between transition to practice of NGRNs and attrition rates has been found (Charette et al., 2019; Chen et al., 2021; Doughty et al., 2021; Hofler & Thomas, 2016; Kenny et al., 2021). The high attrition rates of NGRNs are positively correlated with the quality of their transition experiences and have been found to directly influence the quality of care provided (Kenny et al., 2021). Regan et al. (2017) found that in 2014 Canada gained 12,000 NGRNs, with this demographic making up much of the new nursing supply to health care systems around the country. With attrition rates of NGRNs in their first year of practice at a staggering 25%, initiatives that can improve the successful transition of NGRNs are essential (Parsh & Taylor, 2013).

Research shows that within their first year of practice, 18% to 30% of NGRNs leave their practice environment or profession altogether, and that number increases to 37% to 57% in their second year of practice (Sandler, 2018; Sanzone et al., 2021). The Canadian Federation of Nurses Unions (CFNU) suggests that 56% of early-career nurses will consider leaving their current job in the next year, while 19% of nurses will consider leaving the profession entirely (Ahmed & Bourgeault, 2022). By 2030 Canada is projected to be short of 117,600 nurses, with a third of registered nurses providing care being 50 years of age or older and nearing retirement (CFNU, 2022). Health care systems are under increasing pressure to meet service demands, a situation that is exacerbated by a decline in the number of nurses ages 35 to 54 years, who are increasingly changing career fields and retiring early (Regan et al., 2017).

Given the increasing pressure on health care systems to optimize care delivery while maintaining fiscal responsibility, it is important to balance the need for recruitment of highly qualified nurses with efforts that engage them and support work satisfaction; retaining a passionate and committed workforce is the pathway to quality care (Regan et al., 2017). As a result, some hospitals have introduced nurse residency programs (NRPs) as structures created to support NGRNs in their transition from nursing student to practising registered nurse. NGRNs benefit from having a structured transition-to-practice program that builds confidence and encourages autonomy (Hofler & Thomas, 2016; Letourneau & Fater, 2015; Maxwell, 2011; Van Camp & Chappy, 2017).

Several studies have focused on the experiences of NGRNs engaged in NRPs. Wildermuth et al. (2019) and Ankers et al. (2018) used semi-structured interviews to gain the perspectives of nurses as students and followed them through their NRPs as NGRNs. They found that at the outset, NGRNs were apprehensive, feeling overwhelmed in roles for which they did not feel fully prepared; this experience was corroborated by Fowler et al. (2018). Additionally, the NGRNs experienced doubt when having to communicate with the interdisciplinary team, with many claiming that they lacked the knowledge needed to communicate with their team confidently

and effectively (Ankers et al., 2018; Letourneau & Fater, 2015; Wildermuth et al., 2019). As the NGRNs progressed through the NRP, they reported feeling supported when asking questions and learning from their team (Ankers et al., 2018; Letourneau & Fater, 2015; Wildermuth et al., 2019). NRPs focus on the successful and safe transition from student to registered nurse (Ankers et al., 2018; Letourneau & Fater, 2015; Wildermuth et al., 2019). Globally, NRPs have been integrated and in some cases mandated by regulatory and government bodies (Doughty et al., 2021; Rush et al., 2019). New Zealand is one of the few nations to mandate a national entry-to-practice program, and the United Kingdom has a preceptorship framework that all practising NGRNs must complete (Doughty et al., 2021; Rush et al., 2019). In the United States, NRPs gained popularity in the early 2000s after a collaborative report by the Institute of Medicine (2011) and the Robert Wood Johnson Foundation mandated residency programs as a criterion for hospital accreditation (Institute of Medicine, 2011; Rush et al., 2019).

Mentorship is paramount to successful NRPs as it allows experienced nurses to support NGRNs, creating more positive workplace environments (Parsh & Taylor, 2013; Rush et al., 2019). Having experienced nurses as mentors when entering the profession mitigates some of the stressors associated with transitioning into clinical practice (Charette et al., 2019; Hofler & Thomas, 2016). Charette et al. (2019) found that NGRNs integrate better into practice when they have support from managers, when adequate staffing is in place, and when they experience positive attitudes from peers and colleagues. Multiple researchers have conducted studies showing NGRNs benefit from having a structured transition-to-practice program that builds confidence and encourages evolving autonomy (Hofler & Thomas, 2016; Maxwell, 2011). The Benner (1984) model of skill acquisition suggests that novice health care providers require dedicated full-time supervised practice for the first 6 to 12 months to develop competencies (CASN, 2022b). In 2017, CASN conducted a focus group in Canada and found significant knowledge gaps among NGRNs, regardless of education and clinical skills. NRPs work to standardize the approach to onboarding new nurses by balancing skill acquisition and competency with the experience of orientation, transition, integration, and stabilization within the context of the workplace. CASN (2022) purported that supporting a healthy transition optimizes the context within which safe and effective care can be delivered.

Needs Assessment

Needs assessment is "a systematic examination of the gap that exists between the current state and desired state of an organization and the factors that can be attributed to this gap" (Cuiccio & Husby-Slater, 2018, p. 1). It can be used to guide decisions and is a systematic process that justifies the decisions and plans that will be made (Sydorenko, 2021). This project was an in-depth assessment to gather the information that could inform an NRP.

Needs Analysis Framework

The Needs Analysis Framework was initially developed to standardize the communication of humanitarian needs by the United Nations Inter-Agency Standing Committee (2007). This framework consists of seven steps: identifying goals and performers, creating investigative questions, developing a data collection plan, creating data collection instruments, collecting data, analyzing data to identify needs, and summarizing findings and reporting them. It serves as a systematic process for identifying performance gaps in organizations.

Initially, key collaborators such as nurse leaders and educators were identified, and the objective of the assessment was clearly defined. In this specific case, the goal was to understand

the current state and future objectives of parties responsible for the transition-to-practice process of NGRNs in Canada. Subsequent steps involved creating investigative questions to illuminate available transition supports and developing a data collection plan to engage with relevant institutions and entities. Participants included clinical nurse educators and nurse leaders in health care institutions who have knowledge of NGRN orientation and learning processes. The data from both closed-ended and open-ended questions was used to generate a report identifying current practices and gaps in NGRN transition support, with the aim of sharing this information with relevant parties and proposing actions to optimize NGRN transition support across Canadian health care institutions.

Survey Methodology

This needs assessment employed a comprehensive sample survey design (Polit & Beck, 2021) to understand phenomena related to the transition to practice and NRPs among nursing leaders.

Survey Design

This project used an 11-question survey (see Appendix A) adapted from AbuAlRub and Abu Alhaija'a (2018). The survey included five multiple-choice questions, four open-ended questions, one 5-point Likert scale, and one binary (yes/no) question. These questions aimed to uncover information about current NGRN transition processes, existing gaps, and health facilities' readiness to adopt an NNRP. The survey's purpose was to understand the factors motivating health care facilities to participate in a national residency program.

Sample and Context

We used a purposive snowball sampling method (Palinkas et al., 2015; Polit & Beck, 2021) to reach clinical nurse educators and leaders across Canada. Initial survey invitations were distributed through HealthCareCAN, accompanied by a reminder email after 2 weeks and a Twitter advertisement 3 weeks later. When the initial 2 weeks yielded no responses, additional recruitment strategies were devised, involving nursing regulatory bodies and executives from health authorities.

Inclusion criteria included health care facilities within Canada that were members of HealthCareCAN, nurse regulatory bodies, and nursing executives with publicly available email addresses and respondents who could provide input in English. Excluded were health care facilities outside Canada, regulatory bodies without publicly available email addresses, and respondents unable to provide input in English.

The survey invitation included project details and a link to the online survey (see Appendix B). Implied consent was used, informing participants about the project's nature, voluntary participation, and consent upon survey completion (Sunnybrook Research Institute, 2022).

Data Collection, Timeline, and Storage

Data were collected via an online SurveyMonkey survey approved by Thompson Rivers University's Research Ethics Board. The survey remained open for 9 weeks, yielding a total of 33 responses. All data were securely stored in a password-protected account to ensure confidentiality.

Data Analysis

The analysis involved pattern development, categorization, and relationship identification (Polit & Beck, 2021). We analyzed closed-ended question results with SurveyMonkey to create charts and identify trends. We coded and thematically analyzed open-ended question results to understand participant responses.

We used thematic analysis, a qualitative research method, to identify, analyze, and organize patterns in the data (Kiger & Varpio, 2020; Nowell et al., 2017). Data were organized by provinces/territories and care settings (acute, community, mixed rural), resulting in three themes: Theme 1: Current orientation and transition support; Theme 2: Participation barriers; and Theme 3: Current needs with subthemes: (a) missing elements of current orientation, (b) participation requirements, and (c) perceived usefulness. These themes provide a framework for understanding the data, detailed in the following sections.

Ethical Considerations

The study was approved by a university research ethics board, and participants received a detailed project description, including data access disclosure and researcher contact information. Participation was voluntary and anonymous, and withdrawal without repercussions was assured. Confidentiality was maintained, and the report excludes identifying information.

Results

Quantitative Data

The data offer valuable demographic insights into facility type, size, and location, along with participant familiarity with a proposal for a NNRP. The survey targeted nurse leaders, clinical educators, and health care experts with NGRN transition knowledge. Challenges arose in accurately gauging participant reach because of snowball sampling, making response rate calculation difficult. Nonetheless, 33 responses were collected. Response variation existed among nurse regulatory bodies and health authority executives regarding survey dissemination. Most did not confirm their intent to share the survey. Responses mainly came from provinces/territories where sharing was not confirmed.

Most of the respondents (31 out of 33 participants or 93.94%), provided information on the size of their facility (see Table 1). The results reveal that a majority (51.61%) of respondents reported having health care facilities with fewer than 100 beds. Furthermore, more than a quarter of participants (25.81%) indicated that their facilities comprised 100 to 300 beds. Less than 10% of respondents represented health care facilities with 300 to 500 beds, while 12.9% of respondents reported health care facilities with over 500 beds.

Table 1

Facility Size

Facility size	Number of respondents	Percentage
<100 beds	16	51.61
100–300 beds	8	25.81
300–500 beds	3	9.68
>500 beds	4	12.90

Most participants (31 out of 33 respondents or 93.94%), provided information on the type of care setting in their facilities (see Table 2). Of these, 16 respondents (51.61%) indicated that they were employed at acute care facilities; hospitals formed the largest group within the acute care demographic. A considerable number of respondents (9, or 29.03%) reported working in a mixed setting, which encompassed rural health centres with a combination of emergency rooms, long-term-care units, acute care services, and outpatient beds. Community settings, focused on primary care, were represented by 5 participants (16.13%). A single respondent (3.23%) represented a clinic setting.

Table 2

Type of Care Setting

Care setting	Number of respondents	Percentage
Acute care facilities	16	51.61
Mixed setting	9	29.03
Community (primary care)	5	16.13
Clinic (urban mediclinic)	1	3.23
Total	31	93.94

Most of the respondents (66.67%) reported being from facilities based in Atlantic Canada (see Table 3). This region offered a total of 22 responses, including at least 1 from all four provinces. In addition, Northern Canada was represented by 11 responses. It is important to highlight that there was no participation from other regions across Canada. Efforts were made to get comprehensive coverage, and all provinces and territories, except for Quebec, were contacted via email through contacts available on their respective professional nurse regulatory bodies' and health authorities' websites.

Table 3

Geographical Distribution

Region/province/territory	Number of responses	Percentage
Atlantic Canada	22	66.67
Northern Canada	11	33.33
Other regions	0	0.00

A total of 32 out of the 33 respondents included data on the number of NGRNs at their facility (see Table 4). Most of the facilities (14 or 43.75%), reported employing fewer than 10 NGRNs per year, while 9 respondents (28.13%) reported employing 10 to 30 NGRNs per year. This was followed by 4 respondents (12.5%) reporting employing 40 to 50 NGRNs per year and another 4 respondents (12.5%) reporting employing more than 70 NGRNs per year. A single respondent (3.13%) reported hiring 60 to 70 NGRNs per year.

Table 1

NGRN Hires

Number of NGRNs per year	Number of respondents	Percentage
Less than 10	14	43.75
10–30	9	28.13
40–50	4	12.5
60–70	1	3.13
More than 70	4	12.5
Total	32/33	96.97

A "select all that apply" question explored barriers to participating in a NNRP among 33 respondents (see Table 5). The primary obstacle was the lack of senior nurses for preceptorship/mentoring (66.67%), followed by unspecified competing demands (60.61%). Other barriers included the complexity of change (30.30%), lack of stable leadership and partner resistance (24.24%), and costs (21.21%). Additionally, only 21.21% of respondents indicated prior knowledge of a proposed NNRP in Canada, while the majority (78.79%) reported being unfamiliar with the program.

Table 5

Barriers to Participating in the Nurse Residency Program

Barrier	Percentage of participants
Lack of senior nurses available as preceptors/mentors	66.67
Competing demands (unspecified)	60.61
Magnitude and complexity of change	30.30
Other	30.30
Lack of stable leadership	24.24
Resistance from stakeholders to participate	24.24
Costs	21.21

Qualitative Results

The qualitative analysis focused on understanding the current orientation and transition support for NGRNs in Canadian health care facilities and the perspectives of clinical nurse educators and nurse leaders on participating in an NNRP. Three key themes emerged from this analysis: Theme 1: Current orientation and transition support, which explored the existing support mechanisms and orientation processes for NGRNs; Theme 2: Participation barriers, which delved into the barriers preventing health care facilities from actively participating in an NNRP, examining the associated challenges and implications; and Theme 3: Current needs, which investigated the perceived needs for improvements in current orientation and NNRP implementation, with three subthemes: gaps in orientation and transition support, participation requirements, and perceived usefulness, offering insights into the utility and relevance of NNRP implementation.

Theme 1: Current Orientation and Transition Support

The survey uncovered diverse approaches to orientation and transition support for NGRNs across Canada (see Table 6). In the Atlantic jurisdictions, acute care facilities offered programs ranging from 6 to 8 weeks, while community settings had a 6-week preceptorship. In the Northern jurisdiction, acute care facilities provided a 6-month preceptorship/mentorship program, and the community setting featured a 6-month mentorship program. Mixed rural health centres in the Northern jurisdiction had a 3-day orientation with online videos. In Atlantic jurisdictions, NGRNs had unit-based orientations lasting around 9 months, with varying support levels. Various orientations were also offered in acute care, including hybrid programs, critical care programs, and general orientations in the Atlantic jurisdiction. Mixed rural health centres in Atlantic jurisdictions had 6-week unit-specific orientations.

Table 2

Current Orientation and Transition Support

Province/territory	Orientation and transition support
Atlantic jurisdictions	**Acute care:** range from 6 to 8 weeks, with some extending up to 9 months or even a year, including classroom, clinical components, preceptorship, and hybrid orientations
	Community: orientation programs vary, with some offering a 6-week preceptorship combined with in-class teaching, while others provide a 1-week orientation focused on the facility's mission and values.
	Critical care: 3-month preceptorship/orientation followed by comprehensive critical care nursing program
	Provincial health authorities: self-directed general orientation, interprofessional practice and learning days, clinical orientation, 6-week preceptorship
	Mixed rural health centres: orientation programs include unit-specific training, education days, and a 6-week period of shadowing senior staff
Northern jurisdiction	**Acute care:** CASN program with 6-month preceptorship/mentorship
	Community: 6-month mentorship program with individualized learning plans and regular mentor meetings
	Mixed rural health centres: 3-day orientation, online videos, optional CASN mentorship available

Note. CASN = Canadian Association of Schools of Nursing.

Theme 2: Participation Barriers

Barriers to participating in an NNRP were identified across the Atlantic and Northern jurisdictions (see Table 7). In the Atlantic jurisdiction, common challenges included the complexity of change, partner resistance, and a shortage of senior nurses for preceptorship, with competing demands particularly noted in mixed rural health centres. Acute care facilities also faced issues related to change magnitude, partner resistance, and program costs. In the Northern jurisdiction, similar barriers were observed, including the complexity of change, unstable leadership, and a lack of senior nurses for preceptorship, with additional challenges in community settings related to competing demands and program costs. Overall, the most recurrent barriers were competing demands and a shortage of senior nurses for preceptorship, though specific details on these demands were limited.

Table 7

Summary of Common Barriers

Jurisdiction	Magnitude and complexity of change	Competing demands	Resistance from partners	Lack of senior nurses for preceptorship	Lack of stable leadership	Costs
Atlantic	x	x	x	x	x	x
Northern	x	x		x	x	x

Theme 3: Current Needs

Gaps in Orientation and Transition Support. The needs assessment uncovered variations and deficiencies in orientation and transition support across Canadian jurisdictions (see Table 8). In the Atlantic jurisdiction, the acute care sector faced challenges with insufficient in-class education, a lack of experienced nurses, and an inflexible orientation period, which were compounded by shortages of senior staff. Community settings struggled with a lack of seasoned nurses, inadequate leadership support, and staffing issues, while mixed rural health centres dealt with inadequate senior nurse mentorship, limited funding, and inconsistencies in preceptor availability. Similarly, in the Northern jurisdiction, there was a significant shortage of experienced mentors across health care settings.

Table 8

Summary of Gaps in Orientation and Transition

Jurisdiction	Care setting	Gaps
Atlantic	Acute care	• Lack of additional in-class education and expectation for NGRNs to acquire missing practice knowledge from nursing programs • Insufficient staffing levels, including shortages of nurses and senior staff • Non-extendable orientation period
Atlantic	Community	• Absence of seasoned nurses • Inadequate support from leadership • Insufficient staffing levels to allocate adequate orientation time
Atlantic	Mixed rural health centre	• Lack of senior nurse mentors • Inconsistent availability of experienced preceptors • Lack of standardized simulation approaches • Insufficient operational funding
Northern	Acute care and community	• Shortage of experienced nurses eligible to mentor NGRNs

Participation Requirements

Insights from various Canadian jurisdictions highlight essential requirements and concerns for participating in an NNRP (see Table 9). In the Atlantic jurisdiction's acute care, there was an emphasis on funding, comprehensive program details, upper management support, and a dedicated coordinator. In the community setting, key elements included willing experienced mentors and support from government and senior leadership. In the Northern jurisdiction's acute care settings, the CASN Nurse Residency Program was implemented, focusing on organizational buy-in, mentor support, and a more stable workforce. Across the Atlantic jurisdiction, both acute care and mixed rural health centres highlighted the need for experienced nurse mentors, clear program guidelines, and additional administrative support in the community setting. There was also a call for more information, executive and front-line support, and a more structured transition period, although specific trends were difficult to discern because of limited data.

Table 9

Summary of Participation Requirements

Jurisdiction	Care setting	Requirements, concerns, and opinions
Atlantic	Acute care	• Adequate funding and support staff
		• Comprehensive program information and upper management support
		• Dedicated program coordinator
		• Addressing loss of new graduates and improving pay for shift workers
		• Need for experienced mentors and clear program guidelines
Atlantic	Community	• Willing mentors for NGRNs
		• Support from government and senior leadership
		• Additional administrative support
		• Integration of new graduates
Atlantic	Mixed rural health centre	• Commitment to change
		• Funding and staff
		• Participation in CASN's Nurse Residency Program
		• Request for standardized national program information
Northern	Acute care	• Implementation of CASN's Nurse Residency Program
		• Formal mentorship program
		• Structured transitional plan
		• Need for mentor support and organizational buy-in

Northern	Community	• More education time for NGRNs to gain experience
Northern	Mixed rural health centre	• Funding and staff
		• Participation in CASN's Nurse Residency Program
		• Request for standardized national program information

Perceived Usefulness

Opinions on the benefits of participating in a NNRP varied by jurisdiction (see Table 10). In the Atlantic jurisdiction, 75% to 81.82% of respondents found the program beneficial, with 1 respondent suggesting the transition period start during the undergraduate nursing program. In the Northern jurisdiction, 63.63% found the program beneficial, with 27.27% remaining neutral. Overall, 62.5% of participants across all regions recognized the advantages of an NNRP.

Table 10

Summary of Perceived Usefulness

Jurisdiction	Total respondents	Positive perception (%)	Neutral perception (%)	Negative perception (%)
Atlantic	21	75.36	12.52	12.12
Northern	11	63.64	27.27	0
Overall	32	62.5	0	0

Discussion

This needs assessment sought to evaluate the support systems and requirements for transitioning NGRNs into practice, as well as the willingness of employers and nurse leaders to participate in an NNRP. The respondent demographics showed a majority from the Atlantic jurisdiction (66.67%), with the rest from the Northern jurisdiction, highlighting the need for broader regional representation in future studies. The assessment identified significant gaps in orientation and transition support within health care facilities in the Atlantic and Northern jurisdictions, emphasizing the need for improvements to enhance effectiveness. Although many facilities in the Northern jurisdiction participated in CASN's NNRP and found it beneficial, they sought a more stable workforce, senior leadership support, and changes in mentor/preceptor compensation. The main barriers to NNRP participation included the lack of senior nurses for preceptorship/mentoring (66.67%) and competing demands (60.61%), reflecting broader issues of nursing shortages and retirement challenges in Canada. The qualitative analysis revealed varied orientation practices across facilities, indicating a need for improved staffing, leadership, funding, and education opportunities. Missing elements included additional education away from the point of care, preceptorship, and mentorship. This assessment, combined with existing literature (e.g., Health Canada, 2024) enhances our understanding of the essential elements required for a successful nurse residency program and provides valuable insights into the barriers and needs related to implementing an NNRP in the Atlantic and Northern jurisdictions, guiding proactive measures to improve the NGRN transition experience nationwide.

Limitations

Several limitations impacted this needs assessment. First, constraints on financial, time, and human resources, typical of a graduate student project, necessitated a limited survey duration. A small research team interpreting findings from a small sample introduced potential bias. The time constraints caused by the master of nursing program of the student involved in this needs assessment and anonymous nature of the survey resulted in a lack of respondent follow-up or in-depth exploration of survey responses, making validation methods such as inter-rater reliability and member checking infeasible.

The recruitment method (snowballing) made calculating response rates challenging. Additionally, various nursing regulatory bodies demanded additional ethical reviews and fees, causing delays and resource concerns. The limited sample size, biased regional representation, and exclusion of certain entities further constrained the needs assessment's validity. It is important to highlight that the survey questionnaire was provided only in English, potentially resulting in a lack of responses from Quebec and other French-speaking regions across the country.

Additionally, the questionnaire employed in this needs assessment was adapted from a needs assessment conducted by AbuAlRub and Abu Alhaija'a (2018), which focused on newly hired nurses in Jordan. The questions used in the needs assessment were developed through a comprehensive literature review, followed by evaluation from a panel of nursing experts to ensure clarity, along with face and content validity. In contrast, this needs assessment centres on the perspectives of nurse employers and managers in Canada. Hence, it is imperative to consider the unique cultural contexts and demographic differences when interpreting the results, as this may highlight a potential limitation in the instrument used for this needs assessment. It is also worth noting that a comprehensive inventory of NRPs in Canada was not done. This gap might limit the needs assessment's ability to fully grasp the national scope of these programs, potentially impacting its analytical depth and comparative insights. Consequently, this limitation influences the broader interpretation of the needs assessment's findings. These limitations highlight opportunities for future research to address these challenges effectively.

Recommendations

To overcome the limitations in this needs assessment, future research should explore external funding or collaborations to expand resources for a more comprehensive implementation, including research evaluation. Collaborative approaches involving multiple researchers and subject matter experts can minimize bias and enhance objective data analysis. Using diverse data collection methods, including interviews, and obtaining contact information from willing participants can improve communication and understanding of their perspectives. Initiating the ethical review process earlier and advocating for standardized national ethics approval processes can expedite approvals and dissemination. Efforts to engage with excluded entities, multiple recruitment channels, and a bilingual approach can address representation gaps.

Knowledge translation (KT) strategies should be employed to ensure that data and research findings are moved beyond theoretical speculation towards practical application (Polit & Beck, 2021). By translating theoretical findings into practice, the goal is to improve current nursing practices. For this project, KT strategies include distributing relevant findings to collaborators to optimize a national approach to NGRN transitions in Canada. These data could inform the program content and processes of an NNRP, contributing to the existing knowledge and practice of professional role transition support across Canada. Following publication, these findings can be

used to facilitate discussions with national collaborators on further research, policy development, and program enhancements related to the NGRN transition to professional practice.

To enhance the knowledge base in this area, it is crucial to conduct additional needs assessments and mixed-methods studies involving a larger sample size, nurse leaders, and educators from various regions in Canada. Future researchers could broaden their approach by including viewpoints from nurse leaders, educators, and NGRNs, creating a comprehensive solution that addresses the unique needs of all groups. This approach will ultimately foster a more inclusive and supportive transition-to-practice program.

Conclusion

This project assessed current orientation and transition support for NGRNs, primarily in the Atlantic and Northern jurisdictions. The needs assessment revealed significant gaps, highlighting the need for improved transition-to-practice programs. Many respondents expressed interest in a standardized NNRP, emphasizing its potential benefits. While some facilities in the Northern jurisdiction were already involved in such programs, areas for enhancement were identified. The lack of available senior nurses for precepting and mentoring was a key challenge, underscoring the need for proactive measures in retaining NGRNs and experienced nurses. To address the shortage of senior nurse mentors and retain both NGRNs and experienced staff, health care organizations should implement structured preceptorships with mentor incentives, flexible staffing, and peer mentoring (Charette et al., 2019; Hofler & Thomas, 2016; Letourneau & Fater, 2015; Maxwell, 2011; Van Camp & Chappy, 2017). Despite limitations, the needs assessment suggests conducting broader, mixed-methods needs assessment with diverse samples from across Canada. These efforts aim to bridge identified gaps and develop inclusive, evidence-based support programs for nurse leaders and NGRNs during the transition process, ultimately benefiting nurses and patients alike.

References

AbuAlRub, R. F., & Abu Alhaija'a, M. G. (2018). Perceived benefits and barriers of implementing nursing residency programs in Jordan. *International Nursing Review*, *66*(1), 43–51. https://doi.org/10.1111/inr.12452

Ahmed, H. E. B., & Bourgeault, I. L. (2022). *Sustaining nursing in Canada: A set of coordinated evidence-based solutions targeted to support the nursing workforce now and into the future*. Canadian Federation of Nurses Unions. https://nursesunions.ca/wp-content/uploads/2022/11/CHWN-CFNU-Report_-Sustaining-Nursing-in-Canada2022_web.pdf

Ankers, M. D., Barton, C. A., & Parry, Y. K. (2018). A phenomenological exploration of graduate nurse transition to professional practice within a transition to practice program. *Collegian*, *25*(3), 319–325. https://doi.org/10.1016/j.colegn.2017.09.002

Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing practice*. Addison-Wesley Publishing Company.

Canadian Association of Schools of Nursing. (2022a). *CASN/ACESI mission*. https://www.casn.ca/about-casn/casnacesi-mission/

Canadian Association of Schools of Nursing. (2022b). *From advanced beginner to competent RN: Residency program for new registered nurses to transition successfully into practice*. http://w3e6i9k7.stackpathcdn.com/content/user_files/2022/01/Nurse-Residency-Curriculum-Schedule-Cost-2022.pdf

Canadian Federation of Nurses Unions. (2022). *Canada's nursing shortage at a glance: A media reference guide*. https://nursesunions.ca/wp-content/uploads/2022/07/nurses_shortage_media_ref_guide_comp.pdf

Charette, M., Goudreau, J., & Bourbonnais, A. (2019). Factors influencing the practice of new graduate nurses: A focused ethnography of acute care settings. *Journal of Clinical Nursing*, *28*(19–20), 3618–3631. https://doi.org/10.1111/jocn.14959

Chen, F., Liu, Y., Wang, X., & Dong, H. (2021). Transition shock, preceptor support and nursing competency among newly graduated registered nurses: A cross-sectional needs assessment. *Nurse Education Today*, *102*, 1–7. https://doi.org/10.1016/j.nedt.2021.104891

Cuiccio, C., & Husby-Slater, M. (2018). *Needs assessment guidebook supporting the development of district and school needs assessments*. State Support Network. https://oese.ed.gov/files/2020/10/needsassessmentguidebook-508_003.pdf

Doughty, L., Sinnema, C., McKillop, A., & Dixon, R. (2021). The impact of postgraduate education in transition to practice programmes on new graduate nurses' knowledge and skills: A pre-post survey design. *Nurse Education Today*, *102*, 1–6. https://doi.org/10.1016/j.nedt.2021.104888

Duchscher, J. E. B. (2009). A process of becoming: The stages of new nursing graduate professional role transition. *Journal of Continuing Nursing Education*, *39*(10), 441–450.

Duchscher, J. E. B. (2012). *From surviving to thriving: Navigating the first year of professional nursing practice* (2nd ed.). Nursing the Future.

Duchscher, J., Corneau, K., & Lamont, M. (2021). Transition to practice: Future considerations for new graduate nurses. *Canadian Journal of Nursing Leadership*, *34*(4), 44–56. https://doi.org/10.12927/cjnl.2021.26690

Fowler, S. B., Lind, S. C., Johnson, P. R., & Lewis, J. (2018). Qualitative description of new graduate nurses' experiences in a nurse residency program. *Journal for Nurses in Professional Development*, *34*(6), 319–324. https://doi.org/10.1097/nnd.0000000000000496

Health Canada. (2024). *Nursing retention toolkit: Improving the working lives of nurses in Canada*. https://www.canada.ca/content/dam/hc-sc/documents/services/health-care-system/health-human-resources/nursing-retention-toolkit-improving-working-lives-nurses/nursing-retention-toolkit-improving-working-lives-nurses.pdf

Hofler, L., & Thomas, K. (2016). Transition of new graduate nurses to the workforce: Challenges and solutions in the changing health care environment. *North Carolina Medical Journal*, *77*(2), 133–136. https://doi.org/10.18043/ncm.77.2.133

Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. The National Academies Press.

Inter-Agency Standing Committee. (2007). *Needs analysis framework: Strengthening the analysis and presentation of humanitarian needs in the CAP*. https://www.alnap.org/help-library/needs-analysis-framework-strengthening-the-analysis-and-presentation-of-humanitarian

Kenny, A., Dickson-Swift, V., McKenna, L., Charette, M., Rush, K. L., Stacey, G., Darvill, A., Leigh, J., Burton, R., & Phillips, C. (2021). Interventions to support graduate nurse transition to practice and associated outcomes: A systematic review. *Nurse Education Today*, *100*, 1–10. https://doi.org/10.1016/j.nedt.2021.104860

Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide no. 131. *Medical Teacher*, *42*(8), 1–9. https://doi.org/10.1080/0142159X.2020.1755030

Kramer, M. (1974). *Reality shock: Why nurses leave nursing*. The C. V. Mosby Company.

Letourneau, R. M., & Fater, K. H. (2015). Nurse residency programs: An integrative review of the literature. *Nursing Education Perspectives*, *36*(2), 96–101. https://doi.org/10.5480/13-1229

Masso, M., Sim, J., Halcomb, E., & Thompson, C. (2022). Practice readiness of new graduate nurses and factors influencing practice readiness: A scoping review of reviews. *International Journal of Nursing Studies*, *129*, 104208. https://doi.org/10.1016/j.ijnurstu.2022.104208

Maxwell, K. L. (2011). The implementation of the UHC/AACN new graduate nurse residency program in a community hospital. *Nursing Clinics of North America*, *46*(1), 27–33. https://doi.org/10.1016/j.cnur.2010.10.013

Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, *16*(1). https://doi.org/10.1177/1609406917733847

O'Conner, T. (2018). *Inside the nurse residency experience*. nursingCAS. https://nursingcas.org/inside-the-nurse-residency-experience/

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, *42*(5), 533–544. https://doi.org/10.1007/s10488-013-0528-y

Parsh, B., & Taylor, E. (2013). Benefits of residency programs for new grads. *Nursing*, *43*(12), 64. https://doi.org/10.1097/01.nurse.0000437485.83616.1a

Perron, T., Gascoyne, M., Kallakavumkal, T. K., & Demagistris, N. (2019). Effectiveness of nurse residency programs. *Journal of Nursing Practice Applications and Reviews of Research*, *25*(9), 48–52. https://doi.org/10.13178/jnparr.2019.09.02.0908

Polit, D. F., & Beck, C. T. (2021). *Nursing research: Generating and assessing evidence for nursing practice*. Wolters Kluwer.

Regan, S., Wong, C., Laschinger, H. K., Cummings, G., Leiter, M., MacPhee, M., Rhéaume, A., Ritchie, J. A., Wolff, A. C., Jeffs, L., Young-Ritchie, C., Grinspun, D., Gurnham, M. E., Foster, B., Huckstep, S., Ruffolo, M., Shamian, J., Burkoski, V., Wood, K., & Read, E. (2017). Starting out: Qualitative perspectives of new graduate nurses and nurse leaders on transition to practice. *Journal of Nursing Management*, *25*(4), 246–255. https://doi.org/10.1111/jonm.12456

Rush, K. L., Janke, R., Duchscher, J. E., Phillips, R., & Kaur, S. (2019). Best practices of formal new graduate transition programs: An integrative review. *International Journal of Nursing Studies*, *94*, 139–158. https://doi.org/10.1016/j.ijnurstu.2019.02.010

Sandler, M. (2018). Why are new graduate nurses leaving the profession in their first year of practice and how does this impact on ED nurse staffing? A rapid review of current literature and recommended reading. *Canadian Journal of Emergency Nursing*, *41*(1), 23–24. https://doi.org/10.29173/cjen66

Sanzone, L., D'Aquila, V., & Fukamizu, S. (2021, October 18). *Stemming the tide of nursing attrition: Developing resilience via a peer mentorship program*. Canadian Nurses Association. https://www.cna-aiic.ca/blogs/cn-content/2021/10/18/stemming-the-tide-of-nursing-attrition-developing

Sunnybrook Research Institute. (2022). *Informed consent*. https://sunnybrook.ca/research/content/?page=sri-crs-reo-faq-informedconsent

Sydorenko, N. (2021). *What is a needs assessment: Definition, importance, model, and tips*. Snovio. https://snov.io/glossary/needs-assessment/References

Van Camp, J., & Chappy, S. (2017). The effectiveness of nurse residency programs on retention: A systematic review. *AORN Journal*, *106*(2), 128–144. https://doi.org/10.1016/j.aorn.2017.06.003

Wildermuth, M. M., Weltin, A., & Simmons, A. (2019). Transition experiences of nurses as students and new graduate nurses in a collaborative nurse residency program. *Journal of Professional Nursing*, *36*(1). https://doi.org/10.1016/j.profnurs.2019.06.006

Woo, M. W. J., & Newman, S. A. (2019). The experience of transition from nursing student to newly graduated registered nurses in Singapore. *International Journal of Nursing Sciences*, *7*(1), 81–90. https://doi.org/10.1016/j.ijnss.2019.11.002

Appendix A: National Nurse Residency Programs: Needs Assessment Survey

Purpose of survey

- Gain insight into the existing supports and projected needs of institutions transitioning newly graduated registered nurses into professional practice in Canada.

- Inform the ongoing development a National Standardized New Graduate Nurse Residency Program.

Who is conducting this survey?

- Bezawit Alamerew, a master of nursing student at Thompson Rivers University, 743 Kamloops, BC

- **Contact-Email:** alamerewb21@mytru.ca

- **Supervisor:** Dr. Judy Duchscher **Contact-Email:** jduchscher@tru.ca

Length of survey

- 11 questions

- Approximately 10-20 minutes to complete.

Privacy & consent

- Completing this survey is optional. You are free to stop answering at any time. If you decide to complete this survey, you may choose which questions to answer and you may stop at any point before completion.

- Your answers are anonymous and will be used to better understand the consensus of Canadian healthcare institutions on implementing new graduate nurse residency programs.

- Responses will be anonymized and analyzed for a graduate project at Thompson Rivers University, a report will be written using the results from this survey.

- The report will not include any identifying information about the healthcare facility or the individual completing this survey.

- If you submit this survey, it will be understood that you have consented to participate in this project.

Questionnaire

1. What is the size of your healthcare facility?
   - Less than 100 beds
   - 100–300 beds
   - 300–500 beds
   - More than 500 beds

2. What is the demographic focus of your healthcare facility?
   - Acute-Care (hospital)
   - Mixed (rural health center with combined ER, LTC, acute-care, outpatient beds)
   - Clinic (urban mediclinic)

- Community (primary care)
- Rehabilitation

3. Where is your facility located?
   - Alberta
   - British Columbia
   - Manitoba
   - New Brunswick
   - Newfoundland and Labrador
   - Northwest Territories
   - Nova Scotia
   - Nunavut
   - Ontario
   - Prince Edward Island
   - Quebec
   - Saskatchewan
   - Yukon

4. How many new graduate nurses are hired at your facility each year?
   - Less than 10
   - 10–30
   - 30–50
   - 50–70
   - More than 70

5. Prior to this survey, had you heard about the proposal to introduce a National Standardized New Graduate Nurse Residency Program in Canada?
   - Yes
   - No

6. Briefly describe the current support program for the professional role transition of newly graduate nurses at your facility. Please include information on the following if available:

   - Orientation program content and process

   - Mentorship/preceptorship available (time, nature, and structure of the relationship with the new graduate, preparation programs/compensation for mentors/preceptors)

   - Classroom vs clinical orientation time/content

7. Implementing a National Standardized New Graduate Nurse Residency Program would be useful to my healthcare facility:
    - Strongly agree
    - Agree
    - Neither agree nor disagree
    - Disagree
    - Strongly disagree

8. Which of the following would be barriers to participating in a National Standardized New Graduate Nurse Residency Program for your healthcare facility? **Choose all that apply.**
    - Magnitude and complexity of the change
    - Lack of stable leadership
    - Competing demands
    - Resistance from stakeholders
    - Cost
    - Lack of senior nurses to act as preceptors/mentors
    - Other (please specify)

9. What elements are missing from your current transition support program/approach?

10. What is needed for your institution to participate in a National Standardized New Graduate Nurse Residency Program?

11. Please use this section if you would like to provide additional comments, suggestions, feedback.

Appendix B: Email Introduction Letter

Dear Nurse Leaders,

My name is Bezawit Alamerew, and I am a student in the Master of Nursing program at Thompson Rivers University working under the direction of Dr. Judy Duchscher (Supervisor) and Dr. Cathy Ringham (Committee Member). As part of my graduate project, I will be conducting a ***Needs Assessment Survey*** of tertiary healthcare institutions across Canada to understand current practices and future needs in supporting newly graduated nurses moving into professional practice. The data from this survey will culminate in a report.

We would greatly appreciate if you would forward this letter to all your participating healthcare institutions. *Please note that the individual ultimately tasked with completing this survey will require current knowledge of educational and practical supports for newly graduated nurses within that institution, as well as support processes/resources desired but not currently available within the institution/health region.*

Completion of this survey is voluntary and anonymous. The survey will not associate any identifying information with the institution or the person completing the survey. You may withdraw from participating at any time before submitting the survey. Once the survey has been submitted, it will not be possible to withdraw your data given the anonymous nature of the study.

If you are interested in participating in this important study assessing the needs of institutions supporting newly graduated nurses transitioning into practice, **please use the following link to access the survey** https://www.surveymonkey.ca/r/newgradtransitionsurvey

If you have any questions or concerns, please feel free to contact Bezawit Alamerew via email or her Supervisor Dr. Judy Duchscher. If you have any further questions or concerns about your rights as a research participant, please feel free to contact the Research Ethics Board at Thompson University by **Phone:** or **Email:** TRU-REB@tru.ca and refer to Ethics ID# 103297.

Regards,

Bezawit Alamerew

Master of Nursing Student

Thompson Rivers University