EXPANDING THE EVIDENCE FOR NEW GRADUATE NURSE TRANSITION BEST PRACTICES

Dr. Kathy Rush & Ms. Monica Adamack (Co-Leads) | Mr. Jason Gordon

May 8, 2013
Executive Summary

The global nursing shortage has accelerated efforts to ensure a smooth and effective transition of new graduate nurses into the workplace. Transition programs have emerged internationally to facilitate new nurses’ integration into the workplace. In 2004, health authorities in the Province of British Columbia began to establish New Graduate Nurse Transition Programs to assist graduate nurses who were experiencing problems in the transition and to facilitate recruitment. They have evolved over time into programs that share some commonalities and yet have unique variations to accommodate the needs of each health authority. The purpose of this three-phase study was to examine the application of best practices in British Columbia of new graduate nurse acute care transition programs with a view to develop a best practices toolkit. A cursory review of the literature together with the expert input of the working-steering committee led to a focus on the following components of transition programs: education, support, competence/critical thinking, and workplace environment.

Phase 1 involved an integrative review of the literature to identify best practices of formal New Graduate Nurse Transition Programs. Overall, the findings revealed limited strong evidence to support best practices related to constituent components of these formalized programs. A consistent theme throughout the literature was that formal transition programs improve retention and decrease turnover rates. Although a range of education modalities were described within the context of these programs, none could be recommended as best practice. A modicum of evidence appeared for including a transition program of at least nine months that includes longer orientations, trained preceptors, mentorship and peer-support opportunities, as a means of support. “Healthy” workplace environments reduced transition shock and promoted transition.

The mixed methods study in Phase 2 obtained multiple stakeholder perspectives of transition programs through a series of focus groups and individual interviews and solicited new graduate self-reports of their transition programs and a quantification of their transition experience through an online survey. Survey findings revealed that orientations of four months or greater, 49 hours or more of work in a two-week period, and participation in a transition program were associated with more positive transition experiences. Thirty-nine percent of new graduates reported bullying/harassment in the workplace but participation in a formal transition program improved their transition. For new graduates who were bullied/harassed and those who were not, higher total transition scores were associated with a greater ability to access support when needed, but this positive relationship was weaker among nurses who were bullied/harassed. For new graduates who participated in a transition program, the more helpful the preceptor/mentor, unit staff and workshops/inservices, the greater their total transition scores. Qualitative findings uncovered role ambiguity and confusion among stakeholders in the transition program. Although there were identified gaps, new graduates were generally satisfied with undergraduate education. Employed Student Nurse Summer programs, while valued by all stakeholders, carried expectations that influenced the support new graduates received during transition. Further, transition programs require formal processes of orientation, preceptor/mentorship and development plans in a learning workplace environment supported by all staff and physicians.

Findings from Phase I and II informed the development of a best practice toolkit that will be a resource for agencies involved in transition programs. The identified best practices reflected in the toolkit may involve uncontrollable issues, such as health care funding, academic curriculum changes, policy impacts and/or organizational restructuring that is outside the purview of this research study.
Project Overview

The University of British Columbia Okanagan (UBCO) nursing program and Interior Health (IH) have a strong collaborative relationship. Over 400 students participate in clinical education within IH facilities, and a formal transition program has been initiated. The Michael Smith Foundation for Health Research’s (MSFHR) request for proposals for projects investigating new graduate nurse (NG) transition was felt by both UBCO and IH to be an ideal opportunity to evaluate and further evolve the transition program. Dr. Kathy Rush, UBCO School of Nursing faculty member and Monica Adamack, professional practice lead from Interior Health collaborated to develop a proposal for an academic/practice focused research study on NG transition.

The request for proposals outlined a need for a provincial overview, and therefore a steering committee comprised of British Columbia’s (BC) health authorities (HA) was developed. This team consisted of the leads of the NG programs within the seven HAs. This team assisted the researchers in pervading the direction the study would take as well as providing the in-roads to the HA research/ethics boards, the best routes to take for engaging NGs into the study as well as providing detailed information regarding their programs. The study would benefit each of their organization's NG transition programs in providing best evidence towards the program compositions.

A literature review was initiated in November 2011, which was led by Robert Janke, research librarian at UBCO. The primary investigators (PI), with assistance from Dr. Meredith Lilly, synthesized the results of the literature review and used this information to guide the creation of the quantitative and qualitative data collection tools. The quantitative data collection tool was an online survey involving questions related to demographics, orientation, transition, and the Casey-Fink Graduate Nurse Experience Survey. The qualitative data collection tools were focus group interview guides specific to NGs, front-line nurse managers and care coordinators, and transition program coordinators. These data collection tools were further refined through input from the working-steering committee, and a strategy for data collection was finalized.

The project was then submitted for review to the following ethics review boards: Northern Health (NH), Fraser Health (FH), Vancouver Island Health Authority (VIHA), and Vancouver Island University (VIU). After some modification to satisfy the aforementioned boards, the project was submitted to the ethics review board of UBCO. The UBCO research ethics process is harmonized with the remaining HAs: IH, Vancouver-Coastal Health (VCH), Providence Health Care (PHC), and Provincial Health Services Authority (PHSA). The project was approved by UBCO’s Research Ethics Board on June 1, 2011.

With the research ethics process completed, the project shifted to data collection. Working-steering committee members from each HA worked with the PIs and research assistants to carry out the project information dissemination strategy outlined in the ethics process. This strategy was implemented to recruit participants to the study for both the online survey and the focus group interviews.

The online survey was sent to 1,008 NGs, and 257 completed the survey resulting in a 26 percent response rate. Twenty-three focus groups were performed across BC (n=48 NGs, n=69 nurse managers, n=9 transition program coordinators).
Data analysis of the online survey was performed via an open source statistical software package and included modeling that addressed 21 research questions. Analysis of the qualitative data collected from the focus groups was through the use of NVivo software.

Triangulation of the findings from the literature review, online survey, and focus group data was utilized to determine themes and strength of evidence for components of transition programs to be recommended in the toolkit.
Acknowledgements

The New Graduate Integration Team (NewGit) would like to acknowledge the Michael Smith Foundation for Health Research for providing the funding for this project. It would also like to recognize the contributions of the advisory committee to the project:

- Meredith Lilly, PhD – Research Consultant
- Robert Janke, MLIS, BA – Librarian, University of British Columbia Okanagan
- Ann Holroyd, PhD, RN – Nursing Instructor, Vancouver Island University

The project would not have been possible without the support and participation of the British Columbia health authorities and their working-steering committee member representatives:

- Fraser Health – Pamela Thorsteinsson, MHS, BSN
- Northern Health – Andrea Starck, BSN
- Providence Health Care – Candy Garossino, MSN, BSN; Cindy Elliott, BSN
- Provincial Health Services Authority – Sandra Harris, MSN, BSN
- Vancouver Coastal Health – Pat Semeniuk, MA, BN; Denise Delane, BSN; Khairrunnissa Rhemtulla, MEd, BSN
- Vancouver Island Health Authority – Joanne Maclaren, MN, BSN; Diana Campbell, MPA, BSN

The project also included individual interviews with faculty from nursing academic programs, thus NewGit would like to recognize the contributions of North Island College, UBCO and VIU.

Lastly, NewGit would like to acknowledge the contributions of our statistician, research assistants, and host HA:

- Isabella Ghement, PhD – Ghement Statistical Consulting Company, Vancouver
- Wendy Moss, MSN, BN – Clinical Practice Consultant, Professional Practice and Integration, Fraser Health; Nurse Clinician, BC Children’s Hospital.
- Karen MacKay, MDip, BA (4th Year) – Research Assistant, UBCO
- Pamela Rudd, CL – Document Analyst
- Interior Health – Significant in-kind resources to the project in the form of teleconferencing and meeting space
# Table of Contents

Executive Summary ....................................................................................................................................... ii
Project Overview .......................................................................................................................................... iii
Acknowledgements ....................................................................................................................................... v
Project Context and Objectives .................................................................................................................... 1
New Graduate Transition in British Columbia .............................................................................................. 3

**PHASE 1 – LITERATURE REVIEW** .................................................................................................................... 5
  - Purpose ............................................................................................................................................... 5
  - Methodology ...................................................................................................................................... 5
  - Results: Best Practice .......................................................................................................................... 6

**PHASE 2 – MIXED METHODS STUDY** ............................................................................................................. 9
  - Purpose ............................................................................................................................................... 9
  - Qualitative Component – Methodology ............................................................................................. 9
  - Qualitative Component Results ........................................................................................................ 11
  - Quantitative Component – Methodology ........................................................................................ 19
  - Quantitative Component – Results .................................................................................................. 22

**PHASE 3 – THE TOOLKIT** ............................................................................................................................ 334
  - Challenges and Limitations............................................................................................................... 45
  - Future Research and Next Steps ....................................................................................................... 48

REFERENCES ................................................................................................................................................ 50
Appendix A: Health Authority Programs ..................................................................................................... 59
Appendix B1: Lit Synopsis Table .................................................................................................................. 68
Appendix B2: Retention and Turnover Rates APA report ........................................................................... 72
Appendix C: UBCREB Approval .................................................................................................................... 74
Appendix D1: Focus group letter of invitation and consent – NG’s ............................................................ 77
Appendix D2: Focus group letter of invitation and consent – front line managers ................................... 81
Appendix D3: Recruitment poster .............................................................................................................. 85
Appendix E1: Focus group interview guide – NGs ...................................................................................... 87
Appendix E2: Focus group interview guide – front line managers, care coordinators, clinical unit coordinators .............................................................................................................................................. 90
Appendix E3: Individual interview guide – nursing faculty ......................................................................... 92
Appendix F1: Online survey letter of invitation and consent ..................................................................... 94
Appendix F2: NG Survey Final ..................................................................................................................... 97
Appendix F3: Casey-Fink Graduate Nurse Experience Survey .................................................................. 113


Project Context and Objectives

The projected nursing shortage has drawn national and international attention to the recruitment and retention of new nurse graduates. Central to recruitment and retention concerns has been NGs’ transition to practice. The readiness of new graduates for practice has been a longstanding issue with a significant and problematic developmental lag existing between being a student and entering the workplace as a graduate nurse (Romyn et al, 2009; Wolfe, Pesut, & Regan, 2010). The well documented global theory-practice gap (Maben, Latter, & Clark, 2006) is reflected in gaps in new graduates’ role-related knowledge, skills, and clinical judgment. Del Bueno (2005) found that 65 to 76 percent of US new graduates lacked expectations for entry-level clinical judgment. Swedish neophyte nurses were rated lowest in the areas of informing and teaching co-workers and students and planning and prioritizing nursing interventions (Lofmark, Smide, & Wikblad, 2006). Furthermore, near misses and omissions and errors were observed among Norwegian new nurses’ performance of clinical skills (Bjork & Kirkevold, 1999).

There is a plethora of literature on the transition of the new nurse graduate to practice, dating back to Kramer’s (1974) seminal work on the nature of this transition as a reality shock. Various facets of this transition have been studied including new graduates’ perceptions and experiences of the transition (Goh & Watt, 2003), support (Johnstone, Kanitsaki, & Currie, 2008), competence (Lofmark et al; Ramritu & Barnard, 2001), retention (Altier & Krsek, 2006), job satisfaction (Altier & Krsek), the workplace environment (Lavoie-Tremblay, Wright, Desforges, Gelinas, Marchionni, & Drevniok, 2008), and organizational infrastructure (Schoessler & Waldo, 2006). In addition, NG transition models have been developed that capture this very unique developmental process (Boychuk-Duchscher, 2009).

Transitional programs have emerged internationally to support the integration of new nurses into the workplace. While some question the need for graduate transition programs, proponents regard them as essential for new graduates and in some countries they have even been standardized (Spector & Echternacht, 2010). Referred to as transition support programs, new graduate nurse programs, residencies, or internships, transition programs have been diverse in duration, structure, content, program components, and financial support. Components generally include a combination of the following: education, formal or informal preceptorships or mentorships, extensive supernumerary time, and formal orientation programs. Although transitional programs have been implemented across a range of practice settings, the majority have been developed for the acute care workplace, where 60 percent of new graduates choose to practice.

Evidence has been mixed in demonstrating the value of these programs (Evans, 2008). On the basis of their review, Levett-Jones and FitzGerald (2005) concluded that nurse graduate programs as a whole and their constituent components have not been studied in a systematic, comprehensive or objective manner to determine their efficacy or cost-effectiveness. Although there has been a volume of work done in the area, there has been little consensus regarding what constitutes best practice.

This project was guided by a three-fold purpose: i) to determine best practices from the literature for integrating NGs in the workplace (Phase I); ii) to analyze the current application of identified NG best practices within BC context for strengths and gaps (Phase II); and iii) to develop a best practices toolkit for use with BC new nurse graduates (Phase III).
The study utilized a process-oriented approach that is sensitive to context: an important consideration in the highly variable health human resource arena and in situations such as graduate transitional programs where costs, efficiency, feasibility and political climate require a broader, multi-factorial approach than the traditional gold standard based solely on outcomes evidence. Targeted areas emerged in the early stages of the project development that served as the guiding framework for the study.

1. Education in the pre-registration (undergraduate) stage, orientation, and transition of NGs

What best practices for preparing undergraduate nursing students for the transition are being included in BC nursing educational programs? What are the barriers to incorporating academic education best practices? What strategies could expand the use of academic education best practices? What educational best practices for new graduates are being used? When are they included? Are they formal or informal? What educational best practices facilitate NG integration? What are the barriers to incorporating practice education best practices? What strategies could expand the use of practice-education best practices?

2. Support and satisfaction of NGs

What best practices related to support are given, when, where and how? Are they formal or informal? What best practices related to support facilitate NG integration? What are barriers to incorporating best practices related to support? What strategies could expand use of best practices related to support?

3. Competency and critical thinking

What best practices for consolidating competencies are applied in the NG program? How are they assessed, monitored and developed? When are skills consolidated? What are the barriers to the application of best practices for skill consolidation, and strategies to expand uptake?

4. Workplace environment

Does the work environment support best practices for NG integration?

An expanded base of evidence for best practices was obtained utilizing traditional sources of scientific literature, institutional documents and databases related to existing transition initiatives and programs, unpublished program reports, input from experts and stakeholders, and new evidence gathered from our own data collection process.
New Graduate Transition in British Columbia

As BC was the focus of the data collection portion of the investigation, it was essential to have knowledge of NG transition in this province. In the late 2000s, the seven HAs initiated transition programs in response to difficulties in recruiting and retaining NGs. Each HA developed its own unique NG transition program that have changed or grown over the years. HAs had to find funding within base budgets to support NG transition, often with no new dollars available to develop or grow a program. Thereby, no standardized provincial approach was sought and instead was dictated by the financial picture of the HA. Over the years the programs have evolved and now incorporate shared features such as a general and unit-specific orientation, supernumerary time, a defined resource person(s), and formal education opportunities. A summary of BC NG transition by HA is provided in Appendix A.

Every new nurse employee (NG or transfer) hired by a HA, attends general and unit-specific orientation. The general orientation is a requirement of workplace health and safety standards and contractual negotiations, while the unit-specific orientation that follows is the natural process of preparing new hires for the work environment. The amount of time allocated for orientation and the degree of supernumerary time varies across HAs depending on whether NG funding was received, and on whether the NG was previously hired in another role within the HA. Similar funding issues impact how many NGs receive funding to take part in their organization’s formal NG transition program (if applicable).

As information within the literature and at nursing conferences (e.g. Working Integration of New Nurses) emerged, HAs added defined resource individuals to assist with the management of the program and more importantly to provide support to the new graduate. At a program level, this resource person is typically referred to as a program coordinator or manager, and the number of employees in this role varied depending on the size of the HA. At a unit level, the defined resource person was a preceptor or “buddy” on the unit. The majority of HAs offer some form of formal education opportunities for preceptors who supervise NGs during the supernumerary period; however, attendance is typically voluntary.

All HAs offer their NGs formal education opportunities as part of their transition program. There is some variation in content across HAs, but topics typically include items such as Judy Boychuk-Duchscher’s (2008) work on transition theory, inter-generational differences, receiving feedback, and critical thinking and decision making. In some HAs, only the NGs that receive transition funding are eligible to participate in the transition program. All seven HAs have established partnerships with nursing education programs and offer information sessions to graduating nurses regarding their transition support programs.

BC is unique to many jurisdictions due to a well-developed Employed Student Nurse (ESN) Program (Gamroth, Budgen and Lougheed, 2006). This program offers nursing students employment opportunities in BC HA facilities, and results in general and unit-specific orientations occurring while participants are still in their undergraduate education. The program was developed in partnership with employers, educators, the College of Registered Nurses of British Columbia (CRNBC) and the BC Nurses’ Union. The goals of the program are to:

- Offer paid part-time or part-year employment to students to help offset the costs of nursing education.
- Provide student nurses with clinical nursing experience so that they will be job ready when they graduate.
• Foster a climate of professional renewal and give current registered nurses some hope that their workload will improve over time.
• Increase the recruitment of new graduates in BC by building an employment relationship prior to graduation.

This program has provided flexibility to HAs to develop their transition programs. For example, both general and unit-specific orientations have been shortened as NG participants are often familiar with the facility/unit. Investigation into NG transition in BC is not possible without taking into consideration the impact of the ESN Program.

It is important to note that at the time of this study, NGs fell into an unknown economic process wherein retirements were looming, post-secondary seats were expanded, and then an economic downturn (2009) occurred resulting in existing nurses delaying their retirement. This has created a surplus of new graduates, with organizations only hiring into casual positions. The availability of opportunity for NG nurses is not as abundant, causing financial stress for NGs.
PHASE 1 – LITERATURE REVIEW

Purpose

To determine best practices from the literature for integrating NGs in the workplace.

Methodology

Cooper’s (1989) five-stage integrative review guided the process. Following the first stage of problem formulation ensued data collection, evaluation of data points, data analysis and interpretation, and presentation of results. The search strategy that guided the literature review is outlined below.

A standardized charting form was developed and included significant elements for extraction from each of the 47 selected papers. Using RefWorks, a bibliographic management tool, papers were categorized depending on their focus according to four major themes: education (pre-registration and practice), support/satisfaction, competency and critical thinking, and workplace environment. Papers were reviewed for study design, sample size, program elements (e.g. orientation length, transition length, education, supports), and outcomes (e.g. competency, critical thinking, job satisfaction).

In addition, each paper was scored for its levels of evidence using the following criteria that were adapted from a systems developed by Beck (2001) and later adapted by Park and Jones (2010): study design (quasi-experimental = 3 points; longitudinal = 2 points; descriptive and qualitative = 1 point); sample size (greater than 100 = 3 points; 50 – 100 = 2 points; 0 – 50 = 1 point); and author (multiple publications (>3) in the transition program literature = 2 points; limited number of publications within the transition program literature = 1 point). A sample approach was initially used to appraise quality but
the poor reporting of this criterion in the literature led to it being excluded. The result was a level of evidence score specific to each article from 3 (lowest level) to 8 (highest level). Articles with levels of evidence scores from 6 to 8 (n=10) were considered to be strong, and contribute more weight to the discussion and recommendations derived from the review. Two research team members independently scored the studies, with good inter-rater agreement (fixed-marginal kappa score of 0.81).

Results: Best Practice

A table summarizing studies included in this literature review can be found in Appendix B. The majority of studies used descriptive designs (n=26), but quasi-experimental (n=8), qualitative (n=5), and longitudinal (n=4) designs were also represented. Sample sizes reported in the 47 articles reviewed ranged from 10 to 7,907, with a median of 387. Less than 25 percent of the primary authors of the literature in this review had more than three publications in the general transition program literature.

Another challenge was identifying the scope of the preceptors’ role during the orientation portion of transition. Despite the frequent use of preceptors, seldom did the literature define the proportion of a new graduate’s shifts that were with a preceptor, whether the preceptor had received training, or if there was a formal matching process. NG education was also a common theme in the literature, but again poorly described. Content, methods of delivery, and total number of hours for formal education were infrequently reported.

The literature review revealed both generic transition programs (n=13) and programs based on a specific model: extended preceptorship (n=11), mentorship (n=7), residency (n=10), internship (n=2). Transition programs varied in length from less than one month to over a year, with 14 papers not specifically identifying a program length. Transition programs typically provided the NG with defined resource person(s), formal education, and peer support opportunities. Having a transition program resulted in a cost-benefit for the agency due to improved NG retention and decreased turnover (Appendix B2).

The literature was further analyzed according to the four main themes of the project: education (from pre-registration to transition), support/satisfaction, competency and critical thinking, and workplace environment.

Education (Pre-Registration to Transition)

Pre-registration

Anecdotal reports within the literature identified a significant proportion of nurse managers and new graduates feel NGs are not prepared to meet the requirements of entry-level practice upon graduation. Findings from a large retrospective study collected data via survey from more than 7,000 NG nurses in the US. showed that stronger nursing preparation programs included common education elements, such as faculty that taught didactic content and clinical activities, used information technology and evidence-based practice, integrated pathophysiology and critical thinking throughout the curriculum, and had content related to the care of specific client populations including care of medical-surgical clients, care of clients with psychiatric disorders, and women’s health as independent courses (Li and Kenward, 2006). Several articles described academic-practice partnerships that resulted in human resources support such as additional clinical practicum opportunities (Campbell et al., 2001), academic involvement in preceptor education (Pickens and Fargostein, 2006), and access to academic offerings by staff (Roche et al., 2004).
Transition

Formal education offered with NG transition programs was frequently mentioned, but rarely well-described or specifically evaluated. Only two of the 13 papers (Blanzola et al., 2004; Young et al., 2008), provided a breakdown of the time spent on each component (e.g. hours spent on practical education vs. hours spent on theoretical classroom type learning). Opportunities were typically delivered via course work and classroom sessions and included clinical practice topics such as pain management, end-of-life care, medication errors, supporting the family during crisis, and pathophysiology (Blanzola et al., 2004; Gavlak, 2007; Strauss, 2009; Beyea et al., 2007). Further into the transition programs professional development topics were introduced that included managing the complex patient, conflict resolution, action-oriented learning, and leadership (Blanzola et al., 2004; Keller et al., 2006; Schoessler and Waldo, 2006).

Self-evaluations from nurse graduates suggested that providing dedicated time during transition for specific skill practice results in higher levels of NG comfort (Gavlak, 2007). Such practical skill development opportunities were preferred to formal classroom instruction, as evidenced by comments such as “the classes were overwhelming and took time away from patient care,” and “There are a lot of subjects that are not relevant to my practice area. My time would be better spent on the unit” (Fink et al., 2008). The use of human patient simulation (Beyea et al., 2007) holds promise, but warrants further investigation within the context of a formal new graduate transition program.

Support/Satisfaction

Typically, support is initially provided to NGs via a unit orientation, and often through a preceptorship. An orientation component is specifically described in 18 papers within the transition program literature, with periods ranging in length from less than four weeks to more than three months, and with preceptorship as a strong theme. Some weaker evidence within the transition program literature suggested longer orientations that met NGs’ needs result in better satisfaction and retention (Scott et al., 2008), while stronger evidence showed improved new hire satisfaction with orientation (Baggot et al., 2005; Lee et al., 2009) and improved retention (Baggot et al., 2005; Lee et al., 2009) when preceptors have received formal training. Although there was considerable variation in the length of preceptor training programs (from three hours to three days) and delivery methods, common elements included adult learning principles, learning styles, conflict resolution, and Benner’s (1984) novice to expert transition framework. There was also significant evidence to suggest NG job satisfaction and levels of organizational commitment are lowest near the six-month period post-hire (Bratt, 2009; Krugman et al., 2004), but improved over the course of the next six months (Krugman et al., 2004; Williams, Goode, Krsek, Bednash, and Lynn, 2007; Casey et. al, 2004). Thus, it appeared NGs experience an initial level of reality shock during their transition to practice that last six to nine months post-hire, and they emerge from this towards the end of their first year. It can be reasonably argued that some level of formal support should be provided to the NG for a period longer than six months post-hire to ensure they feel supported during this crucial period. Also, strong evidence within the literature demonstrated higher NG retention and lower turnover when NGs are involved in a transition program.

Competency and Critical Thinking

Competency and critical thinking were significant, yet poorly investigated, themes in the literature. Standardized tools utilized to measure competency included the Performance Based Development System (Anthony and del Beuno, 2001), the Professional Judgment Rating Form (Facione et al., 1998), and the Casey-Fink Graduate Nurse Experience Survey (Goode et al., 2009). Increased competency as a
result of participating in a transition program was found regardless of rater (self, peer, preceptor, manager or administrator), duration, or type of transition program (Komaratat and Oumtanee, 2009; Beyea et al., 2007; Goode et al., 2009). Weaker evidence suggests NGs feel inadequately prepared in areas such as administering medications to groups of clients (Li and Kenward, 2006; Smith and Crawford, 2003), pharmacology (Rydon et al., 2007), nurse-physician interactions (Casey et al., 2007; Li and Kenward, 2006); and felt there was a deficiency in clinical practice opportunities during undergraduate education (Ellerton and Gregor, 2003). Problem-based learning improved critical thinking abilities when compared to traditional methods of education (Uys et al., 2004) but warrants further study within the context of a transition program.

**Workplace Environment**

Workplace environment is a significant factor potentially impacting NG transition, yet it is not heavily studied in the context of a formal transition program. A comprehensive investigation regarding NGs (n=371) in a transition program and their workplace environment utilized a standardized tool to rank the health of clinical units’ work environments employing NGs, and demonstrated those working on clinical units identified as “healthy” or “very healthy” work environments experienced less reality shock as they transitioned to practice (Kramer, Brewer & Maguire, 2013). There was strong subjective feedback from NGs revealing a lack of acceptance and respect, and an insensitivity of experienced nurses to the needs of NGs for continued development in time management skills (Casey et al., 2004). Also, the availability of peer support and the camaraderie it provided were reported as satisfying aspects of the NG work environment.
PHASE 2 – MIXED METHODS STUDY

Purpose

The purpose of the mixed methods study was to analyze the current application of identified NG best practices within the BC context for strengths and gaps.

Best practices associated with NG transition programs found in the Phase 1 literature review were limited, which influenced the direction of Phase 2 and the plan for analyzing the application of best practices in the BC context. The original plan was modified to accommodate these limitations and broaden this study to look at NG transition program practices in general (whether they were best practices or not). A mixed methods study (Doyle, Brady, & Byrne, 2009) was designed to provide a comprehensive assessment/picture of new nurse graduate transition practices in selected BC hospitals, across seven HAs, from the perspective of multiple stakeholder groups. The qualitative component of the study involved focus groups with new graduates, nurse leaders, and NG transition coordinators; individual interviews were conducted with academic educators. The quantitative component of the study included an online survey of new graduates who were within a year of starting employment. In June 2011, final approval was received from UBCO’s Research Ethics Board (Appendix C), and data collection commenced immediately thereafter.

Qualitative Component – Methodology

The purpose of the qualitative study was to understand NG transition program current practices from the perspective of multiple stakeholders.

Design

The qualitative component of the mixed methods design involved a combination of focus groups and individual interviews with multiple stakeholder groups.

Sample

Following ethics review, sample recruitment began. The sample for the qualitative study included four stakeholder groups: NGs, front-line nurse managers (e.g. clinical unit coordinators and care coordinators), transition program coordinators, and nurse educators from academic programs. Potential NG (class of 2010) and nurse leader participants working in acute care from all HAs were recruited by email through a letter of information and invitation (Appendix D). Each HA’s internal mechanisms for communication were used. Additional recruitment, promotion of the project and invitation to participate occurred through posters (Appendix D2) placed in hospitals within areas that NGS and managers frequent (e.g. nurse staff room). NG transition program coordinators and academic nurse educators were recruited through an invitation from the working-steering committee member affiliated with the relevant HA or educational institution.
Data Collection

Data collection involved individual interviews with nurse education faculty, and separate focus group interviews with NGs, front-line nurse managers, and transition program coordinators. Three researchers facilitated the focus group interviews using the semi-structured interview guide specific to each stakeholder group (Appendix E). The PIs initially developed the interview guides and made modifications based on input and feedback from the working-steering committee. The number of focus groups held in each HA was proportional to the number of NGs employed, thus more sessions were offered in those HAs with larger numbers of NGs such as FH, VCH, VIHA and IH. The total number of participants is outlined in the following table.

Table 1: Focus group numbers per health authority

<table>
<thead>
<tr>
<th>Health Authority</th>
<th>Total # of Sessions</th>
<th>Total # of NG Participants</th>
<th>Total # of Nurse Manager Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraser Health</td>
<td>6</td>
<td>8</td>
<td>7</td>
</tr>
<tr>
<td>Interior Health</td>
<td>6</td>
<td>18</td>
<td>23</td>
</tr>
<tr>
<td>Northern Health</td>
<td>2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Providence Health Care</td>
<td>3</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Provincial Health Services Authority</td>
<td>2</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Vancouver Coastal Health</td>
<td>6</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Vancouver Island Health Authority</td>
<td>6</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>48</td>
<td>69</td>
</tr>
</tbody>
</table>

In addition to NG and front-line manager focus groups, there was also a single session for HA transition program coordinators (n=9), with representation from each. Information regarding nursing undergraduate education program’s curriculum capacity to prepare nurses for the transition to practice was also obtained via three individual interviews with faculty members from three nursing education programs. All interviews (individual or focus group) were digitally recorded.

Data Analysis

Data analysis began during data collection but continued following transcription of the digitally recorded interviews. Both a deductive and inductive analytic approach guided the analysis. The major categories (education, support, competency, workplace environment) that guided the overall study were used to analyze the data, while still allowing for categories to emerge inductively. Similar codes or units of meaning were grouped and categorized and became the initial coding framework. As data collection proceeded, the coding framework was refined to capture the relationships and patterns between and across categories. The qualitative data analysis software NVivo was used to manage the data.
Qualitative Component Results

A description of NGs and nurse leader participants appear in Tables 2 and 3.

Table 2: Description of NG focus group participants (n=48)

<table>
<thead>
<tr>
<th>Demographic Characteristic</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 25</td>
<td>15</td>
<td>31.2</td>
</tr>
<tr>
<td>25-35</td>
<td>21</td>
<td>43.8</td>
</tr>
<tr>
<td>36 or more</td>
<td>7</td>
<td>14.6</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>40</td>
<td>83.3</td>
</tr>
<tr>
<td>Male</td>
<td>3</td>
<td>6.3</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>Length employed</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 6 months</td>
<td>4</td>
<td>8.3</td>
</tr>
<tr>
<td>6 months to 1 year</td>
<td>14</td>
<td>29.2</td>
</tr>
<tr>
<td>More than 1 year</td>
<td>25</td>
<td>52.1</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>Previous health care experience</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ESN Program</td>
<td>32</td>
<td>66.7</td>
</tr>
<tr>
<td>Other health related employment</td>
<td>9</td>
<td>18.8</td>
</tr>
<tr>
<td>No previous health related experience</td>
<td>2</td>
<td>4.1</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>Employment status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent full-time</td>
<td>18</td>
<td>37.5</td>
</tr>
<tr>
<td>Permanent part-time</td>
<td>5</td>
<td>10.4</td>
</tr>
<tr>
<td>Temporary full-time</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Temporary part-time</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Casual</td>
<td>20</td>
<td>41.7</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>Average number of hours worked every 2 weeks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>48 hours or less</td>
<td>11</td>
<td>22.9</td>
</tr>
<tr>
<td>49-80 hours</td>
<td>29</td>
<td>60.4</td>
</tr>
<tr>
<td>More than 80 hours</td>
<td>3</td>
<td>6.3</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.4</td>
</tr>
<tr>
<td><strong>Percentage of night shifts every 2 weeks</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25% or less</td>
<td>11</td>
<td>22.9</td>
</tr>
<tr>
<td>26-50%</td>
<td>21</td>
<td>43.8</td>
</tr>
<tr>
<td>More than 50%</td>
<td>11</td>
<td>22.9</td>
</tr>
<tr>
<td>Missing</td>
<td>5</td>
<td>10.4</td>
</tr>
</tbody>
</table>

Note: NGs who didn’t answer the demographic questions were listed under the “Missing” category of each demographic characteristic.
Table 3: Description of nurse manager focus group participants (n=69)

<table>
<thead>
<tr>
<th>Demographic Characteristic</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Under 25</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>25-35</td>
<td>10</td>
<td>14.4</td>
</tr>
<tr>
<td>36 or more</td>
<td>56</td>
<td>81.2</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>88.4</td>
</tr>
<tr>
<td>Male</td>
<td>5</td>
<td>7.2</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>Length employed in nursing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 10 years</td>
<td>12</td>
<td>17.4</td>
</tr>
<tr>
<td>11-20 years</td>
<td>17</td>
<td>24.6</td>
</tr>
<tr>
<td>More than 20 years</td>
<td>37</td>
<td>53.6</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>% of workload addressing NG issues</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 25%</td>
<td>34</td>
<td>49.3</td>
</tr>
<tr>
<td>26-50%</td>
<td>18</td>
<td>26.1</td>
</tr>
<tr>
<td>More than 50%</td>
<td>14</td>
<td>20.2</td>
</tr>
<tr>
<td>Missing</td>
<td>3</td>
<td>4.4</td>
</tr>
</tbody>
</table>

Note: Nurse managers who didn’t answer the demographic questions were listed under the “Missing” category of each demographic characteristic.

**Themes**

Findings are organized according to the framework guiding the study — education, support/satisfaction, competency/critical thinking, and workplace environment. Within and across each of these framework categories was the strong theme of role stress/role ambiguity. Role ambiguity described lack of clarity, confusion, and misconceptions about expected behaviours and role responsibilities within the context of NG transition programs. Role ambiguity appeared in conjunction with NGs’ roles but was also prevalent among the major stakeholders in the transition programs.

**Education**

The broader theme of education applied to pre-registration education and transition. Pre-registration education sub-themes included academic preparation, Employed Student Nurse Program, and career planning. Transition education sub-themes included orientation, preceptorship, and formal learning opportunities.
**Pre-Registration**

**Academic Preparation.** New graduates and faculty were generally satisfied with the basic education provided in preparing the NG for practice; however, NGs and unit leaders identified some gaps (uncertainty of their knowledge, lapses in time, recall of content (e.g. anatomy) or comfort with practice skills). It was also seen as a test of one’s consolidation of the education into practice as highlighted by one NG who stated, “Being the person who had to figure out what to do with the information I found, as opposed to just telling the primary RN. It was quite a switch.” (PHSA NG).

Unit leaders identified the loss of practical skills during practice and time away from medicine/surgery as creating a barrier to NG transition. Faculty commented on the disconnect between the theory provided in academia and actual practice and identified the role of academia to provide this knowledge base and the healthcare organization’s role to transition NGs from student to registered nurse. NGs echoed the theory-practice gap and the resultant role stress placed on them. A FH NG commented, “I think in nursing school, though they teach you in the perfect world situation... it’s another shock once you get out there to see, oh this is what it’s really like.” Additional role issues and of great impact for new graduates was being thrown into roles (due to unforeseen scheduling on their wards), such as charge nurse, for which their basic education had not prepared them. A VCH NG shared “I was put in charge of the unit on my second set of shifts so... it was scary. And I didn’t get any training on being in charge either.” It was apparent that there were misconceptions of “responsibility” related to transition that reflected a lack of collaboration between academia and practice. There was also a sense from NGs that the school was responsible for more than just entry level education, including preparation with advanced practice knowledge in leadership and management skills.

**Employed Student Nurse.** The Employed Student Nurse (ESN) Program, a summer employment opportunity for third year undergraduate nursing students, was lauded by both graduates and unit leaders but yet was a source of tension for NGs. Both NGs and unit leaders expressed the value of the ESN Program. An IH nurse manager reported “I think the biggest change I’ve seen is the difference between the NG who had attended an ESN Program... or who was an employed student nurse starting out that they are leaps and bounds ahead of the graduate who has not taken part in that program”. This was echoed by NGs who had experienced the ideal of doing an ESN Program on the same unit as their NG program and expressed the more extensive preparation they had gained as a result. NGs and unit leaders felt that NGs who had participated in ESN Program fit in easier, already had established relationships with staff, knew what to expect, and felt confident more quickly than those who either did not do an ESN Program or did one on a different ward. A FH NG said “I actually found the ESN Program very helpful because it teaches you how to work within a team” while a clinical nurse educator at PHC indicated that, “They’re already understanding the culture and are often pretty integrated at being in the culture, which really eases their path.” NGs who had ESN experience felt there were higher expectations of them and this was corroborated by unit leaders who confirmed that the NG received fewer orientations or buddied shifts because of their familiarity with the culture and the staff. Yet, ESN NGs often felt that they needed the same number of shifts as their non-ESN counterparts in order to learn the NG (RN) role and scope of practice, which was vastly different from the ESN role.

“Because when I was an ESN it was really easy to ask people and ask questions and people took the time to explain things to you and you’re like oh you’re a student no problem, you’re an ESN, it’s great... but then when I started just the next week I went to a totally different unit and right away my status changed from ESN to RN and I was expected to know a lot more and people didn’t take as much time to explain things.”
Participants felt that students who had done an ESN Program on certain wards were given preferential treatment with hiring; unit leaders confirmed this (final preceptorship students). NGs generally found the politics of hiring practice difficult to navigate. One NG even mentioned that her instructor discouraged the ESN Program due to the intense schedule of schooling, and she regretted not doing it because of the lost seniority. One nurse manager from NH also remarked that they were more likely to hire from particular schools with curricula that better prepared students. She stated, “We have nurses from different programs and their sense of professionalism, accountability, responsibility for practice can be significantly different.” NGs emphasized the value of the ESN Program in providing potential employment opportunities rather than facilitating job readiness (improving self, consolidating skills). “... I worked as an ESN for two years on a certain unit but then I wasn’t hired on that unit, and I remember in my graduating class almost all the ESNs did not get jobs on the floor we ESN’d at.” (VCH NG). Such statements demonstrate the many mixed messages new graduates received as undergraduate students, which had created stress for them.

**Career Planning.** The idea of career planning was mentioned by NGs as something that would add benefit to their transition experience. They described career planning as having someone explain to them early in their education the variety of different routes that their practice could take. Some NGs felt disillusioned as a result of being given misinformation that had cost them opportunities for advancement (e.g. not being able to specialize and then losing out on seniority in that area). They felt a career planning guidance session would aid them in making these decisions. NGs who did not participate in the new grad or ESN Program expressed similar sentiments in being behind in seniority due to these decisions. The need for specialty was contradicted by faculty who voiced specialties were not within their mandate and should not be added to the entry level preparation. Many managers and clinical educators voiced that NGs were not ready or needed to “pay their dues” on a regular nursing unit rather than move into a specialty as a first job. This again illustrates mixed messages, which a neophyte struggles with and raises questions about the validity of placing a NG into a specialty area where there are advanced knowledge and skill requirements.

**Transition**

**Orientation.** Inconsistencies in orientations (content, length, delivery methods, available funding) were common among NGs and many were surprised to hear what other new hires had encountered during their orientations (new and experienced hires in orientation together, limited supernumerary time, multiple unit orientations). Nurse managers observed similar inconsistencies.

**Preceptorship.** NGs and nurse managers viewed buddy shifts (e.g. supernumerary, preceptorship) as very beneficial to NG transition. There was remarkable variability in the number of buddy shifts from hospital to hospital and even ward to ward. Although NGs generally remarked that they had received enough buddy shifts, some suggested that having independent shifts or staggering them would have been helpful. NGs found that lack of mentorship or consistency in buddy shifts was a barrier to their transition (after the most common finding; inconsistent work shifts). The mentor was described as a consistently assigned person who role modeled best practice, determined the NG’s learning needs with them, and assisted the NG in navigating the transition journey. The mentor needed to be approachable, advocating for the NG, and showing an interest in the NG not just as a nurse but as a person. All of these qualities influenced the NGs sense of trust.
Lack of preceptor training was a common problem voiced by both NGs and the nurse managers. Both the NG and the nurse manager identified lack of preceptor training as a common problem. Nurse managers found funding to be a barrier to provide opportunities for staff to attend preceptor training. Nurse managers also found preceptors lacking mentoring skills and that this negatively affected NGs support structure. Support in making a successful transition was optimized when the buddy or preceptor had knowledge and skills related to coaching and providing feedback. Nurse managers expressed they often just needed to take whoever stepped up due to a lack of interest, with the assignment generally falling to an experienced staff member with a full patient assignment. Buddy shifts were often perceived as added workload in an environment dealing with acute patients needing significant healthcare attention. Staff tried to balance management of the patient load as well as educate the new hire into the multiple routines of the unit. Staff members acknowledged their professional responsibility to grow their own.

“We’re inundated with requests and of course the staff nurses get a little bit fatigued from repeatedly having to step up and be a preceptor. I mean most of the time they don’t mind doing it but they don’t want to do it all the time” reported a nurse manager at PHC.

**Formal Learning Opportunities.** There were varied responses about the benefits of the education seminars. Many NGs found that the education workshops were not useful and repeated skills they had already learned in school. Education that was relevant was valued; otherwise it was not helpful. Many responses focused on the need for more practical experiences (mock scenarios, clinical practice) and less classroom learning. The education sessions were useful as a social tool however, to get to know other graduates and compare stories. The NG found it comforting to know that others were experiencing similar doubts and concerns. “The workshops were helpful... to know that there are other people out there feeling the exact same way you do” (FH NG). Arising from this discussion was the desire for either an online or regular support group of sorts for graduates to discuss the process on a regular basis. Nurse managers also mentioned that they felt having an internal program for NGs to discuss things with each other would be beneficial to the transition process.

**Support and Satisfaction**

NGs and nurse leaders identified support as a major theme. Support was defined as NGs’ perceptions of access to available people resources when they needed it. They expressed extremes in the nature and amount of this support, but overall found it lacking or inconsistent. Sub-themes included employment dissatisfaction related to hiring, available work hours for NGs, and financial constraints emphasized by nurse managers; vacillating support, accessing support agents, and monitoring progress.

**Employment Dissatisfaction.** NGs felt very disillusioned about the hiring practices they encountered after graduation. Many were working on a casual basis with some mentioning it took a long time before they had consistent hours; this negatively affected their transition. “The first three months after graduating, I sat home and played on Facebook. I had no work whatsoever” (VIHA NG). Many remarked that when they started school they were told there were jobs everywhere and then once they graduated the jobs were no longer available due to lack of funding. A nurse manager from VIHA remarked similarly when discussing hiring practices. “An issue we’ve been having is there is no work for them.”
This process was very disheartening to many. The stress of not having consistent hours was significant for NGs as they struggled to manage school loans, rent, food and other lifestyle expenses. Gaps in solidifying practice created self-doubt, feelings of inadequacy and increased stress levels for NGs.

“There are just so many worries in the beginning, which makes it very stressful for those just starting out. Along with being a new grad, you’re worried about money, and there are not a lot of full-time lines to just jump into…” (FH NG).

Nurse managers expressed great frustration with funding and the behind-the-scenes politics that were unseen by NGs. Funding restrictions and restructuring made it difficult for nurse managers to hire as they wished, as budgets worked out over many other considerations. They reported offering positions based on the information provided from the organization systems but felt financially bound to offer less than what the NG needed (e.g. An ESN NG needs only four shifts, the program only offers 144 hours or 12, twelve-hour shifts). Nurse managers also remarked about the large number of long time nurses retiring, which made covering shifts challenging because a sizeable percentage of the staff would be recent hires (less than five years). Decreased hours of employment caused inadequate time to further consolidate their knowledge and skills leading to increased stress. NGs voiced that the manager contributed to the NG role stress/confusion with the mixed messages, funding concerns and varied approaches to transition.

**Vacillating Support.** NGs seemed to either feel a lack of support, or amazing support; this support seemed to come from key people rather than from the system at large. Without consistent hours, NGs were faced with being the new person on the unit almost daily. When the unit staff were unfamiliar with the NG’s personality or competency level, NGs felt treated as outsiders. Alternately, they experienced higher expectations from staff who assumed, since they had been an ESN, their knowledge level was higher. New staff often expressed the stress of being left in situations where they had to cope independently.

NGs appreciated when they received caring support that recognized how novice they were and the degree of support they needed, and moved them through their evolving practice. A PHSA NG shared, “I just would have liked more buddy shifts that concentrated more on helping me transition to being on my own and not necessarily orienting me to a unit.” NGs often attributed their success at transitioning to their ability to advocate for themselves as expressed by a VCH NG, “I think advocating, being strong and standing up for yourself helped.” Nurse managers held contrary views, often remarking that students were not ready for the position, did not have insight, and were completely overwhelmed by the process. They also saw many NGs trying to “do it all” and not asking for help (not advocating for themselves). This variance of independence by NGs and the “team” or group approach valued by the nurse managers demonstrates role confusion, and may stem from a lack of agreement about how the NGs stages of role development should occur during transition.

**Accessing Support Agents.** There was significant confusion surrounding the clinical (unit) educator and transition program personnel. NGs voiced a need for an available, trusted educator that they could turn to, especially in the first few months of transition, but did not highlight what position this was within their work environment. In some cases, the NG felt this “person” was invisible or was someone who dropped in once in a while to see how the NG was transitioning, without a true connection to the individual. “They said the educator would check-in, we could call them any time day or night and they would come and chat with us and I never saw them” voiced a VCH NG. This was echoed by a PHS NG, “Yes on paper they are there for you but... they’re not really.” Others felt it was
significant to have a third party individual (someone outside of the unit) that could advocate for them if necessary as noted by a VCH NG:

“I think it was really good to have that other person outside of the ward to follow up with you too, to sit down with you and go over learning goals and go through things to make sure that the process is going as it should be.”

Nurse managers expressed NG educators as good supports for the NGs. One nurse manager shared:

“They’re like mothers. We found that when our new grads had a problem they won’t necessarily come to the educator on the unit, they go to the new grad educator because they get this emotional support that the new grad educators provide for them. If they’re really having a hard time coping with whatever, then they will go talk to the new grad educators. She mothers them… being the sounding board for their anxieties” (PHC nurse manager).

Monitoring Progress. Feedback was greatly missing from the transition process with many of the NGs remarking they wished they had the opportunity to hear about their progress. NGs wanted regular, early evaluation from others regarding progress, especially in the first three months, but also at certain points throughout the first year. “I always asked for feedback on my buddy shifts and got it instead of ya, you’re fine go ahead.” (VCH NG). Nurse managers also expressed the importance of ongoing monitoring of NGs progress during their transition as a way to offer them guidance on strengths and gaps in their practice.

There were mixed opinions on the evaluation process. Both groups preferred an informal review process that involved touching base, rather than a performance appraisal. However, nurse managers saw NGs inability to seek feedback as a barrier; they saw their lack of questions as not taking charge of their own review. This was in contrast to NGs who put the onus on nurse managers to provide this feedback. Nurse leaders emphasized the importance of NGs formulating a learning plan for regular progress checking. Some NGs used competency skills lists or the CAPE (Competency Assessment Planning and Evaluation) tool but noted its tendency to get lost over time, due to a lack of motivation. Mixed messages of role responsibility was evident in the focus groups regarding performance review. However, the uncertainty of how one is transitioning can lead to self-doubt, frustration and/or new stress.

Competency and Critical Thinking

Developing competency was a major theme with sub-themes of development expectations and factors facilitating development. Critical thinking was implicit in NGs’ descriptions of competency. They talked about the need for support to cultivate critical thinking through questioning and being questioned and through processing and debriefing about clinical situations.

Development Expectations. Changes in roles during the transition were cited as the most difficult. NGs felt that expectations or assumptions of their skills changed dramatically once their buddy shifts were done. In particular, NGs with ESN preparedness experienced overwhelming expectations and felt that they were considered an equal to the team before they felt ready. Many NGs remarked that they were expected to suddenly have skills outside the role of an ESN or even a NG (e.g. blood transfusion, in-charge, emergency response).
NGs regarded indicators of transition as just sort of happening and evolving over time and experienced a gradual shift toward feeling more confident. Often, this seemed to occur after about a year, or just shortly before the time that they were being interviewed. A few mentioned that they would feel more confident when they realized that they were able to help the next round of ESNs or NGs and that they could see the “scared” look and recognized that it was a look that they themselves no longer had. Nurse managers did not remark on this process as readily as NGs did; however, they also witnessed moments where NGs were able to advocate for themselves, and others and saw this as being an indicator of their transition. However, nurse managers also remarked on some nurses being “new” even years into their practice.

Factors Towards Development. NGs and nurse managers recognized the main facilitator of transition as consistent work hours. NGs found that they would transition easier if they had participated in the ESN Program, done buddy shifts and been trained on one ward where they got consistent hours. This of course was an ideal, but even those NGs who were unable to follow that path found that full-time hours made it easier for them to feel a sense of continuity in their practice and skills building. NGs who remarked that their transition was rocky, often mentioned working casual on different wards where every shift was different. “Experience and having supports there while you are in the middle of things, and to ask questions helps you through it. You can read about something over and over, but until you do it, it is not quite the same” (PHC NG). Education opportunities were valued by NGs as ways to improve their skills. Sometimes they would not be offered at times that NGs felt able to partake in them but “… you’re not going to know everything all the time, but knowing how to find stuff out I think is very important.” (VCH NG).

Workplace Environment

Overall, the talk around the culture and work environment was positive. NGs felt mostly supported in their roles and talked favourably about the environment. NGs valued a consistent setting where they could be comfortable with their assignments and regularly connect with the unit and the people there. NGs voiced that supportive environments promoted and encouraged further learning, and in turn, grew confidence. In addition, younger nurses who were not so distant from the transition experience were noted to be helpful and supportive of the NGs. Further, it was noted that NGs valued social network support; however, not only from nursing but also people in housekeeping, unit clerks and doctors. The personality of mentors played a huge role in fostering a strong work environment for NGs.

There were a few comments about fearing for the safety of patients, although nurse managers remarked more heavily on this. They saw that the culture of NGs made them less likely to ask questions and to have an understanding of the continuity of care a patient needed. Nurse managers saw many NGs not taking breaks and trying to do it all rather than delegate; they saw this as a problem for the overall culture of the workplace. NGs remarked on this as well; feeling alone on the unit and trying to coordinate many things without support. This appeared to be a communication breakdown between the two parties. NGs remarked a few times about how they felt confident once they could talk to doctors; this was outside of their scope of practice as a student, and so it caused fear at first when they started as a licensed nurse.
NGs also voiced examples of interpersonal conflict and how difficult it was for them, such as attempting to navigate through workplace politics, personally enduring horizontal violence from peers, and having their confidence undermined by support agents who challenged their career choice.

**Role Ambiguity**

Throughout the qualitative data, the researchers noted an underlying theme of role ambiguity/confusion and/or misconceptions. This perception, although not directly quoted by focus group participants, was embedded within each stakeholder or process involved in the transition of NGs. It was reflected within the conversations of the parties speaking about role expectations, responsibilities of those involved in transition programs and/or system wide discrepancies. This theme suggests conflict and challenges that requires further examination to formulate best practices.

**Quantitative Component – Methodology**

The purpose of the quantitative component was to identify the relationships between NG transition program components and NGs’ transition experiences.

**Questions**

The overall question guiding the quantitative study was: what is the relationship between participation in a NG transition program and NGs’ transition experience. If so, what education, support, competency/critical-thinking, and workplace environment components are associated with the NG’s transition?

The following research questions guided the study of the relationships between educational components of transition programs and transition:

1. What is the relationship between the helpfulness of different education methods of delivery and the transition experience?
2. What is the relationship between the timing of NG-specific education and NGs’ transition experience? Among nurses who participated in a formal NG transition program, is there a difference in the mean value of the total or subscale transition score between nurses who received their NG-specific education throughout the first year of transition and those who received it during the orientation period? What is the effect on transition of delivering education throughout the first year of transition compared to education that is compressed into the orientation period?
3. After taking into account when the NGs received their NG-specific education, is there a relationship between their total transition scores and their ability to access support when needed?

The following research questions guided the study of the relationships between transition scores and support associated with orientation (length and percent of preceptored shifts) and transition program components (participation in a transition program or not, helpfulness of people supports associated with transition).
1. How does length of orientation affect transition?
2. How does the percentage of NG shifts that are preceptored during the orientation period affect transition?
3. Do the nurses who were provided by their organization with a formal NG transition program differ in their mean value of the total transition score from the nurses who weren’t provided with such a program?
4. What are the most helpful perceived supports for NGs who participated in a NG transition program? Which people supports are related to transition?
5. Does participation in a formal transition program account for a significant amount of variability in the total transition score over and above that accounted for by length of orientation?

The following research questions guided the study of competency related factors, specifically employment status and number of hours worked, and their effect on competency during transition? It was hypothesized that full-time employment combined with more than 49 hours worked over a two-week period would increase competency of NGs during transition.

1. Does the employment status and number of hours worked in a two-week period affect the NG transition experience?
2. After controlling for length of employment of NGs, does transition program participation affect NG transition experience?

The following research questions guided the study of the relationships between transition scores and workplace environment conceptualized as an ability to access support when needed and perceptions of bullying/harassment. To evaluate the impact of a formal NG transition program on bullying/harassment this investigation examined the ability of NGs to access support during times when they felt they needed it most.

1. When do BC NGs feel the greatest need for support during their transition to practice? Are they able to access support when they feel the greatest need?
2. What is the prevalence of self-reported bullying among NGs?
3. After taking into account whether or not the NGs were bullied/harassed in the workplace, is there a relationship between their total and subscale transition scores and how often they accessed support when they felt their greatest need for support?
4. For NGs, what is the relationship between the total/subscale transition score and the predictors “transition program participation,” “bullying/harassment” and “ability to access support when needed most”?

**Design**

The quantitative component of the study included an online survey of NGs within a year of starting employment.

**Sample**

Following ethics approval from two BC post-secondary institutions’ (university) ethics review boards and seven BC HAs, sample recruitment began. The project’s working-steering committee consisted of representatives from each HA in BC; they assisted in the identification of BC NGs who graduated in 2010
(n=1,008) and were working in acute care. Recruitment of the sample consisted of mechanisms internal to each HA and included a letter of information, invitation to participate, and consent process sent via email (Appendix F). A link to an online survey was included in the letter of information, and participant consent was implied via survey completion. Each eligible NG was sent at least one follow-up email reminder.

**Data Collection**

The quantitative component of the project involved administration of an online survey (Appendix F2) that consisted of five sections: demographics, orientation to the employer/nursing unit, general transition, specific NG transition program, and the Casey-Fink Graduate Nurse Experience Survey (Casey, Fink, Krugman, & Propst, 2004) (Appendix F3). Prior to administration, the survey was pilot tested by NGs for clarity of instructions and items, readability, and time to completion with minor changes based on their feedback. Demographics obtained information related to age, gender, employment/work status, previous health experience, etc. Questions related to the orientation stage asked if NGs had received an orientation, its length (none, <2 weeks, between 2-4 weeks, >4 weeks) and the percentage of preceptored shifts it involved (none, <25%, 26-50%, 51-75%, >75%). General transition questions asked new graduates when they experienced the greatest need for support, including how often during their time of greatest need were they able to access support, and if they had experienced any bullying and/or harassment in the workplace as an NG. Specific transition program questions asked about the length of the program; the helpfulness of educational resources (including written materials, classroom/ theory, simulation/ lab, hands-on/ bedside learning, in services/ workshops, and website/ online materials); and the helpfulness of people resources (preceptors, mentors, transition program coordinators, clinical educators, staff and peers). The educational resources were selected based on input from transition coordinators from the seven HAs represented in this study, and included specifics of the NG education and people supports that they included in their transition programs. Other information provided by HA transition program coordinators revealed that three HAs specifically referenced peer-support opportunities where new grads have a chance to share their transition experience with each other. Another interesting difference in programs is that four of the health authorities deliver NG-specific workshops throughout the first year of transition, while the remaining three deliver NG-specific workshops only during the initial orientation period.

The Casey-Fink survey instrument (Appendix F3) was utilized to quantify NGs transition experience and taps into NGs’ professional comfort, expectations and supports (Goode et al., 2009). This tool, originally developed in 1999 and revised in 2002, has been used to survey over 250 hospital nurses in the Denver metropolitan area, and has been further validated with over 1,000 graduate nurse residents participating in the University Health System Consortium/AACN Post Baccalaureate Residency Program (Fink, 2004). It is a summative scale, consisting of 24 questions and uses a four-point response scale (1=strongly disagree; 2=disagree; 3=agree; 4=strongly agree), with total scores ranging from 24 to 96. The higher the score, the better the overall transition of the NGs. Initial psychometrics included principal Axis Factoring with Varimax rotation analysis that produced a five-factor solution accounting for 46 percent of the variation in total scores. The factors/subscales include (1) organizing/prioritizing (.79), (2) communication/leadership (.75), (3) support (.90), (4) stress (.71) and (5) professional satisfaction (.83). Reliability estimates for the factors ranged from .71 to .90. The survey took approximately 15 minutes to complete.
Data Analysis

The results of the Casey-Fink portion of the online survey provided each NG with a “transition score” that was used in the data analysis. For each nurse, the total transition score was derived by summing the scores to all 24 questions of the Casey-Fink survey. Five items (Q 5, 8, 16, 17, 24) were reverse coded. The higher the score, the better the overall transition of the NG. Missing responses for individual questions were replaced with the median value for that item computed from responses from the other nurses. Subscale transition scores were similarly obtained by summing relevant items for each dimension following reverse coding of relevant items and replacement of missing values with median scores.

Quantitative Component – Results

A TRANSITION PROGRAM MAKES A DIFFERENCE

A description of NG survey respondents appears in Appendix F4. Each HA was represented in the sample of respondents, with rates ranging from as low as 7 percent to as high as 57 percent, with an overall response rate of 26 percent.

Table 4: New graduate response rates for survey study

<table>
<thead>
<tr>
<th>Health Authority</th>
<th># of NGs Receiving Survey Invite</th>
<th># of NGs who Participated</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraser Health</td>
<td>307</td>
<td>23</td>
<td>7%</td>
</tr>
<tr>
<td>Interior Health</td>
<td>152</td>
<td>72</td>
<td>47%</td>
</tr>
<tr>
<td>Northern Health</td>
<td>122</td>
<td>39</td>
<td>32%</td>
</tr>
<tr>
<td>Providence Health Care</td>
<td>90</td>
<td>24</td>
<td>27%</td>
</tr>
<tr>
<td>Provincial Health Services Authority</td>
<td>21</td>
<td>12</td>
<td>57%</td>
</tr>
<tr>
<td>Vancouver Coastal Health</td>
<td>124</td>
<td>41</td>
<td>21%</td>
</tr>
<tr>
<td>Vancouver Island Health Authority</td>
<td>192</td>
<td>46</td>
<td>24%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1008</td>
<td>257</td>
<td>26%</td>
</tr>
</tbody>
</table>

Does participation in a NG transition program improve the new graduate’s transition experience to the workplace?

Fifty-nine percent, or 144, of survey respondents participated in their HA’s NG transition program. Overall, statistical analysis demonstrated that NGs who took part in their organization’s formal NG transition program differed in their transition experience from those NGs who were not able to take part in such a program (Appendix G). An independent two-sample t-test revealed that on average, the NGs who participated in a formal NG transition program had significantly higher total transition scores than the nurses who did not (t = 4.907, df = 243; P-value < 0.0001). The mean value of the total transition score for the nurses who participated in a formal NG transition program was 5.27 points.
higher (95 percent CI: 3.16 – 7.39) than for the nurses who did not. Similarly, having a formal NG transition program was associated with higher organizing/prioritizing scores (t = 2.249, df = 243; P-value = 0.02541), communication/leadership scores (t = 3.722, df = 243; P-value = 0.00025), support scores (t = 5.002, df = 243; P-value < 0.0001) and professional satisfaction scores (t = 4.058, df = 243; P-value < 0.0001).

**Figure 1:** Side-by-side boxplots of the total and sub-scale transition scores for the nurses who were provided with a formal NG transition program by their organization and for those who were not provided with such a program.

The following summarizes the quantitative portion of the project related to the four themes of education (from pre-registration to transition), support/satisfaction, competency and critical thinking, and workplace environment.

**Education (Pre-Registration to Transition)**

**What is the relationship between participation in an ESN Program (pre-registration) and NG transition scores?**

Of the 257 NGs who took part in the online survey, 146 had participated in BC’s ESN Program (57 percent). Based on the outcome of an independent two-sample t-test, there was no statistically significant difference in the mean values of the total transition scores between the nurses who were previously employed as a student nurse and those who did not hold this type of employment (t = 0.8195, df = 243; P-value = 0.413). Similarly, on average, there was no statistically significant difference between the nurses who participated in BC’s ESN Program and those who did not with respect to their organizing/prioritizing scores (t = -0.3564, df = 243; P-value = 0.7219), communication/
leadership scores (t = 0.4271, df = 243; P-value = 0.6697), support scores (t = -1.5863, df = 243; P-value = 0.114), stress scores (t = -1.4279, df = 243; P-value = 0.1546) and professional satisfaction scores (t = 0.1948, df = 243; P-value = 0.8457).

What is the relationship between the helpfulness of different education methods of delivery and NG transition scores?

Education is a key component of most NG transition programs; BC transition programs are no exception. These programs included a combination of written materials, classroom learning, simulation lab, hands-on/bedside learning, in-services/workshops, and online learning materials. Not all choices were applicable to each NG due to the variation amongst HA transition programs in BC with respect to education delivery methods.

Table 5 presents the percentages of the 144 nurses who found various types of educational materials very helpful, helpful/moderately helpful, not very helpful, or not applicable during their transition process. NGs reported hands-on/bedside learning (58 percent) and in-services/workshops (30 percent) as being the most helpful during transition. A simple linear regression demonstrated a significant positive linear relationship between the total transition score and the helpfulness ranking attributed to in-services/workshops (t = 1.978, df = 142; P-value = 0.0499). The more helpful in-services/workshops were perceived to be by the NGs as an education delivery method, the higher the NGs’ total transition scores (see Figure 2). Also, significant positive linear relationships were found via simple linear regression analyses between the support sub-scale score and the helpfulness ranking attributed to written materials (t = 2.412, df = 142; P-value = 0.0171), simulation/lab (t = 2.070, df = 142; P-value = 0.0402), in-services/workshops (t = 3.524, df = 142; P-value = 0.000571) and website/online (t = 2.407, df = 142; P-value = 0.0174); the higher the helpfulness ranking score for each educational opportunity, the higher their support sub-scale. Lastly, the data provided evidence that the higher the helpfulness ranking attributed by nurses to inservices/workshops, the higher their professional satisfaction sub-scale score (t = 2.640, df = 142, P-value = 0.00921).

Table 5: Percentages of nurses (n=144) who found various types of educational materials very helpful, helpful/moderately helpful, not very helpful, or not applicable during their transition process.

<table>
<thead>
<tr>
<th>Type of Educational Opportunities</th>
<th>Very Helpful</th>
<th>Helpful/Moderately Helpful</th>
<th>Not Very Helpful</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written Materials</td>
<td>18.8</td>
<td>62.5</td>
<td>11.8</td>
<td>6.9</td>
</tr>
<tr>
<td>Classroom/Theory</td>
<td>13.9</td>
<td>63.2</td>
<td>6.2</td>
<td>16.7</td>
</tr>
<tr>
<td>Simulation/Lab</td>
<td>13.2</td>
<td>34.0</td>
<td>2.8</td>
<td>50.0</td>
</tr>
<tr>
<td>Hands-on/Bedside Learning</td>
<td>57.6</td>
<td>23.6</td>
<td>1.4</td>
<td>17.4</td>
</tr>
<tr>
<td>Inservices/Workshops</td>
<td>29.9</td>
<td>59.0</td>
<td>0.7</td>
<td>10.4</td>
</tr>
<tr>
<td>Website/Online Materials</td>
<td>13.2</td>
<td>54.9</td>
<td>9.0</td>
<td>22.9</td>
</tr>
</tbody>
</table>
Among nurses who participated in a formal NG transition program, is there a difference in the mean value of the total or subscale transition score between nurses who received their NG-specific education throughout the first year of transition and those who received it during the orientation period? After taking into account when the NGs received their NG-specific education, is there a relationship between their total transition score and their ability to access support when needed?

Transition program coordinators from BC HAs reported delivery of their NG-specific workshop/education opportunities in one of two ways. Three HAs typically delivered all of their NG-specific education/workshops within the unit orientation period only, while the remaining four HAs offered their NG-specific workshop/education opportunities beyond the typical orientation period. This model typically involved a NG workshop early in the orientation period, and an additional workshop(s) later in the transition process.

An independent two-sample t-test indicated that there was no significant difference in NGs total transition scores whether they had workshop/educational opportunities during the unit orientation period only or received them throughout the first year of transition (t = -0.1237, df = 142; P-value = 0.9017). Similar testing established that having workshop/educational opportunities during the unit orientation period rather than throughout the first year of transition had no significant impact on the organizing/prioritizing scores (t = -2.255, df = 142; P-value = 0.7993), communication/leadership scores (t = -1.233, df = 142; P-value = 0.2196), support scores (t = 0.336, df = 109.667; P-value = 0.7372), stress scores (t = 0.513, df = 70.398; P-value = 0.6096) and professional satisfaction scores (t = 0.507, df = 81.725; P-value = 0.6137). For nurses who received their NG-specific workshops beyond the typical orientation period, there was a significant positive relationship between ability to access support when needed and the total transition score that was not found in NGs who received education during orientation only. For NGs who received year-long education, each one-unit increase in their ability to access support when needed was found to be associated with an increase of 6.14 points in the mean value of the total transition score (95 percent CI: 3.93 to 8.35) (see Figure 2).
Support/Satisfaction

Support was studied in conjunction with orientation and transition program components of the NG transition programs. Orientation involved “supernumerary time,” or time for a NG to become immersed in their new role without workload pressures. Both the length of orientation and the amount of preceptored shifts were viewed as forms of support associated with this stage. Beyond orientation, the transition program consisted of people supports, including mentors, transition program coordinators, clinical unit educators, unit staff, and NG peers.

For nurses who received an orientation from their employer, what is the relationship between their total transition score and their length of orientation?

Table 6 indicates that 176 NGs were provided with a unit orientation. The online survey asked participants about the length of their unit orientation, and responses from participants allowed for the creation of three categories to identify length: two weeks or less (n= 80); more than two weeks but less than four weeks (n=49); four weeks or more (n=48) (see Table 6 below).
Table 6: Orientation information for the 176 NGs who responded to the question “Were you provided with an orientation specific to your unit?”

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orientation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>167</td>
<td>94.89</td>
</tr>
<tr>
<td>From Previous Employment</td>
<td>7</td>
<td>3.98</td>
</tr>
<tr>
<td>No</td>
<td>2</td>
<td>1.14</td>
</tr>
<tr>
<td>Length of Orientation (Weeks)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>78</td>
<td>44.83</td>
</tr>
<tr>
<td>2 but &lt; 4</td>
<td>48</td>
<td>27.59</td>
</tr>
<tr>
<td>&gt; 4</td>
<td>48</td>
<td>27.59</td>
</tr>
<tr>
<td>% Preceptored Shifts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>18</td>
<td>10.34</td>
</tr>
<tr>
<td>25</td>
<td>19</td>
<td>10.92</td>
</tr>
<tr>
<td>26-50</td>
<td>21</td>
<td>12.07</td>
</tr>
<tr>
<td>51-75</td>
<td>25</td>
<td>14.37</td>
</tr>
<tr>
<td>&gt;75</td>
<td>91</td>
<td>52.30</td>
</tr>
</tbody>
</table>

Note: Overall, 174 nurses were considered to have had a unit-specific orientation — 167 nurses who received an orientation from their current employer plus seven nurses who received an orientation from their previous employer. The frequencies and percentages reported for the variables — length of orientation and percentage of preceptored shifts — apply only to these 174 nurses.

A one-way analysis of variance applied to the data from the 174 nurses who received a unit orientation demonstrated that length of orientation had a significant effect on the new graduate nurses’ total transition scores (F = 8.5853, df = 2, 171; P-value = 0.0003). Tukey’s post-hoc comparisons indicated that, on average, the nurses who attended an orientation of four weeks or more had significantly higher total transition scores than nurses who attended an orientation of either two weeks or less, or more than two weeks but less than four. Specifically, the total transition score of the nurses who attended an orientation lasting four weeks or more was on average 6.21 points higher than those nurses who attended an orientation of two weeks or less (95% CI: 2.63 to 9.80) and 4.77 points higher than that of the nurses who attended an orientation lasting more than two weeks, but less than four (95% CI: 0.78 to 8.76). The nurses whose orientation lasted four weeks or more significantly outperformed the other nurses in terms on the communication/leadership sub-scale score (F = 4.2651, df = 2, 171; P-value = 0.0156), the support sub-scale score (F = 11.6460, df = 2, 171; P-value < 0.0001) and the professional satisfaction sub-scale score (F = 5.4800, df = 2, 171; P-value = 0.0049).
Does the percentage of NG shifts that are preceptored during the orientation period affect transition?

Table 7 displays summary statistics describing the distribution of the total transition scores for nurses (n=174) who received a unit orientation according to percent of preceptored shifts. A series of one-way analyses of variance established that the percentage of NG shifts that are preceptored during the orientation period did not have a statistically significant effect on the total transition score (F = 1.057, df = 3, 170; P-value=0.3689) and on each of the subscale transition scores: priority setting/organizing (F = 0.8141, df = 3, 170; P-value = 0.4877), communication/leadership (F = 0.4136, df = 3, 170; P-value = 0.7434), support (F = 1.562, df = 3, 170; P-value = 0.2004), stress (F = 1.009, df = 3, 170; P-value = 0.3900), and professional satisfaction (F = 0.5045, df = 3, 170; P-value = 0.6797).

Table 7: Summary statistics describing the distribution of total transition scores in the groups of nurses defined according to the percentage of their preceptored shifts during their specific unit orientation.

<table>
<thead>
<tr>
<th>Percent Preceptored Shifts</th>
<th>N</th>
<th>%</th>
<th>Mean Transition Score</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>18</td>
<td>10.3</td>
<td>69.39</td>
<td>9.75</td>
</tr>
<tr>
<td>25% or less</td>
<td>19</td>
<td>10.9</td>
<td>72.79</td>
<td>9.50</td>
</tr>
<tr>
<td>26-75%</td>
<td>46</td>
<td>26.4</td>
<td>71.76</td>
<td>8.59</td>
</tr>
<tr>
<td>More than 75%</td>
<td>91</td>
<td>52.3</td>
<td>73.15</td>
<td>8.24</td>
</tr>
</tbody>
</table>

What is the relationship between the total/subscale transition score and the helpfulness ranking of support people?

The survey asked NGs to rank the different types of “people supports,” including mentors, transition program coordinators, clinical educators, unit staff, and NG peers in terms of their helpfulness during transition. Table 8 gives the percentages of nurses (n=144) who found various types of “people supports” very helpful, helpful/moderately helpful, not very helpful, or not applicable during their transition process. Significant positive linear relationships were found between the total transition score and the helpfulness ranking attributed to the mentor and to the unit staff. A one-unit increase in the value of the helpfulness ranking attributed to the mentor and unit staff were found to be associated with an increase of 1.10 points (95% CI: 0.10 to 2.09) and an increase of 3.99 points (95% CI: 1.82 to 6.17) respectively, in the expected values of the total transition score. (See Table 1 and Figure 1 for details.) Only the support sub-scale score had a significant positive linear relationship with helpfulness ranking attributed to the mentor and unit staff. Each one-unit increase in the value of the helpfulness ranking attributed to the mentor and unit staff were found to be associated with an increase of 0.87 points (95% CI: 0.41 to 1.32) and an increase of 2.87 points (95% CI: 1.82 to 3.91) respectively, in the expected value of the support score (see Table 8).
Table 8: Percentages of nurses (n=144) who found various types of support people very helpful, helpful/moderately helpful, not very helpful, or not applicable during their transition process.

<table>
<thead>
<tr>
<th>Types of Support People</th>
<th>Very Helpful</th>
<th>Helpful/Moderately Helpful</th>
<th>Not Very Helpful</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mentor</td>
<td>43.8</td>
<td>21.5</td>
<td>0.7</td>
<td>34.0</td>
</tr>
<tr>
<td>Transition Program Coordinator</td>
<td>18.8</td>
<td>50.7</td>
<td>16.7</td>
<td>13.9</td>
</tr>
<tr>
<td>Clinical Educator</td>
<td>27.8</td>
<td>52.1</td>
<td>13.2</td>
<td>6.9</td>
</tr>
<tr>
<td>Other NGs/Peers</td>
<td>38.2</td>
<td>53.5</td>
<td>2.1</td>
<td>6.2</td>
</tr>
<tr>
<td>Unit Staff</td>
<td>44.4</td>
<td>50.7</td>
<td>4.2</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Competency and Critical Thinking

*How do the employment status and the average number of hours worked in a two-week period affect the total transition score of NGs?*

The Casey-Fink survey sub-scale “organizing/prioritizing” is related to the competency of the NG nurse. Thus, to address competency and critical thinking of NGs in this particular investigation, various data collected were analyzed in relation to NG organizing/prioritizing sub-scale scores. A multiple linear regression analysis with no interaction established that NGs who worked an average of 49 hours or more in a two-week period tended to have higher organizing/prioritizing sub-scale scores than nurses who worked 48 hours or less during that period when taking into account employment status. Indeed, among NGs with the same employment status, nurses who worked 49 hours or more in a two-week period had a mean total transition score that was 3.62 points higher than nurses who worked 48 hours or less during that period (95%: 1.05 to 6.20). While the priority setting/organizing and communication/leadership score was found to be significantly linearly related to the average number of hours worked in the past two weeks, it was not significantly related to employment status.

There was a significant difference between the group of NGs who participated in a formal transition program and those NGs who did not, with NGs who had gone through a formal transition program having significantly higher organizing/prioritizing sub-scale scores (P-value = 0.0254). Further, organizing/prioritizing sub-scale scores were significantly linearly related to the average number of hours worked in the past two weeks. Specifically, NGs who worked an average of 49 hours or more in a two-week period had higher organizing/prioritizing sub-scale scores than nurses who worked 48 hours or less during that period (95%: 0.28 to 1.60). Simple linear regression analysis with no interaction showed that average number of hours worked in a two-week period was a significant predictor of the total transition score. After adjustment for employment status new graduates who worked 49 hours or more in a two-week period had a mean total transition score of 3.62 points higher than nurses who worked 48 hours or less during that period (95%: 1.05 to 6.20). The priority setting/organizing and communication/leadership scores were found to be significantly linearly related to the average number of hours worked in the past two weeks but not to the employment status.

*After controlling for length of employment of NGs, is there a relationship between transition program participation and NG transition experience?*
Length of employment as a newly graduated nurse was not a statistically significant moderator (F = 0.0893, df = 2, 239; P-value = 0.9146) of the relationship between the total transition scores of NGs who participated in a formal NG transition program and those who did not. Participation in a formal NG transition program had the same effect on the total transition score whether new graduates were employed less than six months, for six months to one year, or for more than one year — namely, nurses who participated in a formal NG transition program tended to have higher total transition scores than those who didn’t, after taking into account the length of employment. Similarly, length of employment was not a significant moderator of the relationship between participation in a formal NG transition program and all of the sub-scale transition scores: priority setting/organization (F = 0.0792, df = 2, 239; P-value = 0.9238), communication/leadership (F = 0.1155, df = 2, 239; P-value = 0.8909), support (F = 0.532, df = 2, 239; P-value = 0.5881), stress (F = 0.5957, df = 2, 239; P-value = 0.5520), and professional satisfaction (F = 0.4498, df = 2, 239; P-value = 0.6383).

Workplace Environment

Sixty-two percent of NGs indicated that their greatest need for support during the transition process was during the one- to three-month time frame. Further, 71 percent were able to access support when needed most or all of the time. Table 9 illustrates NGs’ ability to access support relative to whether they reported being bullied/harassed in the workplace.

Table 9: Ability to access support when needed and bullying/harassment

<table>
<thead>
<tr>
<th>Ability to Access Support When Needed</th>
<th>Where you Bullied/Harassed in the Workplace as a NG?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td>None of the time</td>
<td>1</td>
</tr>
<tr>
<td>Some of the time</td>
<td>30</td>
</tr>
<tr>
<td>Most of the time</td>
<td>76</td>
</tr>
<tr>
<td>All of the time</td>
<td>41</td>
</tr>
<tr>
<td><strong>Column Total</strong></td>
<td>148</td>
</tr>
</tbody>
</table>
What is the prevalence of self-reported bullying among NGs?

Of the 242 nurses who provided information on their participation in a formal NG transition program as well as on their bullying/harassment status and their ability to access support when most needed, 39 percent claimed they experienced bullying/harassment. The prevalence of bullying was the same among the 142 nurses who attended a formal transition program (39 percent) and 100 nurses who didn’t (39 percent). Among the 142 nurses who attended a formal NG transition program, 69 percent of the bullied nurses were able to access support when needed most or all of the time compared to 90 percent for the non-bullied nurses. In contrast, among nurses who did not attend a formal transition program, 38 percent of the bullied/harassed nurses were able to access support when needed most or all of the time versus 64 percent for the non-bullied nurses (see Table 10).

Table 10: Three-way table of observed frequencies and percentages describing the relationships among the variables: participation in a formal NG transition program, bullying/harassment in the workplace, and ability to access support when needed.

<table>
<thead>
<tr>
<th>Ability to Access Support When Needed</th>
<th>Participation in a Formal NG Transition Program</th>
<th>Bullying/Harassment</th>
<th>Bullying/Harassment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>None of the time</td>
<td>2</td>
<td>3.6</td>
<td>0</td>
</tr>
<tr>
<td>Some of the time</td>
<td>15</td>
<td>27.3</td>
<td>9</td>
</tr>
<tr>
<td>Most of the time</td>
<td>29</td>
<td>52.7</td>
<td>45</td>
</tr>
<tr>
<td>All of the time</td>
<td>9</td>
<td>16.4</td>
<td>33</td>
</tr>
<tr>
<td>Total</td>
<td>55</td>
<td>100</td>
<td>87</td>
</tr>
</tbody>
</table>

Overall, 242 nurses provided information on their participation in a formal NG transition program, their bullying/harassment status and their greatest need for support. Among the nurses who attended a formal NG transition program, the percentage of nurses who indicated that their greatest need for support occurred between one and three months of practice as a newly graduated nurse was comparable between bullied and non-bullied nurses: 60 percent for bullied nurses versus 63.2 percent for non-bullied nurses (see Table 11).
### Table 11: Three-way table of observed frequencies and percentages describing the relationships among the variables: participation in a formal NG transition program, bullying/harassment in the workplace, and greatest need for support for the 241 nurses who provided information on their ability to receive support when most needed.

<table>
<thead>
<tr>
<th>GREATEST NEED FOR SUPPORT</th>
<th>PARTICIPATION IN A FORMAL NG TRANSITION PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>BULLYING/HARASSMENT</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Column Total</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>60</td>
</tr>
</tbody>
</table>

Participation in a transition program was associated with higher total transition scores after taking into account bullying/harassment in the workplace and the ability to access support when needed (t = 2.991, df = 239; P-value = 0.00307). Thus, NGs who experienced bullying/harassment had better transition scores if they participated in a formal transition program compared to bullied NGs who did not. The mean value of the total transition score was 2.96 points higher for nurses who participated in a transition program compared to those who did not (95% CI: 1.01 to 4.90), all else being equal.

After controlling for participation in a formal NG transition program, bullying/harassment in the workplace was found to be a statistically significant moderator of the relationship between the NGs’ ability to access support when needed and their total transition scores (t = -2.527, df = 239; P-value = 0.01217). Higher values in total transition scores were associated with a greater ability to access support when needed for both the nurses who were bullied/harassed and those who were not. This positive relationship was weaker among nurses who were bullied/harassed, with each one-unit increase in their ability to access support when needed associated with a 2.90 point increase in the mean value of the total transition score (95% CI: 0.77 to 5.04) compared to a 6.35 increase in scores of new nurses who were not bullied/harassed (95% CI: 4.61 to 8.09) when controlling for transition program participation (see figure 3 for more details). Transition program participation, bullying/harassment and ability to access support when most needed, accounted for 31.79 percent of the variability in the total transition scores.

Statistically significant or marginally statistically significant moderating effects of bullying/harassment were found on NGs’ ability to access support when needed and their organizing/prioritizing sub-scale score (t = -3.717, df = 239; P-value = 0.00025), stress sub-scale score (t = -2.050, df = 239; P-value = 0.0414,) and professional satisfaction sub-scale score (t = -1.893, df = 239; P-value = 0.0596) after controlling for participation in a formal NG transition program.
Figure 3: Effect of NG’s ability to access support when most needed on the total transition score, conditional on bullying/harassment status.
PHASE 3 – THE TOOLKIT

The goal of this project was to produce a toolkit of best practices in the transition of NGs. However, the complexity of NGs’ transition makes it a challenging area to study, as reflected in the limited best practices emerging from Phase 1. In developing the toolkit, methodological triangulation (Creswell and Plano Clark, 2006) was used to converge multiple sources of data. The use of triangulation is comprehensive but also has been well established to enhance validity; it is a strategy to assist with data confirmation, the process of examining and comparing data collected from multiple sources and looking at the extent to which findings converge (Casey and Murphy, 2009). There were two main components to this triangulation process, data scrutiny and data comparison. The data scrutiny component involved examining each data set distinctly, determining key findings, and then arranging the data to enable comparison. The data comparison component involved the formation of a table of findings to assist in the comparison of themes and variables.

Table 12 was organized according to the four main themes of the project: education (pre-registration, practice), support/satisfaction, competency and critical thinking, and workplace environment. One column of the table, “recommendations for toolkit,” was specifically for key points to be recommended as “best practices” in the transition of NGs. There is a more significant level of recommendation titled “strongly recommended” in this column of the table. Information provided in the “strongly recommended” section meets the criteria if it was a key finding in at least two of the literature review, qualitative data, and quantitative data columns. Furthermore, if a source of the data was from the literature review column, it had to be of an evidence level of six or higher to contribute to that recommendation. Information in the remaining section of the “recommendations” column refers to recommendations where one of the sources of data was the literature review, and the evidence level was less than six.
<table>
<thead>
<tr>
<th>Themes</th>
<th>Literature Review</th>
<th>Qualitative Data</th>
<th>Quantitative Data</th>
<th>Recommendations for Toolkit</th>
</tr>
</thead>
</table>
| Education (pre-registration to transition) | - NGs felt there was a deficiency in clinical practice opportunities during undergraduate education (3). | - Would suggest future curriculum has more practical skill focus, especially in specialty areas. Differences in NG skills depending on where they went to school. | - New graduates nurses reported hands-on/bedside learning and inservices/workshops as being the most helpful during transition.  
- A significant positive linear relationship was found between the total transition score and the helpfulness ranking attributed to inservices/workshops.  
- Each 1-unit increase in the value of the helpfulness ranking attributed to the simulation/lab was found to be associated with an increase of 0.55 points (95% CI: 0.01 to 1.09) in the expected value of the support score.  
Furthermore, each 1-unit increase in the value of the helpfulness ranking attributed to the inservices/workshops was found to be associated with an increase of 1.26 points (95% CI: 0.60 to 1.92) in the expected value of the support score. | Strongly Recommended:  
- NG education delivered during a formal transition program should be of a practical nature such as hands-on/bedside learning opportunities and inservices/workshops.  
- Formal classroom type learning should be limited.  
Recommended:  
- Encourage undergraduate programs to increase the opportunities for practical skill focus. |
<p>|                                            | - Open-ended qualitative comments revealed that orientation could be improved by including fewer formal classes (7). | - NGs valued training opportunities, but some comments related to the sessions being offered at a time they were unable to participate, or they were repetitive of things previously learned in school. |                                                                                                                |                                                                                                                                                                                                                           |</p>
<table>
<thead>
<tr>
<th>Themes</th>
<th>Literature Review</th>
<th>Qualitative Data</th>
<th>Quantitative Data</th>
<th>Recommendations for Toolkit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support/ Satisfiction</td>
<td>- NGs who received a longer orientation that met all of their needs were more satisfied in their current position (5).</td>
<td>- NGs: support from ‘key people’ rather than system at large.</td>
<td>- The group of nurses who attended an orientation lasting 4 weeks or more had a significantly higher transition score from the other two groups, as well as a higher ‘support’ sub-scale score.</td>
<td>Strongly Recommended:</td>
</tr>
<tr>
<td></td>
<td>- Importance of preceptors receiving formal education and reported outcomes that included enhanced preceptor satisfaction (5), preceptor retention (6), NG satisfaction with their preceptoring experience (6), and NG retention (3).</td>
<td>- NGs: recommend preceptor training. Nurse managers commented there is a training day but typically they just need to take whoever shows interest.</td>
<td>- Significant positive linear relationships were found between the support score and the helpfulness ranking attributed to the mentor and to the unit staff, respectively. The higher the helpfulness ranking attributed by nurses to these two types of support people, the higher their support score.</td>
<td>- Use of mentors to support NGs during their transition.</td>
</tr>
<tr>
<td></td>
<td>- All articles involving mentorship programs demonstrated positive outcomes regarding NG retention (3, 3).</td>
<td>- The data suggested a significant positive relationship between ability to access support when needed and the total transition score but only for the nurses who received their NG-specific workshops beyond just the typical orientation period. This would suggest that NGs who are in formal transition programs with workshop/education opportunities beyond the typical orientation period are more readily able to access support when needed.</td>
<td>- The data suggested a significant positive relationship between ability to access support when needed and the total transition score but only for the nurses who received their NG-specific workshops beyond just the typical orientation period. This would suggest that NGs who are in formal transition programs with workshop/education opportunities beyond the typical orientation period are more readily able to access support when needed.</td>
<td>- Provide formal preceptor education and make this training a requirement.</td>
</tr>
<tr>
<td></td>
<td>- Regular meetings with a mentor positively influenced the likelihood of the mentor being a stress reducer (p=0.001), ‘clicking’ with the mentor (p=&lt;0.001), and providing guidance and support (p=&lt;0.001). In addition, mentors of an older age were more likely to be stress reducers (p=0.005) and provide guidance and support (p=0.100) (6).</td>
<td>- NG support and providing opportunities for NGs to meet and discuss their transition experiences with each other was a theme in four qualitative articles (3, 7).</td>
<td>- Significant positive linear relationships were found between the support score and the helpfulness ranking attributed to the mentor and to the unit staff, respectively. The higher the helpfulness ranking attributed by nurses to these two types of support people, the higher their support score.</td>
<td>- Provide formal support to NGs for at least 6 to 9 months post-hire.</td>
</tr>
<tr>
<td></td>
<td>- Peer support and providing opportunities for NGs to meet and discuss their transition experiences with each other was a theme in four qualitative articles (3, 7).</td>
<td>- Lowest levels of satisfaction and highest levels of stress at 6-9 months post hire (5).</td>
<td>- The data suggested a significant positive relationship between ability to access support when needed and the total transition score but only for the nurses who received their NG-specific workshops beyond just the typical orientation period. This would suggest that NGs who are in formal transition programs with workshop/education opportunities beyond the typical orientation period are more readily able to access support when needed.</td>
<td>- Unit orientation at least 4 weeks in length.</td>
</tr>
<tr>
<td></td>
<td>- Satisfaction decreases during the first stage of transition, and then significantly increases towards the end of the first year (4, 6).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Themes</td>
<td>Literature Review</td>
<td>Qualitative Data</td>
<td>Quantitative Data</td>
<td>Recommendations for Toolkit</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Competency/</td>
<td>- NGs competence improves over the course of a transition program (5, 4, 7).</td>
<td>- Concerns NGs don’t receive enough shifts to consolidate their practice.</td>
<td>- The organizing/prioritizing sub-scale score was found to be significantly linearly related to the average number of hours worked in the past 2 weeks. After taking into account employment status, the mean value of the organizing/prioritizing score for the nurses who worked an average of 49 hours or more in a 2 week period was 0.94 units higher than the mean value of the score for nurses who worked 48 hours or less during that period (95%: 0.28 to 1.60).</td>
<td></td>
</tr>
<tr>
<td>Critical Thinking</td>
<td></td>
<td>This contributed to feeling of being ‘new’ for quite some time after hire.</td>
<td>- There was also a significant difference between the group of NGs who participated in a formal transition program and those NGs who did not, with NGs who had gone through a formal transition program having significantly higher organizing/prioritizing sub-scale scores (P-value=0.0254).</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Strongly Recommended:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Ensure all NGs participate in a formal transition program as this assists in skill consolidation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Strive to provide NGs with at least 49 hours of work in a two week period during their first year of practice.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Recommended:</td>
<td></td>
</tr>
<tr>
<td>Themes</td>
<td>Literature Review</td>
<td>Qualitative Data</td>
<td>Quantitative Data</td>
<td>Recommendations for Toolkit</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Workplace Environment        | - In conjunction with transition, new graduates described a lack of acceptance and respect, and an insensitivity of experienced nurses to their needs for continued development in time management skills (6).  
- NGs working on clinical units identified as ‘Healthy’ or ‘Very Healthy’ work environments experienced less reality shock as they transitioned to practice (7). | - Some nurse manager comments related to NG culture.  
- There is a lack of team oriented practice. Saw many NGs trying to do it all and not delegate or ask for help. Yet some NGs commented they didn’t feel as supported as they would like. Some NGs felt they had to do it on their own because that was what was expected. | - The more the bullied nurses in our survey were able to access support, the better their total transition score; The more the non-bullied nurses in our survey were able to access support, the better their total transition score; When comparing bullied vs. non-bullied nurses, improvement in the total transition score was better in the non-bullied group vs. the bullied group.  
- Significant positive linear relationships were found between the total transition score and the helpfulness ranking attributed to the mentor and to the unit staff, respectively.  
- NGs that experienced bullying/harassment had better transition scores if they participated in a formal transition program as compared to bullied NGs who didn’t participate in a formal transition program. | Strongly Recommended:  
- Strive to ensure clinical unit work environments are ‘Healthy’.  
- Experienced staff nurses should be provided training and resource on how to be supportive to NGs.  
- Zero tolerance for bullying policy.  

Recommended:
Discussion

This toolkit is based on NG transition programs as a best practice. It was developed through a rigorous process; however, the evidence on which it is based is highly variable. Participation in a formal NG transition program improves NG transition experience and the program needs to include a distinct orientation stage followed by a transition period.

Each component consists of a discussion piece, recommendations for the toolkit, barriers to implementing the recommendations, and strategies to address the barriers. Although the discussion addresses program components separately to highlight their specific contributions to NGs’ transition experiences, there is considerable overlap among the components of education, support, competency, and workplace environment throughout the transition experience, thus some findings are discussed in relation to more than one theme.

Education (Pre-Registration to Transition)

The emphasis in this study of NG transition programs was not on pre-registration education. Participation in an ESN Program had no significant relationship with NGs’ transition experience. This was an unexpected finding and contrary to other studies that have revealed several benefits of these programs in easing NG transition, including less orientation and transition time, reduced graduate stress, familiarity with institutional culture, and increased retention (Gamroth, Budgen & Lougheed, 2006; Nelson et al., 2004; Olsen et al., 2001; Phillips, Kenny, Smith, & Esterman, 2012; Rochford et al., 2009). Although the current qualitative findings showed NGs and nurse leaders valuing the employment program, there were higher organizational expectations of ESN-prepared students that translated into less support. Yet NGs were clear they needed the same amount of orientation and other supports that non-ESN students received to transition to an RN scope of practice.

A variety of education approaches and content were being used with BC NGs within formal transition programs. Education identified by NGs as helpful was shown to enhance the transition experience, in particular through workshops/inservices opportunities. The helpfulness of the workshop/inservice opportunities was found in the relevancy of the content that built on academic educational offerings and facilitated social interaction with peers. Best practices related to educational content and length/amount of education cannot be drawn from the findings of this investigation.

The findings suggest that education is viewed as a support within the context of NG transition programs and NGs like a range of opportunities. The more helpful NGs found written materials, simulation/lab, inservices/workshops and website/online, the more they felt supported. This illustrates that educational support can occur either with or without people support (direct contact with people). This broad scope of educational support may also relate to the predominantly millennial-generation learner represented by NG participants. Consistent with millennial learners, written materials and website/online education supported their valuing of personalized learning, their technological savviness, and their desire for control (Broom, 2010), while simulation/lab, inservices/workshops met their desire for participation in communities of learning (Broom). Equally as surprising is that hands-on practice, although the most helpful of all educational modalities, did not significantly affect overall transition or its subscale scores. Modalities aside, research with millennials has suggested that a preparation-practice gap exists that manifests itself as a deep seated unfamiliarity with the increasingly complex acute care setting (Olson,
2009). Closing this gap is another issue that needs to be addressed in the development of transition programs for acute care, which may not be as prominent in the transition to community or long-term care settings.

Another facet to the education was the timing of the education sessions. Some HAs provided education at the beginning of the transition while others provided longitudinal sessions. New graduates in formal transition programs with workshop/education opportunities beyond the typical orientation period were more readily able to access support when needed, which influenced their transition. This may be related to ongoing contact with the clinical educator or NG coordinator and the knowledge that everyone is having similar issues and is encouraged to ask questions. The value of ongoing education support is consistent with Boychuk-Duchscher’s (2008) Transition Stages Model for new nurse graduates. HAs providing educational support that spanned the year did not consistently align it according to the three stages and might benefit from doing so: doing — one to three months (focusing on skills, interventions), being — four to six months (focusing on reasoning, critical thinking, conscious competency), and knowing — seven to twelve months (career development).

<table>
<thead>
<tr>
<th>Recommendations for Toolkit</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Focus on hands-on, practical skills in both undergraduate education and transition program education within the context of an academic-practice partnership will bridge the theory-practice gap.</td>
</tr>
<tr>
<td>• Use a variety of educational approaches for this millennial-generation of NG learners.</td>
</tr>
<tr>
<td>• Deliver transition education over time rather than concentrated during the orientation stage.</td>
</tr>
<tr>
<td>• Incorporate a social networking component (simple, low cost strategies) within the educational delivery to capitalize on peer support.</td>
</tr>
<tr>
<td>• Keep the content current, relevant, specific to the work environment, and that builds on NGs entry level education.</td>
</tr>
<tr>
<td>• Continue to support the ESN Program with attention to clear messaging around role expectations and future hiring expectations. Maintain consistent orientation length regardless of ESN status.</td>
</tr>
</tbody>
</table>
A barrier to incorporating pre-registration education best practice is the lack of collaboration between academia and practice regarding NG transition. Although there are some good examples of partnerships in BC, there is evidence of confusion surrounding each stakeholder’s role in preparing NGs for the transition experience. Barriers to incorporating transition education best practices include unit level support for attending education opportunities often colliding with operations, and NGs fear of losing clinical hours to attend. There are also funding limitations, as not all NGs within an organization receive resources to participate in a formal NG transition program, thus missing out on education opportunities.

Strategies to implement the toolkit recommendations in the area of transition program education would include cohesive partnerships between academic and practice, and adequate resources to ensure access to transition programs is equitable for all NGs.

Support

Support is provided throughout the formal transition support program, but takes different forms at various points during transition. Transition experiences were enhanced with a unit orientation stage of at least four weeks in length, falling at the lower end of the range (< four weeks to > three months) of orientation lengths reported in the transition literature (Gavlak, 2007; Marcum and West, 2004) and contrary to positive outcomes associated with longer orientations (Scott, Engelke, & Swanson, 2008). The percentage of preceptored shifts had no significant relationship to NGs transition experience and may reflect the greater importance on quality and not quantity of the preceptorship component. Formal preceptor training can enhance quality of the preceptorship and has been shown to improve NG transition outcomes (Beecroft, Hernandez, & Reid, 2008). Once the preceptored period is complete, formal supports should continue to be available for at least six to nine months post-hire. An important finding in the current study was the helpfulness of mentor and staff nurses in supporting new graduation transition. Although much attention has been given to the cultivation of one-on-one support for new graduates, equally as valuable is a network of support at a unit level. Formal support should include the use of mentors throughout the duration of a formal transition program, and informal support through the facilitation of peer-support opportunities. In contrast to the negative influence of unit staff’s lack of acceptance and respect for NGs (Casey et al., 2004), this study is unique in highlighting the positive impact supportive unit staff has on NG transition experience. The more helpful NGs found their unit staff in supporting their transition, the more positive their transition experience.
Recommendations for the Toolbox

- Provide clear communication about the nature of the transition program, including key resource individuals and their roles and expectations of all players in the program.
- Encourage key stakeholders to provide orientation for a minimum of four weeks and longer if possible and on one unit.
- During the transition period, formal supports should continue to be available for at least six to nine months post-hire.
- Prepare frontline staff with preceptorship/mentorship training to ensure quality of transition.
- If operationally possible, healthcare orientations should aim to ensure one consistent preceptor per new graduate; however, it takes a village to transition a NG.
- Structure orientation in consultation with the NG and unit staff and potentially consider alternate models. Be innovative in use of preceptor models.
- Enhanced communication between preceptor and NG related to (graduated) progression of competency, including ongoing, two-way feedback.

A significant barrier to incorporating best practices in this area is the high demands of the workplace (e.g. patient acuity, staffing). This impacts preceptors, mentors, and unit staff and their ability to provide support to the transitioning NG. Also, the lack of funding for preceptor training, preceptor incentives, and the development of mentorship programs further impact best practices uptake in this area.

Strategies for increased uptake include financial support for such initiatives, and education to stakeholders regarding the importance unit staff play in transitioning NGs. Unit staff not necessarily directly involved in the transition of NGs (e.g. preceptor, mentor) should still be included in education initiatives concerning support of the NG.

Workplace Environment

What best practices related to support are given, when, where and how? Are they formal or informal? What best practices related to support facilitate NG integration? What are barriers to incorporating best practices related to support? What strategies could expand use of best practices related to support?

Workplace environment plays a significant role in the transition experience of NGs. Bullying is prevalent and negatively impacts transition, a finding consistent with other NG transition studies (Kramer, Brewer, & Maguire, 2011; Laschinger, Grau, Finegan, & Wilk, 2010). Research has demonstrated that this personal attack on self, can lead to absenteeism, poor job satisfaction and retention issues (Chang & Hancock, 2003). Providing a formal transition program assists the bullied NG with their transition experience; however, they still do not transition as well as their non-bullied peers. The ability to access support when needed is associated with an improved transition experience regardless of a NG’s bullied status. This is consistent with other work showing the moderating effect of a supportive work environment on the harmful effects of bullying including enhanced retention, reduced depression, and increased job satisfaction (Quine, 2001). Kramer et al. found that healthy work environments were associated with less reality shock. The importance of access to support was highlighted by Laschinger et
al., (2010) who found that NG access to structural empowerment, particularly access to resources, was associated with less bullying exposure.

<table>
<thead>
<tr>
<th>Recommendations for Toolbox</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Establish and maintain learning cultures at unit level.</td>
</tr>
<tr>
<td>• Disrupt the normalcy of unit level bullying and enforce zero tolerance through cultivation of CRNBC’s quality work place environment guidelines.</td>
</tr>
</tbody>
</table>

Barriers related to workplace environment best practices include adequate staffing resources to handle patient acuity and demand, and financial resources to ensure adequate supports are available to NGs.

Strategies to expand the use of best practices related to workplace environment include the commitment of organizations to providing “healthy” unit environments, bullying policy that outlines steps for reporting and consequences for offenders, and ensuring all staff within a unit are educated and engaged in supporting the transitioning NG.
**Competency/Critical Thinking**

*What best practices for consolidating competencies are applied in the NG program? How are they assessed, monitored and developed? When are skills consolidated? What are the barriers to application of best practices for skill consolidation, and strategies to expand uptake?*

An efficient and effective progression to a competent clinical nurse is critical for both an organization and the NG. Participation in a formal transition program resulted in improved transition experience in the areas of organizing/prioritizing, and communication/leadership, which are important competencies for the NG to master in the first year of transition (Boychuk-Duscher, 2008). NGs who receive more clinical hours of work within a two-week period demonstrated increased organizing/prioritizing and communication/leadership scores. In general, NG competencies were assessed and monitored utilizing non-standardized tools developed by the organization, and typically evaluated via self-report or observation. Skill consolidation typically occurred by the end of the first year post-hire, but NGs expressed a desire for more feedback throughout the process.

### Recommendations for Toolbox

| • Utilize competency assessment planning tools throughout the transition program and beyond; ongoing monitoring of progress. |
| • Have defined learning resources to assist with competency development and critical thinking. |

Barriers to the establishment of best practices related to competency include the lack of application of standardized tools for measurement and evaluation by both NGs and educators. Furthermore, there are many skills related to NG practice that may not be utilized frequently and are difficult to assess at that particular time. This nature of nursing practice makes evaluation challenging.

Strategies to increase uptake in best practices in the area of competency include ensuring adequate clinical hours for transitioning NGs. Also, organizations and NGs should implement effective and standardized procedures for monitoring and evaluation.
Challenges and Limitations

During the course of this project, a number of conceptual and methodological challenges emerged and are discussed below.

**Conceptual**

Research related to NG transition, including the current study, has been plagued by conceptual challenges. Three areas of conceptual confusion emerged in conjunction with the literature review: i) interchangeable use of the terms orientation and transition; ii) critical thinking used distinct from competency or subsumed by competency; iii) preceptor and mentor or other related terms used interchangeably.

Additional NG support beyond the traditional orientation period was defined both as an extended orientation and as a formal transition program. In the majority of cases, the supports provided were very similar and the only difference was in the terminology used to define the program. Another area of inconsistency was the use of “critical thinking” used separately from, or subsumed by “competency.” Finally, a lack of clarity with titles and definitions was also apparent in the terminology used to describe people assigned to support the new graduate: preceptor, mentor, buddy, clinical coach, and transition program coordinator. This conceptual overlap made it challenging to compare studies to identify best practices related to transition program components.

To mitigate these challenges in Phase 2, a glossary of terms was created to accompany the online survey. The extent to which NGs accessed the glossary in completing the survey remains unknown.

**Methodological Challenges**

The major methodological challenges arising during the project related to timeframe, ethics, institutional reporting, and quality of tools for measuring new nurse transition outcomes.

**Time.** Perhaps the largest limitation of this investigation was the strict timeline for completion, which logistically prevented a longitudinal study design. This resulted in most of the NGs participating in the online survey, which relied on retrospective self-reporting of their transition experience, potentially affecting the validity of data. Use of a mixed-methods design sought to mitigate some of these limitations.

**Ethics.** With a project of this magnitude, the ethics approval process was complex. The investigation required approval from seven BC HAs and four BC post-secondary institutions. UBCO has a harmonized research ethics review process with IH, PHC, PHSA and VCH. However, prior to submitting the project to UBCO’s Research Ethics Board, it first had to be reviewed and approved by the research ethics boards of NH, VIHA, FH and VIU. The following table outlines the timeline for the ethics review process:
There were several additional steps that further contributed to the complexity of the process. A co-principal investigator was required to obtain “affiliated researcher” status in both FH and VCH prior to submitting for ethics review, leading to a further delay in the research ethics application. Also, despite VCH being part of the harmonized process for ethics review at UBC, projects still had to go through an additional approval process through the VCH Research Institute. Letters of approval from high-level management within each HA had to be obtained including the chief nursing officers, chief financial officers, and chief data stewards. Requesting information from such high-level managers was an involved and timely process. In addition, the application to FH’s Research Ethics Board required significant modifications after initial review, further delaying the process. From the table above, all other HAs not harmonized with UBCO approved the project by April 2011, but the delays experienced through FH’s process set data collection for Phase 2 back by approximately two months. FH also had significant restrictions on the ability to recruit participants and to request their participation, which likely explains the limited level of online survey participation from NGs at FH.

**Sampling.** The small sample size obtained for this study was disappointing, raising concerns about the representativeness of the sample of 2010 NGs, and yet reflects a fairly typical low response rate (26 percent) for online surveys when compared to other methods of data collection such as interviews and postal surveys (Leeuw, 2012). This sample population that practices within extended hours and does shift work makes recruitment particularly challenging and has been documented in the literature (ref). Electronic surveys may not have been well received as this is the most common means of cross-institutional feedback, resulting in “survey apathy.” A second cycle of data collection would have been helpful and boosted numbers, but may have represented a different cohort of NGs (2011 vs. 2010). Additionally, summer data collection may have hampered responses. The small sample size, coupled with variations in their programs, did not allow for comparison between HAs. Unfortunately, due to budget constraints and eligibility criteria, not all NGs are able to participate.

This study did not include front-line staff input, including staff who had been preceptors/mentors although there has been significant research related to preceptorship. It was felt that managers and clinical educators would represent front-line staff but in retrospect, the importance NGs placed on unit staff support would warrant specific attention to this group.

**Measurement.** Measurement of NG transition outcomes was restricted both by the lack of standardized tools or failure to use existing standardized tools. A review of the literature surfaced few examples of transition specific tools. Use of the Casey-Fink survey was prevalent in the US (Consortium), was relatively current (Casey, Fink, 2001), and provided a direct measure of scope of practice of the NG (e.g. planning/prioritizing, communication/teamwork). However, it did not reflect the Canadian context, such as language related to delegation, and was limited in representing the NG experience. The mix of

<table>
<thead>
<tr>
<th>Research Ethics Board</th>
<th>Date Submitted</th>
<th>Date Approval Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vancouver Island Health Authority</td>
<td>March 2011</td>
<td>April 2011</td>
</tr>
<tr>
<td>Northern Health</td>
<td>February 2011</td>
<td>March 2011</td>
</tr>
<tr>
<td>Fraser Health</td>
<td>March 2011</td>
<td>June 2011</td>
</tr>
<tr>
<td>UBC Okanagan</td>
<td>March 2011</td>
<td>June 2011</td>
</tr>
<tr>
<td>Vancouver Island University</td>
<td>March 2011</td>
<td>April 2011</td>
</tr>
</tbody>
</table>
dimensions (subscales) related to the transition captured by Casey-Fink does not provide a strong indication that NGs have achieved a successful transition.

**Institutional Reporting.** Challenges related to HA institutional reporting had an impact on meeting some of the anticipated outcomes of the project. The researchers were external to six of the HAs and despite working through the working-steering committee, internal restrictions were present, making access to data incomplete or unavailable. As a result, the cost-benefit analysis that was planned could not be completed. The cost-benefit of implementing a transition program shows promise, but again, limitations in consistency of measurement and calculating program expenses limits conclusions that can be drawn in this area.

NG retention in BC improved with a transition program; NG retention with the class of 2010, as reported by BC HA transition program coordinators, was good, ranging from 82 percent to 100 percent with a mean value of 94 percent. However, there were variations and limitations related to measurement. In general, BC HAs had challenges tracking NG retention through human resources mechanisms, which limited a province-wide picture of retention. A movement towards standardizing such processes within the context of BC is strongly recommended.
Future Research and Next Steps

Future Research

Research related to NG transition programs has overall been of low quality and primarily descriptive in nature. The toolkit needs to be tested, and strengthened in the areas where minimal evidence has been provided. Broadening the concept of NG best practices requires further investigation into each program component.

NG-specific education is poorly evaluated and efforts to identify quantifiable outcome measures would be beneficial. Education during a transition program needs further study to help identify appropriate content, delivery methods, and length that result in a positive transition experience. People supports such as mentors, preceptors, and unit staff proved very valuable in the transition process, but further study within the context of a transition program could potentially identify standards for training length, content, education delivery, and NG matching processes. Comparison studies on the impact of various NG transition support models would also benefit program development and structure.

Program components that are useful have been identified, but there is little evaluation related to when the support component is implemented and its impact on the transition experience. This type of research would help bridge much of Boychuk-Duchschere’s (2008) NG transition model work to program development; this new model would need application and testing. NG evaluation is important within the larger context of patient care outcomes.

This investigation suggests the provincial ESN Program warrants further study to evaluate outcomes related to transition and ensure the program is addressing the objectives for which it was created. Also, investigations are needed to identify the supports required by nursing students’ participating in the ESN Program, and the impact of an ESN Program on transition compared to other pre-registration options such as co-ops.
Next Steps for BC

This project has resulted in increased collaboration and discussion amongst BC HAs regarding their NG transition programs, and the appetite for further work in this area is evident. Independent HA program information must be shared and understood by all parties involved.

To assist in moving transition program development forward, organizations need to move towards the development and/or utilization of standardized tools and methods for measuring aspects of NG transition. This includes specific NG characteristics such as competency and job satisfaction, as well as program variables such as NG retention and return on investment. Thorough evaluation of NG, preceptor, mentor and unit staff education provided within transition programs would help identify delivery methods, content, and length that are best practices, which could be shared with transition program coordinators in other HAs. Many organizations currently have partnerships with academia for a variety of programs and initiatives, yet evaluation of these partnerships is limited and inhibits the sharing of promising innovations with others. Lastly, BC HAs need to continue to be vigilant regarding the health of their clinical units. There must be clear policies and practice concerning bullying, and NGs should be very clear regarding the steps they should take when experiencing bullying in the workplace.
REFERENCES


Campbell, S. L., Prater, M., Schwartz, C., & Ridenour, N. (2001). Building an empowering academic and
practice partnership model. *Nursing Administration Quarterly, 26*(1), 35-44.

Canadian Nurses Association. (2007). *Tested solutions for eliminating Canada’s registered nursing
/documents/pdf/publications/RN_Highlights_e.pdf

Nursing Administration, 34*(6), 303-311.


Chang, E., & Hancock, K. (2003). Role stress and role ambiguity in new nursing graduates in
Australia. *Nursing and Health Science* (5), p 155 - 163

nurses using focus groups. *International Journal of Nursing studies, 44*(7), 1210-1220.
doi:10.1016/j.ijnurstu.2006.05.010

College of Registered Nurses of British Columbia. Practice Environment Framework. Retrieved from

College of Registered Nurses of British Columbia. (2009). *Competencies in the Context of Entry-level
Registered Nurse Practice in British Columbia*. Retrieved from
https://www.crnbc.ca/Registration/Lists/RegistrationResources/375CompetenciesEntrylevelRN.
pdf


Oaks CA: Sage


## Appendix A: Health Authority Programs

<table>
<thead>
<tr>
<th>HA</th>
<th>PHSA</th>
<th>Providence</th>
<th>VIHA</th>
<th>Fraser</th>
<th>Northern</th>
<th>Interior</th>
<th>V/C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Orientation</strong></td>
<td>4 hour hospital and organization orientation (core values, electronic system, fire and safety, finding resources). Pediatric Nursing Orientation Program - 6 weeks. 56 hours classroom; 6 - 4 hour workshops (disease/program focused, include lab-based skill work). 12-15 preceptored shifts. Competency Validation Day at 2 1/2 months via mini case-studies</td>
<td>1 day new employee orientation (Providence specific) 4 day general nursing orientation (computer system, blood trans, aggressive behaviour, chest tubes, etc.) 1 day NG orientation (AM = NG orientation info; PM = skills practice time)</td>
<td>3 day general orientation, followed by a general nursing orientation. General nursing orientation flexible to meet the goals and needs as outlined by the NG and nurse leader in a learning plan. This general nursing orientation can include up to 6 weeks of supernumerary time. VIHA has also arranged with BCNU a 6 month rotation position to be offered to NGs at the manager’s discretion and according to availability. These are 6 month full-time positions, often used to fill in for sick calls, vacation, etc. NGs in these positions are encouraged to apply for any permanent positions that arise in that time. At the end of 6 months if there isn’t a permanent full-time opportunity then the NG returns back to casual status.</td>
<td>1. General orientation to the health authority, program, and site are provided and coordinated by other Fraser Health groups (e.g. Organizational Development for regional orientation). Fraser has a new online New Employee Orientation which New Graduates (and any other new employee) are intended to complete before starting work in their practice setting. This covers corporate topics such as introduction to departmental services such as People Services, Professional Practice and library services for example. Also, mandatory education topics such as Fire and Safety, Infection Control, FIOPPA, Workplace Safety and Wellness, Respectful Workplace,</td>
<td>All employees expected to go through an online orientation to NHA (approx. 2-3 hours). All employees typically have a 2-3 day site orientation as well. Experience from there depends on whether or not the NG received NG transition initiative funding.</td>
<td>Our program begins with Regional Orientation (organization wide requirement) followed usually by a site or discipline specific orientation for new hires. At four of our main sites, this includes a specific new graduate orientation and is based on numbers (often we are hiring over 20 people at a tertiary site and it just gets too big to manage). The Orientation segment starts with 144 hours. This can be increased or decreased based on the individual new graduates needs. A learning plan is developed for these 144 hours to ensure the NG is targeting their time to meet learning objectives, gaps in practice and unit-specific nuances. These hours are supernumerary in nature and are coded</td>
<td>4 stage orientation (ESN’s would have already been through, but receive specific unit orientation if hired to a different unit). Stage 1 - regional online orientation, four hour module; stage 2 - Health Specific Delivery Area specific orientation, classroom learning, work safe, accreditation, org and prov. requirements, leadership meet and greet; stage 3 - info tech training - 8 hour patient care info system training, n/a to some as per job req.; stage 4 - unit/program/dept. level orientation - based on individual learning needs. Buddy shift guidelines - external hires or ESNs hired from different unit receive 144 hours supernumerary time (includes orientation stages). VCH ESNs</td>
</tr>
<tr>
<td>HA</td>
<td>PHSA</td>
<td>Providence</td>
<td>VIHA</td>
<td>Fraser</td>
<td>Northern</td>
<td>Interior</td>
<td>V/C</td>
</tr>
<tr>
<td>----</td>
<td>------</td>
<td>------------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>----------</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Communication, Quality. Employees are required to submit a completed certificate to their supervisor. New employees are paid four hours to complete this online learning orientation. 2. Site Based Program Orientation and Unit Based Orientation: prior to practice New graduates are then provided orientation to their worksite as well as their clinical area. This orientation integrates new graduates RN’s with other nursing employees. This is provided onsite with face-to-face learning activities. There is a current initiative to centralize and standardize orientation regionally, beginning with medical surgical programs. Site based program orientation is followed by a unit-based orientation which covers unit-specific or specialized clinical training. Through our scheduling office as orientation time.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preceptor info</td>
<td>Formal training via 5 preceptor/mentor workshops. Learning styles, coaching, etc. No formal matching process.</td>
<td>After orientation above, move to unit-specific orientation. 1-3 sets of preceptored — supernumerary shifts, varies depending on unit. Includes a couple days in the classroom, again, depending on unit. Struggling NGs can have access to 3 more shifts of supernumerary time. Preceptors take a level 1 online course, and a level 2 workshop instructed by the NG educators. No formal matching process.</td>
<td>Up to six weeks of buddy shifts/ supernumerary time. Flexible (i.e. can be broken into components). Preceptors referred to as 'mentors.' No formal mentor education/training, and NGs are assigned a mentor. May have more than one mentor during their transition.</td>
<td>NGs are paired with a mentor for their supernumerary shifts in a preceptorship model: supernumerary shifts are in one care delivery area, with a designated mentor(s). 3. Professional Practice funding supports 150 supernumerary hours; if additional time needed provided from the Manager’s budget. Use of the 150 hours is flexible: duration can vary as needed per the NG/mentoring RN/RPNs’ schedule(s) 4. There are foundational mentorship</td>
<td>If NG transition funding received then typically 3 weeks of preceptored orientation, but if funding not received then this figure is closer to one set of shifts. NGs are assigned a preceptor, no formal matching process. Managers are recommended to keep the # of preceptors to 1-2 per NG. Preceptors receive 10 hours of training (1 6 hour class, followed by one 4 hour class 6 months later). Training includes feedback delivery, adult learning theory, and evaluation strategy</td>
<td>The supernumerary time is often preceptored or buddied with experience staff. This might be one individual or a team depending on the unit processes. The preceptorship matches the orientation time usually. Our preceptors are invited to attend a workshop but this is an area where IH could improve by reinforcing the need for this upfront education of our preceptors. It is not mandatory and it might need to be. We do not do a formal matching process within the</td>
<td></td>
</tr>
<tr>
<td>HA</td>
<td>PHSA</td>
<td>Providence</td>
<td>VIHA</td>
<td>Fraser</td>
<td>Northern</td>
<td>Interior</td>
<td>V/C</td>
</tr>
<tr>
<td>----</td>
<td>------</td>
<td>------------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>----------</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>The unit leaders pair the mentor and NG, e.g. CNEs will pair NG with mentors whom they believe are ready and willing to take mentees. Preferably those with 1 year experience or more.</td>
<td>workshops available for staff — are not mandatory. (1st class), followed by education in change management, leadership/empowerment, appreciative inquiry (2nd session).</td>
<td>orientation phase. The manager typically assigns an experienced nurse to the new graduate hire and is often aligned with the rotation the new grad will be following into.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>NG establishes a learning plan with support from CNE/clinical leader, e.g. PCC/RN; learning plan content is derived from a CAPE Tool designed for their area of practice.</td>
<td>Yes, formal transition program is part of our “Practice Start Program” as above. Provides new graduate practice consultation, workshops and supernumerary mentored hours for new graduate RN and RPN’s that focuses on practice transition. Employees: (1) Director of Nursing Practice (executive sponsor), (2) Transition Leader: Yes, there is an official NG transition program. There is a NG meet and greet in the 3 main centres (PG, Terrace, Fort St. John). NGs apply for NG transition funding (funding divided amongst the regions, and between general practice and specialty areas. $5500 for general, $9500 for specialty areas). This transition funding can be applied to Interior Health does have a formal NG Transition Program lead through the PPO with its Passage to Practice Program. The program has been structured using Judy Boychuk-Duscher’s Transition model. As stated previously — there is a formal application process which outlines the roles and responsibilities of the manager and new grad. Orientation is set up.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transition prog.</td>
<td>After 6 week orientation there is a 6 month skill consolidation period. Then internship starts. NG placed in one of 18 clinical pathways, each pathway is 3 months long. In a new pathway every 9 months or so or until hired into a unit. 15% of time during pathways is education via workshops/ assignments, etc. No formal peer support opportunities.</td>
<td>All NGs supported by program. 4 education workshops delivered on a quarterly basis. A mentorship team of nurses (selected by interview and experience level) floats the hospital and are available for clinical support. Mentorship team members and NG educators attend workshops re: having difficult conversations, etc. Often work with</td>
<td>In addition to the 6 week preceptored period and possible 6 month full-time rotation, there is also a NG workshop (attendance optional) delivered shortly after hire. Full day, content includes Transition Process (learning needs as per Judy Boychuk-Desrochers, learning plan, giving and taking feedback) and Transition within VIHA (options, mentorship, rights</td>
<td>Yes, there is an official NG transition program. There is a NG meet and greet in the 3 main centres (PG, Terrace, Fort St. John). NGs apply for NG transition funding (funding divided amongst the regions, and between general practice and specialty areas. $5500 for general, $9500 for specialty areas). This transition funding can be applied to</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>STEP (supported transitions and entry to practice) Team. Includes a manager, coordinator, clinical education assistant, and regional clinical educators. Offers 2 - 7.5 hour workshops for NGs. First is transition theory, standards of practice, competency development and workplace wellness. Also case based session to familiarize with protocols and</td>
<td></td>
<td>Yes, there is an official NG transition program. There is a NG meet and greet in the 3 main centres (PG, Terrace, Fort St. John). NGs apply for NG transition funding (funding divided amongst the regions, and between general practice and specialty areas. $5500 for general, $9500 for specialty areas). This transition funding can be applied to</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HA</td>
<td>PHSA</td>
<td>Providence</td>
<td>VIHA</td>
<td>Fraser</td>
<td>Northern</td>
<td>Interior</td>
<td>V/C</td>
</tr>
<tr>
<td>----</td>
<td>------</td>
<td>------------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>----------</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>other nurses who have complex patients. Not exclusive to NGs, but most frequently accessed by them. At 3 months all NGs get together for a NG seminar. Opportunity for sharing of experiences with peers.</td>
<td>and duties, intergenerational differences, resources within VIHA).</td>
<td>lead for program, practice consultation (3) two Clinical Nurse Educators: workshop facilitation, practice consultation, outreach education), (4) Program Coordinator (positions changed this year include Leader position - was previously at the Consultant level; 2nd CNE and the Program Coordinator) • PPI staff work closely with the clinical areas’ managers, CNEs to support the NGs’ journey New Graduate Workshops: provided to all new graduate RN’s and RPN’s Workshop #1: Preparatory Workshop - occurs before entering clinical practice area 4 hours. Introduces Transition Shock and Stages Models (Dr. J. Duchscher.2008), self care strategies for transition shock, introduction to professional practice, CAPE tool review, learning plan</td>
<td>buddy shifts and training (e.g. courses, rural nurse certificate, etc.). Training decisions guided by learning plan developed by NG and manager. 3 NG workshops in each of the 3 main centres: first session in June, one in September, and a ‘charge nurse’ workshop in March. NGs from surrounding areas can travel to attend the workshops (funding available to cover travel).</td>
<td>by the hiring unit with assistance from one of three NG Coordinators that report through the PPO. These NG Coordinators are also responsible for the ESN program — which helps establish relationships (The individual new hire may have completed 2 summers of employment and then comes into the New Grad program). The NG Coordinators are geographically located: one in the Thompson, Cariboo Shuswap corridor, one in the Okanagan Valley and one in the Kootenays. These NG Coordinators are within the BCNU Collective Agreement and are classified as ED2 (educators). They have the dual responsibility of the two fore mentioned programs but also are linked as Educators within the PPO. The Coordinators are responsible for ensuring that the practices related to high risk meds. Workshop #2 is a case based interactive skills development day (e.g. oxygen, chest tubes, traches, patient controlled analgesics, epidurals. Sessions are offered within the NG transition supernumerary support period (or just prior to graduation for ESNs).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HA</td>
<td>PHSA</td>
<td>Providence</td>
<td>VIHA</td>
<td>Fraser</td>
<td>Northern</td>
<td>Interior</td>
<td>V/C</td>
</tr>
<tr>
<td>----</td>
<td>------</td>
<td>------------</td>
<td>------</td>
<td>--------</td>
<td>----------</td>
<td>----------</td>
<td>-----</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>development, mentor/mentee relationship and skills, peer mentorship skills</td>
<td>individual new graduate has completed regional orientation, attended facility/discipline specific orientation as well as unit-specific orientation. They may be asked to assist with presentations etc. at the various orientations as requested by the local educators/patient care coordinators/managers. The Coordinator is also responsible for ensuring the unit staff are aware of the program and what their role and responsibility entails (both staff and coordinator’s). They assist with the development of a learning plan using the Entry Level Competency tool and directing the new graduate to various learning resources. The Coordinators are then responsible to follow up with each of the NG through the first year of</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- reviews the New Graduate component; discusses structures, support, and troubleshooting</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- discusses the mentorship relationship and how it differs from preceptorship</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- clarifies new role responsibilities and expectations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Reviews helpful tools and resources in the Health Authority</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Prepare a personalized learning plan using the CAPE tool based on your new clinical practice area</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- Connect with other New Graduates and experience support from each other (Peer Mentorship)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Workshop #2: Critical Thinking and Decision Making Workshop.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>- 7.5 hour. Case-based analysis of complex care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
situations. Small groups co facilitated with frontline Clinical Practice Leaders and frontline staff who have participated in the Educator Pathway. Storytelling encouraged/non-testing format, provided within 3 weeks after workshop #1. What - Common clinical scenarios with “complications” Delirium/Dementia/ Depression; Post Operative Care, Sepsis, Alcohol Withdrawal; Admission/Discharge teaching - Specialized scenarios; post partum hemorrhage, palliative care in the home setting, mental health, pediatrics Workshop #3 Leadership 4 hours. Provides new graduates an opportunity for practice reflection and to consider future professional development. Learning activities related to exploring employment. In addition to the individual learning plans, the NG Coordinators host three Education sessions. These have been strategically placed within the first year of hire — matching Judy’s Transition model. The Passage to Practice Education days start with organizational information that is often missed at orientation (how to apply for vacation, how to do sick call, IH website, key resource individuals). There is also scheduled a de-briefing time, when NG’s can share their experiences to date. This session is typically held at the three month mark. The second P2P day is about six months post-hire. The day is focused on critical thinking / decision making within a clinical setting. Case studies are reviewed and discussed. Again there is a de-briefing
and building leadership competencies in nursing. New graduates are scheduled for this workshop between 3-9 months of practice. Correlates to Transition Crisis Phase of the Transition Shock Model (Dr. J. Duchscher) As of September 2011

Page 3 of 5

Supernumerary Mentorship:
New graduates are provided 150 hours of supernumerary mentorship. Level 1 Mentorship and Level 1 Advanced Mentorship Educator Pathway workshops are available for mentors to develop skills. We strongly recommend that mentors take the Level 1 Mentorship Workshop as a foundation prior to entering in a mentorship relationship. The mentor and mentee matching process is negotiated and facilitated by

time scheduled. The third P2P day is around the nine month mark. This day has changed from a career development day to Next Steps and includes topics around being in-charge, being a preceptor and being a leader. Each of these days are 7.5 hours in length and are held throughout IH (Vernon, Kelowna, Penticton, Kamloops, Williams Lake, Trail and Cranbrook). Guest speakers often attend to share their expertise and experience. The day is evaluated to ensure we are meeting its objectives.
<table>
<thead>
<tr>
<th>HA</th>
<th>PHSA</th>
<th>Providence</th>
<th>VIHA</th>
<th>Fraser</th>
<th>Northern</th>
<th>Interior</th>
<th>V/C</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>unit-based clinical educator, coordinator, PCC or manager. Managers may supplement the 150 hours with additional supernumerary shifts based on the learning needs of the new graduate</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**NG Education**

See above

In addition to the unit orientation education, there are 4 NG workshops — lab values and tests; navigating the final journey (end of life care); emergency/ code blue; RN exam prep.

See above

See above

See previous answer

See above

**Comp./CT**

Competency formally assessed at the competency validation day 2 1/2 months post-hire. CT not formally assessed

CAPE tool — self-assessment for competency

All NGs subject to typical employee performance appraisal. No specific eval. of critical thinking.

Competencies, critical thinking evaluated together (use CRNKC model: competencies, i.e. knowledge, skill, attitude & judgment) via CAPE Tools — NG evaluates their own competency level and reviews this with their clinical leader(s) and mentor(s); unit- specific competencies also reviewed with clinical leaders

Rely on site developed competency assessment tools. Working on implementing a NH wide tool. No specific assessment of critical thinking.

As stated above, IH does assess NG competency and ensures any validation requirements are met by the NG (e.g. central line education). The competency tool is used to develop an individual learning plan for the NG. Our second P2P day focuses on critical thinking. It is incorporated within our competencies.

VCH competency assessment tool received by each hire. Clarifies expectations and is reviewed by STEP educator. Learning goals identified based on learning needs. STEP educators assess competencies via clinical dialogue, questioning, rounds, concept mapping, observation and role modeling.
## Appendix B1: Lit Synopsis Table

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Level of Evidence</th>
<th>Design</th>
<th>Sample Size</th>
<th>Transition Program Length (Months)</th>
<th>Unit Orientation Length</th>
<th>NG Specific Education</th>
<th>Types of Supports Provided</th>
<th>Competency and Critical Thinking</th>
<th>Job Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adlam, K. A., Dotchin, M., &amp; Hayward, S. (2009)</td>
<td>3</td>
<td>Descriptive</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>Mentor for both preceptor and NG</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Almada, P., Carafoli, K., Flattery, J. B., French, D. A., &amp; McNamara, M. (2004)</td>
<td>3</td>
<td>Descriptive</td>
<td>40</td>
<td>&gt; 6 months</td>
<td>&gt; 4 weeks, less than 3 months</td>
<td>Yes</td>
<td>Resident Facilitator</td>
<td>-</td>
<td>↑</td>
</tr>
<tr>
<td>Altier, M.E., &amp; Krsek, C.A. (2006)</td>
<td>6</td>
<td>Descriptive</td>
<td>111</td>
<td>&gt; 6 months</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>No change</td>
<td></td>
</tr>
<tr>
<td>Anderson, T., Linden, L., Allen, M., &amp; Gibbs, E. (2009).</td>
<td>6</td>
<td>Quasi-experimental</td>
<td>90</td>
<td>&gt; 6 months</td>
<td>-</td>
<td>-</td>
<td>↑</td>
<td>↓</td>
<td></td>
</tr>
<tr>
<td>Applin, H., Williams, B., Day, R., &amp; Buro, K. (2011)</td>
<td>5</td>
<td>Descriptive</td>
<td>121</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Baggot, D. M., Hensinger, B., Parry, J., Valdes, M. S., &amp; Zaim, S. (2005)</td>
<td>6</td>
<td>Longitudinal</td>
<td>526</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Beecroft, P., Hernandez, A. M., &amp; Reid, D. (2008)</td>
<td>5</td>
<td>Descriptive</td>
<td>88</td>
<td>4 - 6 months</td>
<td>&gt; 4 weeks, less than 3 months</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Beecroft, P. C., Santner, S., Lacy, M. L., Kunzman, L., &amp; Dorey, F. (2006)</td>
<td>6</td>
<td>Descriptive</td>
<td>318</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Mentor</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Beyea, S., Kobokovich Van Reyn, L., &amp; Slattery, M.J. (2007)</td>
<td>4</td>
<td>Longitudinal</td>
<td>6 to 27</td>
<td>0-3</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>↑</td>
<td></td>
</tr>
<tr>
<td>Bratt, M. M. (2009)</td>
<td>5</td>
<td>Descriptive</td>
<td>1500</td>
<td>&gt; 6 months</td>
<td>-</td>
<td>-</td>
<td>Mentor (Clinical Coach)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Blanzola, C., Lindeman, R., &amp; King, M. L. (2004)</td>
<td>5</td>
<td>Quasi-experimental</td>
<td>8</td>
<td>4 - 6 months</td>
<td>&lt; 4 weeks</td>
<td>Yes</td>
<td>Mentor</td>
<td>↑</td>
<td>-</td>
</tr>
<tr>
<td>Campbell, S. L., Prater, M., Schwartz, C., &amp; Ridenour, N. (2001)</td>
<td>3</td>
<td>Descriptive</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>Yes</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Note: NG = New Graduate; Design = Methodology; Sample Size = Number of participants; Transition Program Length = Duration of the training program; Unit Orientation Length = Duration of the unit orientation; NG Specific Education = Whether education specific to NG was provided; Types of Supports Provided = Types of support given during the training; Competency and Critical Thinking = Impact on competency and critical thinking; Job Satisfaction = Impact on job satisfaction.
# Appendix B1: Lit Synopsis Table

<table>
<thead>
<tr>
<th>Study Descriptors</th>
<th>Program Elements</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Author(s)</strong></td>
<td><strong>Level of Evidence Score</strong></td>
<td><strong>Design</strong></td>
</tr>
<tr>
<td>Casey, K., Fink, R., Krugman, M., &amp; Propst, J. (2004)</td>
<td>6</td>
<td>Longitudinal</td>
</tr>
<tr>
<td>Clark, T., &amp; Holmes, S. (2007)</td>
<td>5</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Ellerton, M. L., &amp; Gregor, F. (2003)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Fink, R., Krugman, M., Casey, K., &amp; Goode, C. (2008)</td>
<td>7</td>
<td>Longitudinal</td>
</tr>
<tr>
<td>Forneris, S. G., &amp; Peden-McAlpine, C. (2009)</td>
<td>3</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Fox, K. C. (2010)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Gavlak, S. (2007)</td>
<td>5</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Ho, B. (2006)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Hayes, J. M., &amp; Scott, A. S. (2007)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Kaddoura, M. A. (2010)</td>
<td>3</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Keller, J. L., Meekins, K., &amp; Summers, B. L. (2006)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Komaratat, S., &amp; Oumtanee, A. (2009)</td>
<td>5</td>
<td>Quasi-experimental</td>
</tr>
<tr>
<td>Kowalski, S., &amp; Cross, C. L. (2010)</td>
<td>5</td>
<td>Longitudinal</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Level of Evidence Score</td>
<td>Design</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Kramer, M., Brewer, B. &amp; Maguire, P (2011)</td>
<td>7</td>
<td>Longitudinal</td>
</tr>
<tr>
<td>Krugman, M., Bretschneider, J., Horn, P. B., Krsek, C. A., Moutafis, R. A., &amp; Smith, M. O. (2006)</td>
<td>4</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Lee, T. Y., Tzeng, W. C., Lin, C. H., &amp; Yeh, M. L. (2009)</td>
<td>6</td>
<td>Quasi-experimental</td>
</tr>
<tr>
<td>Li, S., &amp; Kenward, K. (2006)</td>
<td>5</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Marcum, E. H., &amp; West, R. D. (2004)</td>
<td>5</td>
<td>Quasi-experimental</td>
</tr>
<tr>
<td>McKenna, L., &amp; Newton, J. M. (2008)</td>
<td>3</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Mills, J. F., &amp; Mullins, A. C. (2008)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Murphy, M., Petryshen, P., &amp; Read, N. (2004)</td>
<td>5</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Nugent, E. (2008)</td>
<td>5</td>
<td>Qualitative</td>
</tr>
<tr>
<td>Pickens, J. M., &amp; Fargotstein, B. P. (2006)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Pine, R., &amp; Tart, K. (2007)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Roche, J. P., Lamoureux, E., &amp; Teehan, T. (2004)</td>
<td>4</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Schoessler, M., &amp; Waldo, M. (2006)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Scott, E. S., Engelke, M. K., &amp; Swanson, M. (2008)</td>
<td>5</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Author(s)</td>
<td>Level of Evidence Score</td>
<td>Design</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Smith, J., &amp; Crawford, L. (2003)</td>
<td>5</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Sorensen, H. A., &amp; Yankech, L. R. (2008)</td>
<td>5</td>
<td>Quasi-experimental</td>
</tr>
<tr>
<td>Strauss, M. B. (2009)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
<tr>
<td>Young, M. E., Stuenkel, D. L., &amp; Bawel-Brinkley, K. (2008)</td>
<td>5</td>
<td>Quasi-experimental</td>
</tr>
<tr>
<td>Zucker, B., Goss, C., Williams, D., Bloodworth, L., Lynn, M., Denker, A., &amp; Gibbs, J. D. (2006)</td>
<td>3</td>
<td>Descriptive</td>
</tr>
</tbody>
</table>
## Appendix B2: Retention and Turnover Rates APA report

<table>
<thead>
<tr>
<th>Reference</th>
<th>Level of Evidence</th>
<th>Program Type</th>
<th>Program Length</th>
<th>Study Sample Size</th>
<th>Pre-Program Retention</th>
<th>Post-Program Retention</th>
<th>% Change</th>
<th>Time When Post-Program Rate Measured</th>
<th>Cost Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almada, Carafoli, Flattery, French and McNamara (2004)</td>
<td>3</td>
<td>Un-named</td>
<td>12 mo.</td>
<td>40</td>
<td>60%</td>
<td>89%</td>
<td>39%</td>
<td>At 14 mo. post implementation of the program</td>
<td></td>
</tr>
<tr>
<td>Anderson and Linden (2009)</td>
<td>6</td>
<td>Residency</td>
<td>12 mo.</td>
<td>90</td>
<td>60%</td>
<td>90%</td>
<td>30%</td>
<td>At one year post hire</td>
<td></td>
</tr>
<tr>
<td>Leigh et al (2005)</td>
<td>5</td>
<td>Un-named</td>
<td>12 mo.</td>
<td>Not provided</td>
<td>76%</td>
<td>99%</td>
<td>23%</td>
<td>At one year post hire</td>
<td></td>
</tr>
<tr>
<td>Marcum and West (2004)</td>
<td>5</td>
<td>Un-named</td>
<td>9 mo.</td>
<td>20</td>
<td>60%</td>
<td>89%</td>
<td>29%</td>
<td>At 18 mo. post completion of the program</td>
<td></td>
</tr>
<tr>
<td>Zucker, Goss, Williams, Bloodworth, Lynn, Denker, and Gibbs (2006)</td>
<td>3</td>
<td>Mentorship</td>
<td>18 mo.</td>
<td>Not provided</td>
<td>77%</td>
<td>90%</td>
<td>13%</td>
<td>At 6 mo. program implementation</td>
<td></td>
</tr>
</tbody>
</table>

### Post-Program Retention Only

<table>
<thead>
<tr>
<th>Reference</th>
<th>Level of Evidence</th>
<th>Program Type</th>
<th>Program Length</th>
<th>Study Sample Size</th>
<th>Pre-Program Retention</th>
<th>Post-Program Retention</th>
<th>% Change</th>
<th>Time When Post-Program Rate Measured</th>
<th>Cost Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Altier and Krsek (2006)</td>
<td>6</td>
<td>Residency</td>
<td>12 mo.</td>
<td>111</td>
<td>-</td>
<td>87%</td>
<td>-</td>
<td>At one year post hire</td>
<td></td>
</tr>
<tr>
<td>Bratt (2009)</td>
<td>5</td>
<td>Residency</td>
<td>15 mo.</td>
<td>1,100</td>
<td>-</td>
<td>90%</td>
<td>-</td>
<td>15-18 mo. post program completion</td>
<td></td>
</tr>
<tr>
<td>Gavlak (2007)</td>
<td>5</td>
<td>Un-named</td>
<td>12 mo.</td>
<td>120</td>
<td>-</td>
<td>94%</td>
<td>-</td>
<td>At one year post hire</td>
<td></td>
</tr>
<tr>
<td>Keller, Meekins and Summers (2006)</td>
<td>3</td>
<td>Residency</td>
<td>12 mo.</td>
<td>72</td>
<td>-</td>
<td>89%</td>
<td>-</td>
<td>At one year post hire</td>
<td></td>
</tr>
<tr>
<td>Kowalski and Cross (2010)</td>
<td>5</td>
<td>Residency</td>
<td>12 mo.</td>
<td>55</td>
<td>-</td>
<td>78%</td>
<td>-</td>
<td>At one year post hire</td>
<td></td>
</tr>
<tr>
<td>Mills and Mullins (2008)</td>
<td>3</td>
<td>Mentorship</td>
<td>12 mo.</td>
<td>Not provided</td>
<td>-</td>
<td>Mentored = 92%; Control = 77%</td>
<td>-</td>
<td>No exact point provided, but within one year of hire</td>
<td></td>
</tr>
<tr>
<td>Strauss (2009)</td>
<td>3</td>
<td>Un-named</td>
<td>3 mo.</td>
<td>Not provided</td>
<td>-</td>
<td>97%</td>
<td>-</td>
<td>At one year post hire</td>
<td></td>
</tr>
<tr>
<td>Reference</td>
<td>Level of Evidence Score</td>
<td>Program Type</td>
<td>Program Length</td>
<td>Study Sample Size</td>
<td>Pre-Program Retention</td>
<td>Post-Program Retention</td>
<td>% Change</td>
<td>Time When Post-Program Rate Measured</td>
<td>Cost Benefit</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-------------------------</td>
<td>-----------------------</td>
<td>----------------</td>
<td>-------------------</td>
<td>------------------------</td>
<td>------------------------</td>
<td>----------</td>
<td>-------------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>Fox (2010)</td>
<td>3</td>
<td>Mentorship</td>
<td>12 mo.</td>
<td>12</td>
<td>32%</td>
<td>16%</td>
<td>16%</td>
<td>At one year post hire</td>
<td>$1,040,153 US annual savings</td>
</tr>
<tr>
<td>Pine and Tart (2007)</td>
<td>3</td>
<td>Residency</td>
<td>12 mo.</td>
<td>48</td>
<td>50%</td>
<td>13%</td>
<td>37%</td>
<td>At one year</td>
<td>$823,680 US annual savings</td>
</tr>
<tr>
<td>Schoessler and Waldo (2006)</td>
<td>3</td>
<td>Un-named</td>
<td>24 mo.</td>
<td>Not provided</td>
<td>20%</td>
<td>6%</td>
<td>14%</td>
<td>3 years post program implementation</td>
<td></td>
</tr>
</tbody>
</table>

**Post Program Turnover Only**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Level of Evidence Score</th>
<th>Program Type</th>
<th>Program Length</th>
<th>Study Sample Size</th>
<th>Pre-Program Retention</th>
<th>Post-Program Retention</th>
<th>% Change</th>
<th>Time When Post-Program Rate Measured</th>
<th>Cost Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Williams, Goode, and Krsek (2007)</td>
<td>6</td>
<td>Residency</td>
<td>12 mo.</td>
<td>679</td>
<td>-</td>
<td>12%</td>
<td>-</td>
<td>At one year post hire</td>
<td></td>
</tr>
<tr>
<td>Krugman, Bretschneider, Horn, Krsek, Moutafis, and Smith (2006)</td>
<td>4</td>
<td>Residency</td>
<td>12 mo.</td>
<td>Not provided</td>
<td>-</td>
<td>8%</td>
<td>-</td>
<td>At one year post hire</td>
<td></td>
</tr>
</tbody>
</table>
Appendix C: UBCREB Approval
The University of British Columbia Okanagan
Research Services
Behavioural Research Ethics Board
3333 University Way
Kelowna, BC V1V 1V7

Phone: 250-807-8832
Fax: 250-807-8438

CERTIFICATE OF APPROVAL - MINIMAL RISK

<table>
<thead>
<tr>
<th>PRINCIPAL INVESTIGATOR:</th>
<th>INSTITUTION / DEPARTMENT:</th>
<th>UBC BREB NUMBER:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kathy Rush</td>
<td>UBC/UBCO Health &amp; Social Development/UBCO Nursing</td>
<td>H11-00444</td>
</tr>
</tbody>
</table>

INSTITUTION(S) WHERE RESEARCH WILL BE CARRIED OUT:

<table>
<thead>
<tr>
<th>Institution / Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vancouver Coastal Health (VCHRI/VCHA) Vancouver General Hospital</td>
</tr>
<tr>
<td>UBC Okanagan</td>
</tr>
<tr>
<td>Children's and Women's Health Centre of BC (incl. Sunny Hill) Women's Health Research Institute</td>
</tr>
<tr>
<td>Providence Health Care Mount Saint Joseph Hospital</td>
</tr>
<tr>
<td>Providence Health Care St. Paul's Hospital</td>
</tr>
</tbody>
</table>

CO-INVESTIGATOR(S):

N/A

SPONSORING AGENCIES:

Michael Smith Foundation for Health Research - “Expanding the Evidence for New Graduate Transition Best Practices”

PROJECT TITLE:

Expanding the Evidence for New Graduate Transition Best Practices

CERTIFICATE EXPIRY DATE: June 1, 2012

DOCUMENTS INCLUDED IN THIS APPROVAL:

<table>
<thead>
<tr>
<th>Document Name</th>
<th>Version</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Expanding the Evidence for New Graduate Transition Best Practices</td>
<td>3.0</td>
<td>March 10, 2011</td>
</tr>
<tr>
<td>Consent Forms:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>focus group consent form - front line managers</td>
<td>3.0</td>
<td>April 5, 2011</td>
</tr>
<tr>
<td>focus group consent form - transition program coordinators</td>
<td>3.0</td>
<td>April 5, 2011</td>
</tr>
<tr>
<td>Online survey consent form</td>
<td>2.0</td>
<td>April 5, 2011</td>
</tr>
<tr>
<td>Individual interview consent form - nursing faculty</td>
<td>3.0</td>
<td>April 7, 2011</td>
</tr>
<tr>
<td>focus group consent form - new graduate nurses</td>
<td>2.0</td>
<td>April 5, 2011</td>
</tr>
<tr>
<td>Advertisements:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>recruitment poster</td>
<td>2.0</td>
<td>April 5, 2011</td>
</tr>
<tr>
<td>recruitment script for phone and verbal invitations</td>
<td>2.0</td>
<td>April 5, 2011</td>
</tr>
<tr>
<td>recruitment for webpages and enewsletters</td>
<td>2.0</td>
<td>April 5, 2011</td>
</tr>
<tr>
<td>Questionnaire, Questionnaire Cover Letter, Tests:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>focus group demographics sheet - front line managers</td>
<td>2.0</td>
<td>April 5, 2011</td>
</tr>
<tr>
<td>Individual interview guide - nursing program faculty</td>
<td>2.0</td>
<td>February 12, 2011</td>
</tr>
<tr>
<td>Focus group interview guide - front line managers</td>
<td>2.0</td>
<td>February 5, 2011</td>
</tr>
<tr>
<td>focus group demographics sheet - transition program coordinators</td>
<td>2.0</td>
<td>April 5, 2011</td>
</tr>
<tr>
<td>Online survey letter of invitation</td>
<td>2.0</td>
<td>April 5, 2011</td>
</tr>
</tbody>
</table>

New Graduate Nurse Best Practices
The application for ethical review and the document(s) listed above have been reviewed and the procedures were found to be acceptable on ethical grounds for research involving human subjects.

Approval is issued on behalf of the Behavioural Research Ethics Board Okanagan and signed electronically by:

Dr. Daniel Salhani, Chair
Appendix D1: Focus group letter of invitation and consent – NG’s
Letter of Introduction and Consent Form for New Graduate Nurses Project Focus Groups

Project Title: Expanding the Evidence for New Graduate Transition Best Practices

Participants: New graduate nurses

Introduction/Background
This is a letter of introduction to tell you about a Michael Smith Foundation for Health Research funded project related to new graduate nurse transition to practice. The project is focusing on the practices that best facilitate the integration of new graduates into the workplace. The outcome of the project will be the development of a toolkit of best practices for use with new nurse graduates. We are writing to invite your participation.

Principal Investigator: Kathy Rush, PhD, RN
UBC-Okanagan, Faculty of Nursing
Phone: 250.807.9561

Co-Investigator: Monica Adamack, MA, BSN
Interior Health Authority, Regional Practice Leader for Clinical Professional Education
Phone: 250.870.4680

Research Coordinator: Jason Gordon, MHS, BScPT
UBC-Okanagan, School of Nursing
Phone: 250.212.0305

Who Can Participate?
We are seeking new graduates nurses to participate in focus groups.

Involvement
You are asked to participate in a single focus group discussion. The focus group will follow an interview guide that you will have access to prior to participating. It is expected the focus group will last approximately 60 minutes. There are questions concerning demographics, supports for new graduate nurses within your Health Authority, barriers and challenges impacting the support available to new graduate nurses, and strategies you feel would assist the process.

Costs and Compensation
There are no costs associated with your participation. As a way to compensate you for your time you will be given $50. This form of compensation must not influence your decision to participate. If you would not participate if the compensation was not offered, then you should refuse.
Risks

There are no perceived risks to participating in this study except perhaps the time involved.

Benefits

This investigation has the potential to inform all BC stakeholders in nursing about the best evidence for effective transition of new nurse graduates to practice. New nurse graduates working for health authorities that implement such strategies will benefit by being more supported throughout their transition process. Society in general will benefit through the consistent nursing care as a result of improved retention rates and effective transition to practice of new nurses.

Confidentiality

A number of measures will be used to keep your identity confidential. All participants will be encouraged to avoid discussing anything said during the discussions with outside individuals. We cannot control what other participants do with the information discussed and for that reason can only offer limited confidentiality. The audio-tapes and printed discussions will be kept in a locked cabinet, made available only to members of the research team, and destroyed in 5 years. The printed discussions will use code numbers so no one from the group can be identified. All documents will be identified only by code number and kept in a locked filing cabinet.

The information you provide will be shared with others who study and work with new graduates and be communicated in written papers or oral presentations. We are asking your permission to communicate your information in this way without personally identifying you. It is anticipated that results from the study will be used to guide future research in this area. If you would like a report of the findings please include your mailing address in the space provided at the bottom of this form. You will also be provided with a copy of the signed consent form.

Contact for Concerns about the Rights of Research Participants

Participants have the right to ask questions, and have those questions answered. If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject Information Line in the UBC Office of Research Services at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250-807-8832.

Withdrawal

Your participation in this research is entirely voluntary. You may withdraw from this study at any time. If you decide to enter the study and to withdraw at any time in the future, there will be no penalty or loss of benefits to which you are otherwise entitled. If you choose to enter the study and then decide to withdraw at a later time, all data collected about you during your enrolment in the study will be retained for analysis.

If you have any questions or desire further information about this study before or during participation you can contact the co-investigators or research coordinator at the contact numbers listed on the first page.
SUBJECT CONSENT TO PARTICIPATE

Expanding the Evidence for New Graduate Transition Best Practices

Check List:

- I have read and understood the subject information and consent form and am consenting to participate in the study Expanding the Evidence for New Graduate Transition Best Practices
- I have had sufficient time to consider the information provided and to ask for advice if necessary.
- I have had the opportunity to ask questions and have had satisfactory responses to my questions.
- I understand that all of the information collected will be kept confidential and that the result will only be used for scientific objectives.
- I understand that my participation in this study is voluntary and that I am completely free to refuse to participate or to withdraw from this study at any time without effecting my participation in the main study and without changing in any way the quality of care that I receive.
- I understand that I am not waiving any of my legal rights as a result of signing this consent form.
- I understand that there is no guarantee that this study will provide any benefits to me
- I have read this form and I freely consent to participate in this study.
- I have been told that I will receive a dated and signed copy of this form.

Signatures

Printed name of subject _____________________________ Signature ___________________________ Date _____________________________

Printed name of witness _____________________________ Signature ___________________________ Date _____________________________

Printed name of PI/rep. _____________________________ Signature ___________________________ Date _____________________________

Version 2.0, April 5, 2011
Appendix D2: Focus group letter of invitation and consent – front line managers
Letter of Introduction and Consent Form for
New Graduate Nurses Project Focus Groups

Project Title: Expanding the Evidence for New Graduate Transition Best Practices

Participants: Front line managers, care coordinators, clinical unit coordinators

Introduction/Background
This is a letter of introduction to tell you about a Michael Smith Foundation for Health Research funded project related to new graduate nurse transition to practice. The project is focusing on the practices that best facilitate the integration of new graduates into the workplace. The outcome of the project will be the development of a toolkit of best practices for use with new nurse graduates. We are writing to invite your participation.

Principal Investigator: Kathy Rush, PhD, RN
UBC-Okanagan, Faculty of Nursing
Phone: 250.807.9561

Co-Investigator: Monica Adamack, MA, BSN
Interior Health Authority, Regional Practice Leader for Clinical Professional Education
Phone: 250.870.4680

Research Coordinator: Jason Gordon, MHS, BScPT
UBC-Okanagan, School of Nursing
Phone: 250.212.0305

Who Can Participate?
We are seeking front line managers, care coordinators and clinical unit coordinators to participate in focus groups.

Involvement
You are asked to participate in a single focus group discussion. The focus group will follow an interview guide that you will have access to prior to participating. It is expected the focus group will last approximately 60 minutes. There are questions concerning demographics, supports for new graduate nurses within your Health Authority, barriers and challenges impacting the support available to new graduate nurses, and strategies you feel would assist the process.

Costs and Compensation
There are no costs associated with your participation. As a way to compensate you for your time you will be given $50. This form of compensation must not influence your decision to
participate. If you would not participate if the compensation was not offered, then you should refuse.

Risks
There are no perceived risks to participating in this study except perhaps the time involved.

Benefits
This investigation has the potential to inform all BC stakeholders in nursing about the best evidence for effective transition of new nurse graduates to practice. New nurse graduates working for health authorities that implement such strategies will benefit by being more supported throughout their transition process. Society in general will benefit through the consistent nursing care as a result of improved retention rates and effective transition to practice of new nurses.

Confidentiality
A number of measures will be used to keep your identity confidential. All participants will be encouraged to avoid discussing anything said during the discussions with outside individuals. We cannot control what other participants do with the information discussed and for that reason can only offer limited confidentiality. The audio-tapes and printed discussions will be kept in a locked cabinet, made available only to members of the research team, and destroyed in 5 years. The printed discussions will use code numbers so no one from the group can be identified. All documents will be identified only by code number and kept in a locked filing cabinet.

The information you provide will be shared with others who study and work with new graduates and be communicated in written papers or oral presentations. We are asking your permission to communicate your information in this way without personally identifying you. It is anticipated that results from the study will be used to guide future research in this area. If you would like a report of the findings please include your mailing address in the space provided at the bottom of this form. You will also be provided with a copy of the signed consent form.

Contact for Concerns about the Rights of Research Participants
Participants have the right to ask questions, and have those questions answered. If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject Information Line in the UBC Office of Research Services at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250-807-8832.

Withdrawal
Your participation in this research is entirely voluntary. You may withdraw from this study at any time. If you decide to enter the study and to withdraw at any time in the future, there will be no penalty or loss of benefits to which you are otherwise entitled. If you choose to enter the study and then decide to withdraw at a later time, all data collected about you during your enrolment in the study will be retained for analysis.

If you have any questions or desire further information about this study before or during participation you can contact the co-investigators or research coordinator at the contact numbers listed on the first page.
SUBJECT CONSENT TO PARTICIPATE

Expanding the Evidence for New Graduate Transition Best Practices

Check List:

- I have read and understood the subject information and consent form and am consenting to participate in the study Expanding the Evidence for New Graduate Transition Best Practices.
- I have had sufficient time to consider the information provided and to ask for advice if necessary.
- I have had the opportunity to ask questions and have had satisfactory responses to my questions.
- I understand that all of the information collected will be kept confidential and that the result will only be used for scientific objectives.
- I understand that my participation in this study is voluntary and that I am completely free to refuse to participate or to withdraw from this study at any time.
- I understand that I am not waiving any of my legal rights as a result of signing this consent form.
- I understand that there is no guarantee that this study will provide any benefits to me.
- I have read this form and I freely consent to participate in this study.
- I have been told that I will receive a dated and signed copy of this form.

Signatures

_____________________ ___________________________ ______________
Printed name of subject    Signature   Date

_____________________ ____________________________ ______________
Printed name of witness    Signature    Date

_____________________ ____________________________ ______________
Printed name of PI/rep.    Signature   Date
Appendix D3: Recruitment poster
Expanding the Evidence for New Graduate Transition Best Practices

You are invited to be part of a province-wide project investigating the transition of new graduate nurses to their role as a RN/RPN. This study is funded by the Michael Smith Foundation for Health Research and will culminate in a best practices toolkit for use by all health authorities to support the transition of BC new nurse graduates. The data collection portion of this study will launch in June of 2011.

Participants:

**New graduate nurses (2010 Grads)**
- An online survey will be distributed through your health authority’s email distribution system, and there will also be opportunities to contribute to this project via focus groups.

**Front line nurse managers, clinical unit coordinators, and new nurse transition program coordinators**
- Focus group information and the RSVP process will be disseminated through your health authority email distribution system, and participants will be compensated $50 for their time.

**Principal Investigators:**

Kathy Rush, PhD, RN  
UBC-Okanagan, Faculty of Nursing  
Phone: 250.807.9561

Monica Adamack, MA, BSN  
Interior Health Authority  
Regional Practice Leader for Clinical Professional Education  
Phone: 250.870.4680

We look forward to your participation in this project.
Appendix E1: Focus group interview guide – NGs
Focus Group Interview Guide - NG

Research Objective – To determine new nurse graduate perspectives on the application and effectiveness of best practices in facilitating workplace integration

Date:
Interviewer:
Location:

Questions

1. **Tell me about the first several months of being a RN?**
   - General starter question to stimulate/initiate discussion

2. **Describe a transition from student to RN/RPN. What is your perception of this experience?**
   Cues: - How do you know you have successfully made the transition? What were your expectations for the transition?

3. **How has your organization’s new nurse transition program helped with your transition to your RN role?**

4. **What components of your program did you find were most effective at helping your transition to the RN role?**
   Cues: - Why? What component do you feel was the most important/useful?

5. **What components of your program were the least effective in assisting your transition to the RN role?**
   Cues: - Why?

6. **What suggestions do you have for additional program components/support to help with the new nurse transition experience?**

7. **At this point in the transition experience, what are your main challenges affecting your ability to successfully transition to your RN role?**
   Cues: - Describe some of the barriers you feel continue to inhibit the transition process.

8. **At this point in the transition experience, what are your main strengths affecting your ability to successfully transition to your RN role?**

9. **Please comment on your nursing education and how it prepared or did not prepare you for the transition to practice.**
Appendix E2: Focus group interview guide –
front line managers, care coordinators, clinical unit coordinators
Focus Group Interview Guide – Front line managers, care coordinators, clinical unit coordinators

Research Objective – To determine the application of best practices, barriers to, and strategies to expand uptake (inter and intra-organizational factors) of new nurse graduate orientation programs

Date:
Interviewer:
Location:

Questions

1. What are the impacts of new graduate nurses being hired to work at your institution in your clinical unit or area you are responsible?
Cues: Positive impacts? Challenges?

2. Talk about how your organization supports new graduate nurses to help them in their transition process.
Cues: - If you have a specific program, what are the components? What is the most effective and important part of your program?

3. In what areas do you perceive the organization does not meet the needs of new graduate nurses?
Cues: - What is the least effective part of your program?

4. What impacts the effectiveness of your organization to assist new nurses in the transition program?
Cues: - How does the current work environment in nursing support best practices for new graduate nurse integration? How does it fail to support best practices?

5. What strategies do you feel could assist in the transition of new nurses in your organization?
Cues: - What challenges do you feel new nurses still struggle with despite existing supports? What are some other strategies you feel would expand uptake of ‘best practices’ with regards to new graduate nurse transition programs?

6. Please comment on the nursing education received by new nurses prior to their employment and how it prepared or did not prepare them for the transition to the RN/RPN role.
Appendix E3: Individual interview guide – nursing faculty
Individual interview guide – nursing faculty

Research Objective – To determine the application of best practices, barriers to, and strategies to expand uptake (inter and intra-organizational factors) of new nurse graduate orientation programs

Date:
Interviewer:
Location:

Questions

1. Describe how your institution’s nursing education curriculum addresses new nurse transition to the RN role.

2. What additions/changes would you make to your program's curriculum to enhance the preparation of your nurse graduates for transition to practice?

3. What barriers/challenges do you feel impact the education sector in terms of preparing nurses for transition to the RN role?

4. What strengths does the education sector have that positively impacts the preparation of nurses for transition to the RN role?

5. Describe any existing relationship you have with individuals from health authorities, and comment on the value of this healthcare environment-academic institution partnership. Describe strategies you feel would enhance partnerships between nursing employers and academic institutions.
Appendix F1: Online survey letter of invitation and consent
Letter of Introduction and Consent Form for New Graduate Nurses Project Online Survey

Project Title: Expanding the Evidence for New Graduate Transition Best Practices

Introduction/Background
This is a letter of introduction to tell you about a Michael Smith Foundation for Health Research funded project related to new graduate nurse transition to practice. The project is focusing on the practices that best facilitate the integration of new graduates into the workplace. The outcome of the project will be the development of a toolkit of best practices for use with new nurse graduates. We are writing to invite your participation.

Principal Investigator: Kathy Rush, PhD, RN
UBC-Okanagan, Faculty of Nursing
Phone: 250.807.9561

Co-Investigator Monica Adamack, MA, BSN
Interior Health Authority, Regional Practice Leader for Clinical Professional Education
Phone: 250.870.4680

Research Coordinator: Jason Gordon, MHS, BScPT
UBC-Okanagan, School of Nursing
Phone: 250.212.0305

Who Can Participate?
As a new graduate nurse we are seeking your participation in an online survey that focuses on your transition to practice during the past year. Your participation is entirely voluntary, so it is up to you to decide whether or not to take part in this study. There is no penalty if you decline to participate.

Involvement
The online survey consists primarily of multiple-choice questions, and takes approximately 15 minutes to complete. You will see that the survey is divided into five sections: It includes questions that ask for information related to your background and demographics, your experiences during transition and specific components regarding taking on the new graduate role.

Costs and Compensation
There are no costs associated with your participation. We do not pay you in cash or in-kind for your participation in the online survey portion of this project.

Risks
There are no perceived risks to participating in this study except perhaps the time involved.
Benefits
This investigation has the potential to inform all BC stakeholders in nursing about the best evidence for effective transition of new nurse graduates to practice. New nurse graduates working for health authorities that implement such strategies will benefit by being more supported throughout their transition process. Society in general will benefit through the consistent nursing care as a result of improved retention rates and effective transition to practice of new nurses.

Confidentiality
Your research-related information will not identify you in any way because all identifying information has been removed such that the information is now anonymous and there is no possibility of linking your identity to your information. The company Fluid Surveys will be utilized to collect survey data, and will be stored on the company’s Canadian servers. Once the data collection portion of the study is completed the data will be exported in an electronic file to a server at UBC-Okanagan. The researchers will then instruct Fluid Surveys to electronically erase all data on their server related to the investigation. Access to survey results at UBCO will be password protected, and data will be stored for 5 years. After 5 years the data will be electronically erased from the server database. Again, throughout this process there will be no personal information able to associate your survey results with your personal identity.

Contact for Concerns about the Rights of Research Participants
Participants have the right to ask questions, and have those questions answered. If you have any concerns about your treatment or rights as a research subject, you may contact the Research Subject Information Line in the UBC Office of Research Services at 1-877-822-8598 or the UBC Okanagan Research Services Office at 250-807-8832.

Withdrawal
Your participation in this research is entirely voluntary. You may withdraw from this study at any time. If you decide to enter the study and to withdraw at any time in the future, there will be no penalty or loss of benefits to which you are otherwise entitled. If you choose to enter the study and then decide to withdraw at a later time, all data collected about you during your enrolment in the study will be retained for analysis.

The Survey
By completing the survey you are consenting to your data being used for the purposes of this research project. There are several terms within the survey that the research team has defined in the ‘Glossary of Terms’ attached to your invitation email. Please take a couple of minutes to review the glossary prior to starting the survey. An asterisk identifies a glossary term within the survey the first time that term is used. Please refer to the Glossary for how that term is defined for the purpose of this project prior to completing that survey question.

If you have any questions or desire further information about this study before or during participation, you can contact Jason Gordon at 250-212-0305.

Here is the link to the survey: (survey link will be inserted here)

Thanks in advance for your participation. We look forward to sharing the results of this project through the development of a best practices toolkit for use with BC new nurse graduates.

Regards,
The New Graduate Integration Team
Appendix F2: NG Survey Final
New Graduate Nurses

Expanding the Evidence for New Graduate Nurse Transition to Practice – Section 1

1. Indicate the health authority you primarily work in:
   - Fraser
   - Interior
   - Northern
   - Provincial health services
   - Providence
   - Vancouver-coastal
   - Vancouver island

2. Do you work in or within 100km of a 'Major Centre?' (Major Centre = a community with an acute care facility)
   - Yes
   - No

3. How old are you?
   - Under 25
   - 25 - 35
   - 36 - 45
   - Over 45
4. What is your gender?
   ○ Female
   ○ Male

5. What previous health care experience did you have prior to being employed as a nurse in BC (select all that are appropriate)?
   ○ volunteer on a nursing unit
   ○ nursing assistant
   ○ licensed practical nurse
   ○ employed student nurse*
   ○ no previous health care experience
   ○ Other ________________

6. How long have you been working as a newly graduated nurse?
   ○ less than 6 months
   ○ 6 months - 1 year
   ○ More than 1 year

7. What was the length of time between your date of graduation from your nursing education program and your first day of employment as a nurse?
   ○ less than 3 months
   ○ 3 months to 6 months
   ○ more than 6 months

8. What is your employment status?
   ○ Permanent Full-time
   ○ Permanent Part-time (enter FTE status, e.g. 0.5 for 1/2 time) ________________
   ○ Temporary Full-time
   ○ Temporary Part-time (enter FTE status, e.g. 0.5 for 1/2 time)
   ○ Casual
9. Further describe your employment status using the choices below:
   - One nursing job, no other non-nursing job(s)
   - One nursing job, other non-nursing job(s)
   - Multiple nursing jobs, no other non-nursing job(s)
   - Multiple nursing jobs, other non-nursing job(s)

10. What is the average number of hours you work in a 2 week period?
   - less than 25 hours
   - 25-48 hours
   - 49-80 hours
   - more than 80 hours

11. Please respond to the following statement: My current hours of work are...
   - About right
   - Less than I’d like
   - More than I’d like

12. If you answered 'Less than I'd like' to the question above, which of the following statements best describes the reason(s): (check all that apply)
   - Employment status/hours wanted was not available
   - I did not have the qualifications required
   - I did not have the experience required
   - I did not have the seniority required
   - I don’t know
   - Other _______________

13. In a 2 week period, what percentage of your shifts are 'night shifts'?
   - 25% or less
   - 26%-50%
   - More than 50%
14. How would you define your primary area of practice?

- Adult Medical
- Adult Surgical
- Ambulatory Clinic
- Oncology
- Paediatrics
- Psychiatry (includes mental health and addictions)
- Rehabilitation
- Sub-Acute
- 'Specialty' areas - NICU, Critical Care, Renal/Nephrology, OR, PACU, Transplant, Emergency, OB/Post partum, ICU
- Other (please identify) ______________________

15. What school of nursing program did you attend?

- BCIT
- Capilano College
- Douglas College
- Kwantlen Polytechnic University
- Langara College
- North Island College
- Thompson Rivers University
- Trinity Western University
- UBC-Okanagan
- UBC-Vancouver
- University College of the Fraser Valley
- University of Northern BC
- UVIC-Camosun
- UVIC-Selkirk
- Vancouver Community College
- Vancouver Island University
- Other (please identify) ______________________
1. Did your employer provide you with a general employee orientation* (e.g.- payroll/benefits info, general facility policies and procedures, etc.)?
   ○ Yes
   ○ No
   ○ Already received an orientation through previous employment (e.g. - LPN, nursing assistant, employed student nurse program*)

Respondents who answer ‘yes’ will be directed to section 2. Answer ‘no’ or ‘already received an orientation...’ will be directed to section 3.
1. Were you provided with an orientation specific to your unit?
   - Yes
   - No
   - Already received an orientation through previous employment (e.g. - LPN, nursing assistant, employed student nurse program*)

2. What was the length of your specific unit orientation?
   - 2 weeks or less
   - More than 2 weeks, but less than 4 weeks
   - 4 weeks to 6 weeks
   - More than 6 weeks

3. During your specific unit orientation, what percentage of your shifts were 'Preceptored* shifts'?
   - 25% or less
   - 26-50%
   - 51-75%
   - More than 75%
   - I did not receive any 'Preceptored shifts'

4. How well did your orientation prepare you for your role as a RN/RPN?
   - Very Good
   - Good
   - Fair
   - Poor
   - Very Poor

5. What do you feel was lacking from your specific unit orientation?
   Select all that apply
☐ My orientation was adequate
☐ My orientation was too short
☐ My orientation had insufficient content
☐ My orientation had inadequate support from my preceptor
☐ Other (please specify) _____________
1. During your transition from new graduate nurse* to your role as a RN/RPN, when was your greatest need for support?
   - Within the first month of practice
   - 1 - 3 months
   - 4 - 6 months
   - 7 - 9 months
   - 10 - 12 months

2. During times when you felt your greatest need for support, how often were you able to access support?
   - None of the time
   - Some of the time
   - Most of the time
   - All of the time
   - I never felt like I needed to receive support

3. Did you experience any bullying and/or harassment in the workplace as a new graduate nurse?
   - Yes
   - No

4. Did your organization provide you with a formal new graduate nurse transition program*?
   - Yes
   - No

Respondents who answer ‘yes’ will be directed to section 4. Answer ‘no’ will be directed to section 5.
1. **What is/was the length of your new graduate nurse transition program?**
   - One month or less
   - More than 1 but not greater than 3 months
   - More than 3 but not greater than 6 months
   - More than 6 months

2. **Rank the following types of educational opportunities in terms of their helpfulness during your transition process. Mark N/A if that type of support wasn’t part of your formal transition program.**

<table>
<thead>
<tr>
<th>Educational Opportunity</th>
<th>Very helpful</th>
<th>Helpful</th>
<th>Moderately helpful</th>
<th>Not very helpful</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written materials</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom/theory</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simulation/lab</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>'Hands-on'/'Bedside' learning</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inservices/workshops</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>website/online materials</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. **Rank the following types of 'people resources' in terms of their helpfulness during your transition process. Mark N/A if that type of support was not part of your formal transition program:**

<table>
<thead>
<tr>
<th>People Resources</th>
<th>Very helpful</th>
<th>Helpful</th>
<th>Moderately helpful</th>
<th>Not very helpful</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preceptor*</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentor*</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New nurse transition program</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>coordinator*</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical educator</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social support from other new graduates/peers</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. Please list any other types of support you would like to have received during your transition program:

☐ ☐ ☐

5. Respond to the following statement: My organization's new graduate nurse transition program helped me establish a sense of commitment to my organization.
   - ☐ Strongly disagree
   - ☐ Disagree
   - ☐ Neutral
   - ☐ Agree
   - ☐ Strongly agree
1. I feel confident communicating with physicians.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

2. I am comfortable knowing what to do for a dying patient.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

3. I feel comfortable delegating workload* to others (e.g.- LPNs, nursing assistants).
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

4. I feel at ease asking for help from other RNs on the unit.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

5. I am having difficulty prioritizing patient care needs.
   - Strongly disagree
   - Disagree
6. I feel my preceptor* provides encouragement and feedback about my work.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

7. I feel staff is available to me during new situations and procedures.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

8. I feel overwhelmed by my patient care responsibilities and workload.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

9. I feel supported by the nurses on my unit.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

10. I have opportunities to practice skills and procedures more than once.
    - Strongly disagree
    - Disagree
    - Agree
11. I feel comfortable communicating with patients and their families.
   o Strongly disagree
   o Disagree
   o Agree
   o Strongly agree

12. I am able to complete my patient care assignment on time.
   o Strongly disagree
   o Disagree
   o Agree
   o Strongly agree

13. I feel the expectations of me in this job are realistic.
   o Strongly disagree
   o Disagree
   o Agree
   o Strongly agree

14. I feel prepared to complete my job responsibilities.
   o Strongly disagree
   o Disagree
   o Agree
   o Strongly agree

15. I feel comfortable making suggestions for changes to the nursing plan of care.
   o Strongly disagree
16. I am having difficulty organizing patient care needs.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

17. I feel I may harm a patient due to my lack of knowledge and experience.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

18. There are positive role models for me to observe on my unit.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

19. My preceptor* is helping me to develop confidence in my practice.
   - Strongly disagree
   - Disagree
   - Agree
   - Strongly agree

20. I am supported by my family/friends
   - Strongly disagree
21. I am satisfied with my chosen nursing specialty.
- Strongly disagree
- Disagree
- Agree
- Strongly agree

22. I feel my work is exciting and challenging.
- Strongly disagree
- Disagree
- Agree
- Strongly agree

23. I feel my manager provides encouragement and feedback about my work.
- Strongly disagree
- Disagree
- Agree
- Strongly agree

24. I am experiencing stress in my personal life.
- Strongly disagree
- Disagree
- Agree
- Strongly agree
25. If you chose 'Agree' or 'Strongly agree' to question #24, please indicate what is causing your stress. (you may select more than one choice)

- Finances
- Child care
- Student loans
- Living situation
- Personal relationships
- Job performance
- Other (please specify) ______________________

Expanding the Evidence for New Graduate Nurse Transition to Practice – Thank You Page

Thank you for participating in our survey and contributing to the knowledge base regarding the transition of new nurses to practice. To enhance this data with some qualitative information, the research team will be hosting several focus groups on this topic for new nurses in BC. Focus group participants will receive $50 and there will be refreshments and light snacks during the focus group. The expected duration is 60 minutes. If you are interested in participating in a focus group please forward your contact information (Name, Health Authority, City, email) to pedther@telus.net. Thanks again!
I. List the top three skills/procedures you are uncomfortable performing independently at this time? (please select from the drop down list) list is at the end of this document.

1. ______________________
2. ______________________
3. ______________________
4. ________I am independent in all skills

II. Please answer each of the following questions by placing a mark inside the circles:

<table>
<thead>
<tr>
<th>Question</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel confident communicating with physicians.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2. I am comfortable knowing what to do for a dying patient.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>3. I feel comfortable delegating tasks to the Nursing Assistant.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>4. I feel at ease asking for help from other RNs on the unit.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>5. I am having difficulty prioritizing patient care needs.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>6. I feel my preceptor provides encouragement and feedback about my work.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>7. I feel staff is available to me during new situations and procedures.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>8. I feel overwhelmed by my patient care responsibilities and workload.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>9. I feel supported by the nurses on my unit.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>10. I have opportunities to practice skills and procedures more than once.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>11. I feel comfortable communicating with patients and their families.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STRONGLY DISAGREE</td>
<td>DISAGREE</td>
<td>AGREE</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>------------------</td>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>12.</td>
<td>I am able to complete my patient care assignment on time.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>13.</td>
<td>I feel the expectations of me in this job are realistic.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>14.</td>
<td>I feel prepared to complete my job responsibilities.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>15.</td>
<td>I feel comfortable making suggestions for changes to the nursing plan of care.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>16.</td>
<td>I am having difficulty organizing patient care needs.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>17.</td>
<td>I feel I may harm a patient due to my lack of knowledge and experience.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>18.</td>
<td>There are positive role models for me to observe on my unit.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>19.</td>
<td>My preceptor is helping me to develop confidence in my practice.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>20.</td>
<td>I am supported by my family/friends.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>21.</td>
<td>I am satisfied with my chosen nursing specialty.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>22.</td>
<td>I feel my work is exciting and challenging.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>23.</td>
<td>I feel my manager provides encouragement and feedback about my work.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>24.</td>
<td>I am experiencing stress in my personal life.</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

25. If you chose agree or strongly agree, to #24, please indicate what is causing your stress. (You may circle more than once choice.)

   a. NCLEX
   b. Finances
   c. Child care
   d. Living situation
   e. Personal relationships
   f. Job performance
   g. Graduate school
III. How satisfied are you with the following aspects of your job:

<table>
<thead>
<tr>
<th>Aspect</th>
<th>VERY DISSATISFIED</th>
<th>MODERATELY DISSATISFIED</th>
<th>NEITHER SATISFIED NOR DISSATISFIED</th>
<th>MODERATELY SATISFIED</th>
<th>VERY SATISFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Vacation</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Benefits package</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Hours that you work</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Weekends off per month</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Your amount of responsibility</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Opportunities for career advancement</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Amount of encouragement and feedback</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Opportunity to work straight days</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

IV. Transition (please circle any or all that apply)

1. What difficulties, if any, are you currently experiencing with the transition from the "student" role to the "RN" role?
   a. role expectations (e.g. autonomy, more responsibility, being a preceptor or in charge)
   b. lack of confidence (e.g. MD/PT communication skills, delegation, knowledge deficit, critical thinking)
   c. workload (e.g. organizing, prioritizing, feeling overwhelmed, ratios, patient acuity)
   d. fears (e.g. patient safety)
   e. orientation issues (e.g. unit familiarization, learning technology, relationship with multiple preceptors, information overload)

2. What could be done to help you feel more supported or integrated into the unit?
   a. improved orientation (e.g. preceptor support and consistency, orientation extension, unit specific skills practice)
   b. increased support (e.g. manager, RN, and educator feedback and support, mentorship)
   c. unit socialization (e.g. being introduced to staff and MDs, opportunities for staff socialization)
   d. improved work environment (e.g. gradual ratio changes, more assistance from unlicensed personnel, involvement in schedule and committee work)

3. What aspects of your work environment are most satisfying?
   a. peer support (e.g. belonging, team approach, helpful and friendly staff)
   b. patients and families (e.g. making a difference, positive feedback, patient satisfaction, patient interaction)
c. ongoing learning (e.g. preceptors, unit role models, mentorship)
d. professional nursing role (e.g. challenge, benefits, fast pace, critical thinking, empowerment)
e. positive work environment (e.g. good ratios, available resources, great facility, up-to-date technology)

4. What aspects of your work environment are least satisfying?
   a. nursing work environment (e.g. unrealistic ratios, tough schedule, futility of care)
   b. system (e.g. outdated facilities and equipment, small workspace, charting, paperwork)
   c. interpersonal relationships (e.g. gossip, lack of recognition, lack of teamwork, politics)
   d. orientation (inconsistent preceptors, lack of feedback)

5. Please share any comments or concerns you have about your residency program:

______________________________________________________________________________

V. **Demographics:** Circle the response that represents the most accurate description of your individual professional profile.

1. Age: _______ years

2. Gender:
   a. Female
   b. Male

3. Ethnicity:
   a. Caucasian (white)
   b. Black
   c. Hispanic
   d. Asian
   e. Other
   f. I do not wish to include this information

4. Area of specialty:
   a. Adult Medical/Surgical
   b. Adult Critical Care
   c. OB/Post Partum
   d. NICU
   e. Pediatrics
   f. Emergency Department
   g. Oncology
   h. Transplant
   i. Rehabilitation
   j. OR/PACU
   k. Psychiatry
   l. Ambulatory Clinic
   m. Other: ___________________________
5. School of Nursing Attended (name, city, state located): ________________________________

6. Date of Graduation: ________________________________

7. Degree Received: AD: _______ Diploma: _______ BSN: _______ ND: _______

8. Other Non-Nursing Degree (if applicable): ________________________________

9. Date of Hire (as a Graduate Nurse): ________________________________

10. What previous health care work experience have you had:
   a. Volunteer
   b. Nursing Assistant
   c. Medical Assistant
   d. Unit Secretary
   e. EMT
   f. Student Externship
   g. Other (please specify): ________________________________

11. Have you functioned as a charge nurse?
   a. Yes
   b. No

12. Have you functioned as a preceptor?
   a. Yes
   b. No

13. What is your scheduled work pattern?
   a. Straight days
   b. Straight evenings
   c. Straight nights
   d. Rotating days/evenings
   e. Rotating days/nights
   f. Other (please specify): ________________________________

14. How long was your unit orientation?
   a. Still ongoing
   b. ≤ 8 weeks
   c. 9 – 12 weeks
   d. 13 – 16 weeks
   e. 17 - 23 weeks
   f. ≥ 24 weeks

15. How many primary preceptors have you had during your orientation?
   ________ number of preceptors

16. Today’s date: ________________________________
Drop down list of skills

Arterial/venous lines/swan ganz (wedging, management, calibration, CVP, cardiac output)
Assessment skills
Bladder catheter insertion/irrigation
Blood draw/venipuncture
Blood product administration/transfusion
Central line care (dressing change, blood draws, discontinuing)
Charting/documentation
Chest tube care (placement, pleurovac)
Code/Emergency Response
Death/Dying/End-of-Life Care
Dobhoff/NG care/suctioning/placement
ECG/EKG/Telemetry monitoring and interpretation
Intravenous (IV) medication administration/pumps/PCAs
Intravenous (IV) starts
Medication administration
MD communication
Patient/family communication and teaching
Prioritization/Time Management
Trach care
Vent care/management/assisting with intubation/extubation
Wound care/dressing change/wound vac
Unit specific skills ______________________________________
Appendix F3: Casey-Fink Graduate Nurse Experience Survey
I. List the top three skills/procedures you are **uncomfortable performing** independently at this time? (please select from the drop down list)  list is at the end of this document.

1. __________________________
2. __________________________
3. __________________________
4. ________I am independent in all skills

II. Please answer each of the following questions by placing a mark inside the circles:

<table>
<thead>
<tr>
<th></th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel confident communicating with physicians.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2. I am comfortable knowing what to do for a dying patient.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>3. I feel comfortable delegating tasks to the Nursing Assistant.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>4. I feel at ease asking for help from other RNs on the unit.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>5. I am having difficulty prioritizing patient care needs.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>6. I feel my preceptor provides encouragement and feedback about my work.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>7. I feel staff is available to me during new situations and procedures.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>8. I feel overwhelmed by my patient care responsibilities and workload.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>9. I feel supported by the nurses on my unit.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>10. I have opportunities to practice skills and procedures more than once.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>11. I feel comfortable communicating with patients and their families.</td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td></td>
<td>I am able to complete my patient care assignment on time.</td>
<td>STRONGLY DISAGREE</td>
<td>DISAGREE</td>
<td>AGREE</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------</td>
<td>------------------</td>
<td>---------</td>
<td>------</td>
</tr>
<tr>
<td>12.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I feel the expectations of me in this job are realistic.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I feel prepared to complete my job responsibilities.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I feel comfortable making suggestions for changes to the nursing plan of care.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I am having difficulty organizing patient care needs.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I feel I may harm a patient due to my lack of knowledge and experience.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>17.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>There are positive role models for me to observe on my unit.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>My preceptor is helping me to develop confidence in my practice.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>19.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I am supported by my family/friends.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>20.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I am satisfied with my chosen nursing specialty.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I feel my work is exciting and challenging.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I feel my manager provides encouragement and feedback about my work.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>I am experiencing stress in my personal life.</th>
<th>STRONGLY DISAGREE</th>
<th>DISAGREE</th>
<th>AGREE</th>
<th>STRONGLY AGREE</th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td></td>
<td>O</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

25. If you chose agree or strongly agree, to #24, please indicate what is causing your stress. (You may circle more than once choice.)

   a. NCLEX
   b. Finances
   c. Child care
   d. Living situation
   e. Personal relationships
   f. Job performance
   g. Graduate school
III. How satisfied are you with the following aspects of your job:

<table>
<thead>
<tr>
<th>Aspect</th>
<th>VERY DISSATISFIED</th>
<th>MODERATELY DISSATISFIED</th>
<th>NEITHER SATISFIED NOR DISSATISFIED</th>
<th>MODERATELY SATISFIED</th>
<th>VERY SATISFIED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Vacation</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Benefits package</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Hours that you work</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Weekends off per month</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Your amount of responsibility</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Opportunities for career advancement</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Amount of encouragement and feedback</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Opportunity to work straight days</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

IV. Transition (please circle any or all that apply)

1. What difficulties, if any, are you currently experiencing with the transition from the "student" role to the "RN" role?
   a. role expectations (e.g. autonomy, more responsibility, being a preceptor or in charge)
   b. lack of confidence (e.g. MD/PT communication skills, delegation, knowledge deficit, critical thinking)
   c. workload (e.g. organizing, prioritizing, feeling overwhelmed, ratios, patient acuity)
   d. fears (e.g. patient safety)
   e. orientation issues (e.g. unit familiarization, learning technology, relationship with multiple preceptors, information overload)

2. What could be done to help you feel more supported or integrated into the unit?
   a. improved orientation (e.g. preceptor support and consistency, orientation extension, unit specific skills practice)
   b. increased support (e.g. manager, RN, and educator feedback and support, mentorship)
   c. unit socialization (e.g. being introduced to staff and MDs, opportunities for staff socialization)
   d. improved work environment (e.g. gradual ratio changes, more assistance from unlicensed personnel, involvement in schedule and committee work)

3. What aspects of your work environment are most satisfying?
   a. peer support (e.g. belonging, team approach, helpful and friendly staff)
   b. patients and families (e.g. making a difference, positive feedback, patient satisfaction, patient interaction)
c. ongoing learning (e.g. preceptors, unit role models, mentorship)
d. professional nursing role (e.g. challenge, benefits, fast pace, critical thinking, empowerment)
e. positive work environment (e.g. good ratios, available resources, great facility, up-to-date technology)

4. What aspects of your work environment are least satisfying?
   a. nursing work environment (e.g. unrealistic ratios, tough schedule, futility of care)
   b. system (e.g. outdated facilities and equipment, small workspace, charting, paperwork)
   c. interpersonal relationships (e.g. gossip, lack of recognition, lack of teamwork, politics)
   d. orientation (inconsistent preceptors, lack of feedback)

5. Please share any comments or concerns you have about your residency program:
______________________________________________________________________________
______________________________________________________________________________

V. Demographics: Circle the response that represents the most accurate description of your individual professional profile.

1. Age: _______ years

2. Gender:
   a. Female
   b. Male

3. Ethnicity:
   a. Caucasian (white)
   b. Black
   c. Hispanic
   d. Asian
   e. Other
   f. I do not wish to include this information

4. Area of specialty:
   a. Adult Medical/Surgical
   b. Adult Critical Care
   c. OB/Post Partum
   d. NICU
   e. Pediatrics
   f. Emergency Department
   g. Oncology
   h. Transplant
   i. Rehabilitation
   j. OR/PACU
   k. Psychiatry
   l. Ambulatory Clinic
   m. Other: ____________________________
5. School of Nursing Attended (name, city, state located): ________________________________

6. Date of Graduation: ________________________________

7. Degree Received: AD: _______ Diploma: _______ BSN: _______ ND: _______

8. Other Non-Nursing Degree (if applicable): ________________________________

9. Date of Hire (as a Graduate Nurse): ________________________________

10. What previous health care work experience have you had:
   a. Volunteer
   b. Nursing Assistant
   c. Medical Assistant
   d. Unit Secretary
   e. EMT
   f. Student Externship
   g. Other (please specify): ________________________________

11. Have you functioned as a charge nurse?
   a. Yes
   b. No

12. Have you functioned as a preceptor?
   a. Yes
   b. No

13. What is your scheduled work pattern?
   a. Straight days
   b. Straight evenings
   c. Straight nights
   d. Rotating days/evenings
   e. Rotating days/nights
   f. Other (please specify): ________________________________

14. How long was your unit orientation?
   a. Still ongoing
   b. ≤ 8 weeks
   c. 9 – 12 weeks
   d. 13 – 16 weeks
   e. 17 - 23 weeks
   f. ≥ 24 weeks

15. How many primary preceptors have you had during your orientation?
   _________ number of preceptors

16. Today’s date: ________________________________
**Drop down list of skills**

Arterial/venous lines/swan ganz (wedging, management, calibration, CVP, cardiac output)

Assessment skills

Bladder catheter insertion/irrigation

Blood draw/venipuncture

Blood product administration/transfusion

Central line care (dressing change, blood draws, discontinuing)

Charting/documentation

Chest tube care (placement, pleurovac)

Code/Emergency Response

Death/Dying/End-of-Life Care

Dobhoff/NG care/suctioning/placement

ECG/EKG/Telemetry monitoring and interpretation

Intravenous (IV) medication administration/pumps/PCAs

Intravenous (IV) starts

Medication administration

MD communication

Patient/family communication and teaching

Prioritization/Time Management

Trach care

Vent care/management/assisting with intubation/extubation

Wound care/dressing change/wound vac

Unit specific skills _________________________________