

Preparing New Graduate Nurses for Pediatric Nursing Practice:  
A Literature Review and Curriculum Blueprint

By

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### Abstract

The transition from student to professional practice nurse is difficult to navigate. New graduates are expected to enter independent practice with little extra support. Due to the nursing shortage and current economic realities, new graduates are being recruited into specialty areas such as pediatrics. It is important that adequate support is maintained so these nurses are retained in the healthcare system. The goal of this project was to develop an orientation curriculum for new graduate nurses entering practice at a tertiary care children's hospital. A thematic analysis of the literature was performed that identified four major themes related to the new graduate transition process and pediatric orientation programs. These themes were: challenges new graduates face with transition to a new role; the requirement of a supportive environment for new graduate nurses; the importance of skill and knowledge attainment; and retention and turnover of new graduates. This thematic analysis informed the development of a new graduate orientation program. A theoretical framework of social constructivism and Fink's taxonomy of significant learning were used to direct the curriculum development. The intent of designing a blueprint of an orientation program for this group of nurses is to provide guidance to educators responsible for supporting the transition of new graduate nurses from new graduate to practicing specialized pediatric nurse to ensure that they develop the requisite skills, knowledge, and attitudes required to practice in a safe, competent manner.

Keywords: pediatric nursing; new graduate nurses; orientation program

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Table of Contents

Supervisory Committee ..... 2

Abstract..... 3

Acknowledgements..... 4

Table of Contents ..... 5

Background..... 8

    Statement of Problem..... 10

Purpose/Aim of Project..... 11

Personal Philosophy of Nursing..... 12

Methods..... 12

    Literature Review..... 13

        Thematic analysis..... 15

    Themes..... 16

        New graduate nurses’ perceptions of the transition experience..... 17

            State of research..... 21

        Supportive Environment ..... 21

            State of research..... 26

        New graduate nurses’ skills and knowledge ..... 27

            State of research..... 30

        Retention and turnover..... 31

            State of research..... 31

    Summary of the research ..... 32

        State of research..... 34

Lessons Learned..... 35

Pediatric Standards of Practice ..... 36

Review of Existing Orientation Curricula ..... 37

Curriculum Development..... 38

    Philosophical View of Teaching and Learning..... 39

        Social Constructivism ..... 39

        Learning theory ..... 40

        Educational Taxonomy ..... 40

    Needs Assessment..... 44

        External frame factors ..... 44

        Internal frame factors ..... 46

        Lessons learned from needs assessment ..... 49

Curriculum Blueprint ..... 51

    Program Components..... 51

        Classroom component..... 51

        Clinical Component ..... 52

        Mentorship Component ..... 53

    Components to be Woven Throughout the Curriculum..... 53

        Family-centred care ..... 54

        Social determinants of health..... 54

Teaching Strategies ..... 55

    Case studies..... 55

Evaluation ..... 56

    Learner evaluation ..... 57

    Program evaluation ..... 57

Conclusion ..... 59

References..... 60

Appendix A; PRISMA Flow Diagram..... 68

Appendix A: Literature Review Summary ..... 69

Appendix B: Strength of Evidence ..... 82

Appendix C: Fink’s Taxonomy of Significant Learning ..... 84

Appendix D: An Orientation Program for New Graduate Nurses in the Pediatric Setting:  
Curriculum Blueprint ..... 85

Preparing New Graduate Nurses for Pediatric Nursing Practice:  
A Literature Review and Curriculum Blueprint

Retaining new graduate nurses is crucial to ensuring the health care system has the continued capacity to provide care (Scott, Keehner-Engelke, & Swanson, 2008). Because nurses compose such a significant proportion of the health care workforce, if new nurses are not entering the health care system to replace those who retire or leave for other reasons, the system as a whole will quickly be compromised. The transition from student nurse to independent practitioner, however, can be difficult to navigate successfully (Duclos-Miller, 2011). Without adequate support, this transition is even more difficult. As a nurse educator, I am interested in planning an education intervention to support new graduate nurses through this transition. To discover what major issues are associated with the transition from student to nurse, and to determine what to include in an educational intervention, I conducted a literature review on new graduates' transition to specialty nursing, with a focus on the pediatric setting. I then developed a curriculum blueprint educators can use to provide adequate support to these beginning nurses. For the purpose of this project, a new graduate nurse is defined as one who has been graduated from a baccalaureate nursing program for less than one year.

### **Background**

The transition from student nurse to graduate nurse is a difficult process that every nurse must experience. Because of the knowledge explosion that has occurred in health care, it is no longer possible for nursing schools to provide students with every piece of knowledge, skill, or attitude required to successfully enter practice as a Registered Nurse; therefore, new graduate nurses must learn a lot on the job (Ulrich et al., 2010). Navigating this transition can overwhelm graduate nurses and leave them feeling frustrated and thus stressed from a lack of confidence in

their nursing skills and their ability to manage patient care independently (Duclos-Miller, 2011). For many graduate nurses, this experience proves too difficult to overcome, and they either move to a different workplace or leave the profession altogether (Duchscher, 2008). The Canadian Nurses Association (CNA) reported in 2009 that the national average yearly turnover rate for Registered Nurses was 19.9%. The yearly turnover rate for new graduate nurses at the pediatric hospital where I am an educator is as high as 30% (T. Adams, personal communication, March 26, 2015). This high turnover rate not only increases costs to the health care system but also creates instability in the workforce, which can lead to poor patient outcomes (CNA, 2009). Reducing nurse turnover leads to greater job satisfaction, more stability in the health care system, and reduced probability of medical errors (CNA, 2009). Thus, it is important to support new graduate nurses throughout their transition from student to nurse to minimize, and reduce the negative effects of, turnover.

Effective orientation programs are one way to provide support for new staff members and reduce graduate nurse turnover (Patterson, Bayley, Burnell, & Rhoads, 2010). Almada, Carafoli, Flattery, French, and McNamara (2004) found that after the implementation of an 11-week orientation program, including classroom lectures and an 8-week preceptorship with a dedicated preceptor, the graduate nurse retention rate went from 25% to 93%, and the nursing vacancy rate decreased from 12.5% to 3%. Scott, Keehner-Engelke, and Swanson (2008) discovered that new graduate nurses who were satisfied with their orientation programs were 2.4 times more likely to be satisfied with their careers, which led to lower rates of staff turnover.

Over time, baccalaureate nursing programs have continued to decrease the amount of pediatric content they provide students (McCarthy & Wyatt, 2014; Society of Pediatric Nurses, 2014). The reasons for this decrease are multifaceted. As recruiting qualified nurse educators

becomes more difficult, schools of nursing are finding it particularly challenging to enlist educators willing and prepared to teach pediatric nursing (McCarthy & Wyatt, 2014; Society of Pediatric Nurses, 2014). As more pediatric services are consolidated into large urban medical centres, it becomes progressively difficult for student nurses to obtain clinical placements that give them acute care pediatric experience (McCarthy & Wyatt, 2014; Society of Pediatric Nurses, 2014). Due to the lack of specialized pediatric clinical faculty and limited pediatric clinical placements, the majority of nursing skills are taught in the context of adult care (Bultas, 2011). This removes the context of the patient as a member of a family unit, which is crucial when caring for pediatric patients (Bultas, 2011). Along with this consolidation of services, primary care and technological advances have allowed for increasingly complex care to be provided at home and managed in ambulatory settings (Society of Pediatric Nurses, 2014). This move toward home management means that fewer patients are managed in the acute care setting. Baccalaureate program curricula are not keeping pace with this change, however, and continue to provide content related mostly to acute care pediatric nursing (McCarthy & Wyatt, 2014). This means that nurses are not receiving education on holistic care of the pediatric patient and family and are less able to assist complex patients and families with their transition to care in the home environment. As a result, because students have limited exposure to pediatric nursing care during their initial training, it is important that a pediatric-specific orientation is provided for those entering this specialty area (Cockerham, Figueroa-Altmann, Eyster, Ross, & Salamy, 2011).

### **Statement of Problem**

At the tertiary pediatric hospital where I am a nurse educator, we frequently hire new graduate nurses in all practice areas, including intensive care. As a tertiary hospital we provided

highly specialized and technical care (Tertiary health care, 2013). We provide a wide variety of diagnostic and treatment options to a large population. Due to the factors discussed above, these nurses have received minimal pediatric clinical experience during their undergraduate nursing programs. For some of them, this is the first time they have cared for an infant or child. I have noticed that the current orientation program is not sufficient to prepare these nurses to independently care for the wide variety of pediatric patients they will encounter. We hire a high number of nurses every month, both recent graduates and more experienced nurses. Because of the structure of the current program and the frequency with which we run orientation programs, newly hired nurses are absorbed onto the unit and left to practice independently very quickly. In my role as educator, I continually offer orientation to newly hired nurses, with new graduate nurses undergoing the same orientation process as nurses with experience, even though they may have different learning needs. When I talk to these new graduate nurses in my role as educator, they tell me that they feel extremely overwhelmed and unsafe to practice even after they have completed the current orientation program. In my view, we need an extended orientation program that is tailored to the needs of new graduate nurses. Such a program would ensure that we retain these new nurses and that they are prepared to deliver safe, quality care.

### **Purpose/Aim of Project**

The purpose of this project was to develop a curriculum blueprint for an orientation program that would prepare new graduate nurses for practice on acute care units in a tertiary care children's hospital. I conducted a review of the literature to determine what challenges new graduates face, both in general and specifically in a pediatric setting, and how an orientation program could be designed to assist them in overcoming these challenges as they pertain to pediatric nursing. As a first step to designing a competency-based curriculum, I also reviewed

the literature to determine what competencies are required of nurses working in pediatric settings. I then developed a curriculum blueprint following the steps of curriculum development in staff development delineated by Richards (2011).

### **Personal Philosophy of Nursing**

I envision nursing as an autonomous and collaborative practice that encompasses caring for sick and well individuals and families of all ages in the context of their communities (International Council of Nurses, 2014). This caring encompasses using a holistic perspective to work with patient, families, and communities to improve health. I also believe that nursing is a “dynamic, interpersonal, generative, and caring practice” (Young & Maxwell, 2007, p. 6). To support this autonomous and collaborative nature, I view nursing through a feminist lens. hooks (2015) states that “feminism is a movement to end sexism, sexist exploitation, and oppression” (p. 1). Through feminism we are better able to understand the sexist influences in the healthcare system and discover where the oppression faced by nurses originates (hooks, 2015). This lens allows nurses to work both to improve our own position as a profession in health care and to advocate for our patients as they navigate the health care system (Anderson, 2011; Bowell, 2011). Feminism encourages the expression and sharing of the authentic voice, which allows all nurses to share knowledge and experience in a way that is true to them (Georges, 2005). This sharing can help bring nurses together to both elevate the profession and come together as a community of learners (Allen, 2010; Welch, 2011). This community of learners is important for new graduate nurses as they work together, through social constructivism, to build new knowledge (Freire, 2005).

### **Methods**

This project was conducted in two parts. The first part was an integrative literature

review. An integrative review is appropriate for this project as it may include both experimental and non-experimental research (Whittemore & Knafl, 2005). I reviewed and synthesized the literature that pertained to new graduate nurses and their transition from student to independent practitioner, including the literature on pediatric nurse competencies. Following the literature review, I then developed a curriculum blueprint using the knowledge gained from the literature review.

### **Literature Review**

I conducted the literature review using the method described by Fulton, Krainovich-Miller, and Cameron (2013). This method guides the reviewer through nine steps: determine the research topic; identify the key terms; delineate inclusion and exclusion criteria; conduct a computer search using at least two recognized online databases; review abstracts online and disregard irrelevant articles; retrieve relevant sources; print articles; conduct preliminary reading and disregard irrelevant sources; critically read each source; and synthesize critical summaries of each article.

I conducted my initial search using three electronic databases: the Cumulative Index to Nursing and Allied Health Literature (CINAHL); Health Source: Nurse/Academic Edition; and Google Scholar. Key words and search terms included, but were not limited to, *retention*, *new graduate nurse\**, *pediatric\**, *child*, *transition shock*, *competenc\**, and *orientation curriculum* in different combinations. I was able to work with a University of Victoria librarian who assisted me with my search strategies. Besides searching electronic databases, I also performed ancestry searches, which involved analysis of the reference lists of selected articles to discover further relevant works (Whittemore & Knafl, 2005). Articles were limited to those within a 10-year timeframe and seminal articles to ensure that the literature gleaned best reflected the current

trends and needs of new graduate nurses. The reviewed articles included only those that pertained to graduates who were eligible to obtain licensure as Registered Nurses. Nurse Practitioners and Licensed Practical Nurses have different educational preparation and therefore would have different needs in an orientation program.

All articles selected for review were required to be primary sources; discuss the new graduate experience and how effective orientation programs can be used to support new graduate nurses; and were Canadian or American. The literature search as described above yielded 70 articles. After duplicates were removed, 60 articles were screened for relevance. Of these articles 18 articles focused on orientation programs for pediatric nurses, with 11 of these 18 focusing on a subspecialty of pediatric nursing. During the initial screening process, a further 55 articles were removed based on title or abstract as they pertained to a specialty area other than pediatrics; focused on a sub-specialty of pediatrics; were not based in Canada or the United States; or did not focus on the new graduate experience. After this initial screening, 15 articles were read for eligibility. Six articles were removed as they either did not pertain to pediatric orientation programs or focused on one piece of an orientation program rather than the orientation program as a whole (See Appendix A for a PRIMSA Flow diagram of this process.)

Nine articles were selected, ranging in date from 2009-2013, which related to the experience of new graduates and new graduate orientation to pediatric nursing. Three of the selected articles were Canadian sources and six were from the United States (See Appendix B for a summary of the selected articles). The articles selected were assessed for quality using the Johns Hopkins Nursing Evidence-Based Practice Appraisal tools. These tools include an assessment form for research evidence appraisal and non-research evidence appraisal (Newhouse, Dearholt, Poe, Pugh, & White, 2007). The nine selected articles were rated for

quality using these tools. To assess the research evidence for quality I determined if there was an adequate description of the data collection methods; the results were clearly reported and consistent; the sample size was adequate; and consistent recommendations were included (Newhouse et al., 2007). To assess the non-research evidence for quality I determined if the aim of the project was clearly stated; the method and results were adequately described; and the interpretation of the results was clear and appropriate (Newhouse et al., 2007) (See Appendix C for a summary of the quality ranking of the selected articles).

**Thematic analysis.** Once I had identified and appraised the articles that were to be included in the literature review, I engaged in thematic analysis to elicit the main themes across the literature. Braun and Clarke (2006) state that “thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within your data” (p. 79). By engaging in thematic analysis, I was able to organize the data in a meaningful way and easily see the emerging patterns. I was also able to fully immerse myself in the data to gain a richer understanding of it. To complete the thematic analysis, I followed the six steps described by Braun and Clarke.

The first step in thematic analysis is to become familiar with the data (Braun & Clarke, 2006). I completed this by reading each selected article several times and appraising each one using the selected appraisal tool. The second step is to generate initial codes (Braun & Clarke, 2006). Codes enable the analyst to take a closer look at the features of the data he or she finds interesting (Braun & Clarke, 2006). I began this step by making a list of potential codes as I read each article. I then extracted data from the articles and summarized it on post-it notes. After all the data was extracted, I assigned codes to each piece of data from the initial code list. I grouped the data by code as I worked through this step. Being able to see all the data extracts side by side helped me see and understand the themes that were emerging. It helped me make connections I

might not have made if I had attempted to code the data in the articles.

The third step in thematic analysis is to begin searching for themes (Braun & Clarke, 2006). Once all the data were coded and grouped by code, I began to search for themes in the data. Themes emerge when codes can be combined to form a broader topic (Braun & Clarke, 2006). It was once again helpful to have the extracted data in a moveable form. This allowed me to group codes together to make cogent themes.

The fourth phase is to review the themes (Braun & Clarke, 2006). During this stage I reviewed my initial themes to determine if they were all truly themes or if they could be combined. I engaged in two levels of review. First I reviewed the themes at the level of the coded data extracts (Braun & Clarke, 2006). This is an important step to ensure that all the data extracts for each theme form a coherent pattern. After moving around any extracts that did not fit the theme to which they had been assigned, I moved on to the second level of review, in which I reviewed the data set as a whole to ensure that the themes fit the data set in its entirety (Braun & Clarke, 2006). I also completed any further coding.

When I was satisfied that my themes fit the data set and everything had been coded to the correct theme, I moved on to phase five, which is defining and naming themes (Braun & Clarke, 2006). In this phase I organized the data extracts into a “coherent and internally consistent account” (Braun & Clarke, 2006, p. 92). I then analyzed each theme and delineated the story that the theme was telling. As a last step in this phase I named each theme based on the detailed analysis.

The sixth step in thematic analysis is to produce the report (Braun & Clark, 2006). After I had analyzed and named each theme, I wrote the report about the data set as a whole. It is important to use the coded data to paint a vivid picture of the themes being presented and “to

make an argument in relation to your research question” (Braun & Clark, 2006, p. 93).

### **Themes**

After analyzing the data, four themes emerged: new graduate nurses’ perceptions of the transition experience; a supportive environment; new graduate nurses’ skills and knowledge; and retention and turnover.

**New graduate nurses’ perceptions of the transition experience.** New graduate nurses felt a wide range of often stressful, intense, and overwhelming emotions when making the transition from student nurse to practicing nurse (Duchscher, 2009; Hunsberger, Baumann, & Crea-Arsenio, 2013). In a review of four qualitative studies spanning a 10-year timeframe, Duchscher (2009) found that new graduates did not anticipate the move from student would be as difficult as it turned out to be. These new graduates expected they would have to make some adjustments but expected to be met with a welcoming, collegial environment; roles and responsibilities that were an extension of their student work; and, a sense of pride at working in the profession for which they had been educated. They also expected that a positive work experience would affirm their career choice and the education that went into preparing for that choice (Duchscher, 2009). The surprise the new graduates felt when they discovered the level of adjustments required for the transition to professional practice, and the environment in which these adjustments would need to be made, contributed to the intense emotions they felt during the transition process (Duchscher, 2009). New graduates experienced transition shock while attempting to manage the change from the familiar role of student to the unfamiliar role of professional nurse (Duchscher, 2009).

In a mixed method study of 3,800 new graduate nurses in the New Graduate Guarantee program in Ontario, Hunsberger et al. (2013) found that new graduate nurses were very nervous

about entering the workplace. Hunsberger's findings resonated with those of Duchscher's (2009) study. Not all new graduates were prepared for the realities of their new jobs (Duchscher, 2009; Hunsberger et al., 2013). When new graduates discovered that the role of professional nurse looked different from what they learned in school, they felt frustration and guilt that they could not enact the practice principles they believed were requirements of the profession (Duchscher, 2009). Along with this frustration, new graduates also reported feeling terrified and experiencing relentless anxiety about their new role (Duchscher, 2009; Hunsberger et al., 2013). New graduates were afraid that they would make an error and harm a patient, and that they would not be able to navigate their new environment and role successfully (Hunsberger et al., 2013).

Part of the reason new graduates were not prepared for their new roles as professional nurses was that many did not feel they understood what this new role entailed (Duchscher, 2009; Hunsberger et al., 2013). New graduates reported being confused about the role they should be filling because as students they performed many different roles (Duchscher, 2009). This led to students spending much of their transition period attempting to determine what their role was in relation to others. Along with discerning their new role, the new graduates also needed to become familiar with the new professional practice environment they were engaging in (Duchscher, 2009; Hunsberger et al., 2013). For new graduates, the transition shock experience was "about finding their way in a world for which they had been prepared but were not wholly ready" (Duchscher, 2009, p. 1108). In a program evaluation of an orientation and fellowship program at Cohen Children's Hospital, with a total of 77 new graduates, Friedman, Delaney, Schmidt, Quinn, and Macyk (2013) found that new graduates felt they were not really nurses but were instead only acting like nurses.

The effects of transition shock on new graduate nurses are all-encompassing (Duchscher, 2009). The physical response to surviving in a state of constant anxiety and fear leaves new graduates exhausted. They are constantly thinking about work, whether that means debriefing about events that already happened or thinking ahead to the next shift, and many report dreaming about work as well (Duchscher, 2009). New graduates face potentially debilitating levels of physical and psychological stress over the first four months after orientation (Duchscher, 2009). Through this experience, though, they are transformed (Duchscher, 2009; Zinsmeister & Schafer, 2009). In a qualitative, phenomenological study of nine new graduate nurses employed for between six months and one year in a health care system on the east coast of the United States, Zinsmeister and Schafer (2009) identified that the graduates gained a new perspective of nursing as they moved through the transition experience. These new graduates reported that, following their transition, they had a clear view of their role that was consistent with others' expectations of them, and they had a new sense of value for, and pride in, the nursing profession. Duchscher (2009) also found that new graduates had a more mature, professional sense of self four months into their transition.

There are many factors that made the transition period so difficult and stressful for new graduate nurses (Duchscher, 2009; Dyess & Sherman, 2009; Rush, Adamack, Gordon, Lilly, & Janke, 2013; Zinsmeister & Schafer, 2009). One factor was the new graduates' lack of confidence in their skills and abilities (Duchscher, 2009; Dyess & Sherman, 2009). In a qualitative study of 81 new graduate nurses participating in the Novice Nurse Leadership Institute in South Florida, Dyess and Sherman (2009) observed that the graduates recognized the knowledge they had gained in school, but were afraid of the responsibilities that came with their

new role. They were unsure that they would be able to match the correct pieces of knowledge to a clinical situation in a timely manner (Dyess & Sherman, 2009).

A second factor that made the transition period challenging for new graduate nurses was the difficulty they faced when communicating with the multidisciplinary team (Duchscher, 2009; Dyess & Sherman, 2009). In their undergraduate education, student nurses were not trained to manage conflicts with physicians and other members of the health care team (Duchscher, 2009; Dyess & Sherman, 2009). Being spoken to harshly or disrespectfully further reduced the confidence, and increased the stress, of a new graduate who already had low self-confidence and felt ill equipped to deal with conflict (Duchscher, 2009; Dyess & Sherman, 2009). These experiences caused some new graduates to avoid all communication with the health care team, which could have a seriously detrimental impact on patient care (Dyess & Sherman, 2009).

A third factor was the difficulty new graduates experienced when delegating and supervising unlicensed health care team members (Duchscher, 2009; Dyess & Sherman, 2009). Student nurses were not taught in their undergraduate training programs how to delegate and supervise (Duchscher, 2009; Dyess & Sherman, 2009), and they were unprepared for the conflicts that developed when they were required to supervise team members who were older and had more seniority than they did (Dyess & Sherman, 2009). Rather than delegate and then supervise to ensure the task was done, new graduates often completed the task themselves (Dyess & Sherman, 2009). This added to their workload, which increased the stress they were already experiencing.

A fourth factor that increased the stress of the transition period was the sense of isolation new graduates often felt (Dyess & Sherman, 2009). Dyess and Sherman (2009) reported that new graduates often felt they were all alone in their role as nurse. The busy, chaotic nature of health

care meant that there was not always a coworker to assist the new graduates when they required help. New graduate nurses reported that at times they did not know what to do in a clinical situation, but there was no one available to help (Duchscher, 2009; Dyess & Sherman, 2009). New graduates did not want to reach out to their more senior colleagues to ask for assistance because they believed their colleagues were too busy with their own workload (Duchscher, 2009). Duchscher (2009) also found that new graduates feared asking their colleagues for assistance as they did not want appear ignorant or inexperienced.

***State of research.*** There was little research available on the transition experience of new graduates in the pediatric setting; therefore, I had to broaden the scope and include studies on the experiences of new graduates in general. This theme was found in six of the nine articles reviewed. As the nature of a transition is that it is a human experience, most of the available studies were qualitative. While this gave an excellent picture of the transition experience of individuals, it was often not generalizable due to small sample sizes. The qualitative studies included in this review showed good trustworthiness, which gave credibility to this theme.

***Supportive environment.*** New graduates indicated a supportive environment was important to help them make their transition to professional nurse (Duchscher, 2009; Dyess & Sherman, 2009; Hunsberger et al., 2013; Rush et al., 2013; Zinsmeister & Schafer, 2009). Duchscher (2009) found that the relationships new graduates had with their colleagues were critical forecasters of what the transition shock experience would be like. New graduates wanted to fit in well with the culture of the unit and be accepted by their new peers (Duchscher, 2009). They wanted to impress their colleagues and were afraid to let them see any signs of incompetence (Duchscher, 2009). It was important for new graduates to be seen as valued and contributing members of the community.

New graduates often experienced horizontal violence (Duchscher, 2009; Dyess & Sherman, 2009; Rush et al., 2013). Rush et al. (2013) found, in an integrative review of 47 articles focusing on best practices in new graduate nurse transition practices, that new graduates often faced a lack of acceptance, lack of respect, and lack of awareness that they required more time to develop skills such as time management. Dyess and Sherman (2009) found that many new graduates experienced unsupportive and unkind nurses in their practice setting. New graduates also perceived more dominant nurses as intentionally attempting to reduce their confidence (Duchscher, 2009). Already functioning in a hypersensitive and self-critical state, new graduates were strongly impacted by any kind of negative attention (Duchscher, 2009). Compounding this was the fact that nurse managers often tolerated such unsupportive behaviour (Dyess & Sherman, 2009). New graduates who were working in these unhealthy environments experienced more transition shock than new graduates working in healthier environments (Rush et al., 2013).

Just as new graduates were deeply affected by negative interactions, they were also deeply affected by positive interactions (Duchscher, 2009; Zinsmeister & Schafer, 2009). Duchscher (2009) found that supportive statements and displays of acceptance by senior colleagues had a transforming effect on the professional self-concept of new graduates. These positive interactions also assisted the new graduates in carrying on through the more stressful moments. New graduates wanted affirming and critical feedback from their colleagues (Duchscher, 2009; Zinsmeister & Schafer, 2009). When new graduates were not given this feedback, they looked for confirmation of their competence and progression from other indicators (Duchscher, 2009).

One of the key elements in a supportive environment for new graduates was the provision

of dedicated support people (Duchscher, 2009; Dyess & Sherman, 2009; Rush et al., 2013; Ulrich et al., 2010; Zinsmeister & Schafer, 2009). A preceptor usually filled this role during the orientation period (Rush et al., 2013). The preceptor relationship was very important to new graduates in the first several weeks of employment, as the preceptor was able to take the new graduates step by step through unfamiliar skills and experiences (Zinsmeister & Schafer, 2009). The preceptor was also able to see when new graduates were struggling, and helped them through the problem (Zinsmeister & Schafer, 2009). New graduates found the encouragement they received from the preceptor invaluable (Duchscher, 2009; Dyess & Sherman, 2009). They also felt that they could ask their preceptor questions without feeling judged (Zinsmeister & Schafer, 2009). Rush et al. (2013) noted that it was important for nurses performing the role of preceptor to receive formal training, which should include principles of adult learning, learning styles, conflict resolution, and Benner's novice-to-expert framework (Rush et al., 2013). When preceptors received formal training, both preceptors and new graduates benefited: there was increased preceptor satisfaction and retention; improved critical thinking skills for the new graduates; quality patient care; new graduate satisfaction with the preceptor experience; and new graduate retention (Rush et al. 2013). Some new graduates found being assigned to one preceptor improved consistency and improved their experience (Dyess & Sherman, 2009), while others found that having several preceptors was helpful as it exposed them to different time management and care prioritization approaches (Rush et al., 2013).

Once the new graduates had completed the orientation period, it was still extremely important that a dedicated support person be assigned to them (Duchscher, 2009; Dyess & Sherman, 2009; Cockerham, Figueroa-Altmann, Eyster, Ross, & Salamy, 2011; Hunsberger et al., 2013; Rush et al., 2013). Occasionally a Resident Facilitator or Transition Program

Coordinator provided this support to several new graduates (Rush et al., 2013), but the most effective method was to assign a mentor to each new graduate (Duchscher, 2009; Hunsberger et al., 2013). An assigned mentor was able to help new graduates integrate into the practice environment and unit routines as soon as they entered completely independent practice; develop organization skills and control work demand; and improve their assessment, medication administration, documentation, and time management skills (Hunsberger et al., 2013). The new graduates worked through clinical decisions with their mentor, which helped improve their decision-making skills (Hunsberger et al., 2013). New graduates who experienced a mentorship were more self-assured and better prepared to work independently (Hunsberger et al., 2013). With a mentor to assist them, new graduate nurses were able to quickly acquire increased confidence, competence, and experience.

Dyess and Sherman (2009) found that without an assigned mentor, new graduate nurses frequently received contradictory information when they asked their colleagues questions. When new graduates engaged in independent practice, they were expected to make clinical decisions, but they found this difficult when they were receiving conflicting opinions (Dyess & Sherman, 2009). Having an assigned mentor meant that new graduates had one person they could go to with questions all the time, which decreased the amount of contradictory information they received. Knowing that there was a dedicated person to whom they field questions and bring concerns, also helped increase the new graduates' comfort when engaging in independent practice (Hunsberger et al., 2013).

Rush et al. (2013) found that it was beneficial to have structured mentorships with regularly scheduled meetings. When regular meetings were scheduled, there was a higher chance that the mentor and new graduate would form a positive relationship and the mentor would be a

source of support and guidance (Rush et al., 2013). Regular meetings meant there was also an increased likelihood of the mentor being a stress reducer for the new graduate (Rush et al., 2013). Rush et al. found that when mentorships were structured, the new graduates' perception of their job satisfaction increased. Regular meetings helped mentors keep up to date on the new graduates' progress. The mentors could then ensure that new graduates were receiving assignments appropriate to their stage of learning (Hunsberger et al., 2013). Duchscher (2009) reported that it was important for new graduate nurses to have their clinical responsibilities increased slowly and purposefully.

In a program evaluation of the Post-Orientation Education Program at Children's Hospital of Philadelphia, Cockerham et al. (2011) found that regular meetings between the new graduates and a member of the unit leadership team helped the new graduates become comfortable asking questions and helped them realize the unit leaders wanted the new graduates to succeed. These meetings also ensured that relationships were built between the leadership team and the new graduates (Cockerham et al., 2011). Dyess and Sherman (2009) found that when new graduates developed relationships with nurse leaders, they felt less isolated. New graduates were also able to receive timely constructive feedback and to engage in mutual dialogue once a relationship with a nursing leader had been established (Dyess & Sherman, 2009).

Finally, mentors were well placed to assist with socializing new graduates to the unit culture (Hunsberger et al., 2013; Rush et al., 2013). New graduates have a keen desire to fit in with their new colleagues (Duchscher, 2009), and mentors were able to form relationships with the new graduates and make them feel like members of the team (Hunsberger et al., 2013). As the new graduates moved through the mentorship, they went from being viewed as students to

being viewed as colleagues and peers (Hunsberger et al., 2013). New graduates were also keen to receive advice from their mentor on how to be productive and functioning members of the organization (Hunsberger et al., 2013).

There is some consensus that extended orientation programs should last for at least a year (Duchscher, 2009; Dyess & Sherman, 2009; Rush et al., 2013). Duchscher (2009) found that new graduates experienced the highest level of stress in the first four months after formal orientation, but suggested that formal support should extend for at least one year. Rush et al. (2013) reported that new graduates may be vulnerable around the six-month mark, and that the period six to nine months after they started working was associated with the highest levels of stress and dissatisfaction. They also suggested that a formal support program should be in place for a full year to ensure the best support was provided for the new graduate nurses. Dyess and Sherman (2009) also found that new graduates benefitted from a year-long extended orientation program. There was evidence that a more personalized approach should be taken when determining the length of a new graduate's extended orientation (Ryan & Tatum, 2013; Zinsmeister & Schafer, 2009). In a descriptive correlation study of 84 RNs engaged in an orientation program at Children's Hospital of Atlanta, Ryan and Tatum (2013) found that by having new graduates complete the Prerequisite Exam for Pediatrics as part of their initial hiring process, managers and educators were better able to predict areas where the new graduate would struggle. By targeting these problem areas with both didactic content and clinical assignments, new graduates were able to improve more quickly than if these were not recognized as areas of difficulty. Ryan and Tatum (2013) found that this tailored approach made fewer extensions of orientation necessary while providing the support required by the individual new graduate.

***State of research.*** The theme of a supportive environment being a requirement for a

positive transition process for new graduate nurses was found in seven of the nine articles reviewed. A supportive environment was found to contribute to the success of the orientation program in two of the three program evaluations. Much of the evidence supporting this theme came from qualitative studies or program evaluations. As with the previous theme, the small sample size inherent in qualitative makes it difficult to generalize the results. This theme was in a program evaluation of an orientation program that is used across the United States, which increase the ability to generalize the results.

**New graduate nurses' skills and knowledge.** New graduate nurses were expected to enter their new role as professional nurses ready to practice independently; however, their undergraduate programs did not prepare them to a high enough level to make this possible (Duchscher, 2009; Hunsberger et al., 2013; Rush et al., 2013). Rush et al. (2013) and Hunsberger et al. (2012) reported that students were not receiving enough clinical practice opportunities in their undergraduate programs. New graduates were also ill-prepared for medication administration, pharmacology, and nurse-physician interactions (Rush et al., 2013). Partnerships between universities and health care facilities were a potential solution to this problem. Such partnerships could potentially provide benefits like additional practicum opportunities, academic involvement in preceptor education, and staff access to educational offers at universities (Rush et al., 2013). Rush et al. also found that better-prepared new graduates came from nursing schools that offered clinical and didactic activities; used information technology and evidence-based practice; integrated pathophysiology and critical thinking throughout the program; and had content related to the care of specific patient populations (Rush et al., 2013). New graduates who had engaged in problem-based learning in their undergraduate programs were better equipped to problem solve than those in traditional programs (Rush et al., 2013).

As new graduate nurses were not ready to engage in independent practice when they began their new role as professional nurses, it was up to the hiring organization to give them the skills and knowledge they required (Cockerham et al., 2011; Duchscher, 2009; Hunsberger et al., 2013; Ryan & Tatum, 2013; Ulrich et al., 2012; Zinsmeister & Schafer, 2009). The traditional way to do this was a basic orientation program; however the basic orientation was often not long enough to provide the support new graduates required (Cockerham et al., 2011; Duchscher, 2009; Hunsberger et al., 2013; Ulrich et al., 2010; Zinsmeister & Schafer, 2009). A post-orientation program aimed at new graduate nurses ensured that new graduates had an extended opportunity to incorporate new information into their knowledge base and practice new skills in a safe environment (Cockerham et al., 2011; Duchscher, 2009; Dyess & Sherman, 2009; Hunsberger et al., 2013; Zinsmeister & Schafer, 2009). New graduate nurses tended to think differently than seasoned nurses (Duchscher, 2009). They lacked both breadth and depth of experience, so had difficulty applying knowledge to new situations as they had few experiences to which they could compare and contrast new situations (Duchscher, 2009). They were more likely to prescriptively apply instruction gained from undergraduate or organizational instruction, without critically thinking about how it applied to the current situation (Duchscher, 2009). By engaging in a supported extended orientation program, new graduates continued to have opportunities to talk through these new situations in safe environments (Cockerham et al., 2011). In a post-orientation education program at Children's Hospital of Philadelphia, new graduates engaged in weekly meetings with a member of the unit leadership team (Cockerham et al., 2011). During these meetings, the new graduates would discuss common pediatric diagnosis and the nursing care that went along with that diagnosis. New graduates were expected to come prepared for the discussion. Cockerham et al. (2011) reported that scores on a written competency test at

the Philadelphia hospital improved from an average of 66% to an average of 92%. This indicated that the post-orientation program was helping new graduates improve their clinical knowledge. The post-orientation program also increased the new graduates' confidence when communicating with members of the multidisciplinary team, improved their critical thinking skills, increased their ability to teach at the bedside, and improved their capacity to anticipate their patients' needs (Cockerham et al., 2011).

In a program evaluation of the Versant® RN residency program, which studied the success of 6,000 nurses engaged in the program at various health care organizations throughout the United States, Ulrich et al. (2010) stated that nurses who participated in the new graduate residency program had higher self-reported competency scores—both two weeks after they were hired and 18 weeks after hire (the end of the residency)—than the comparison group had at an average length of 17 months. Trained observers also rated the residency program participants with a higher competency score at the 18th week of hire than they rated the comparison group after an average length of 17 months. Hunsberger et al. (2013) found that new graduates who had participated in the New Graduate Guarantee in Ontario, which involved a six-month orientation in which new graduates remained in supernumerary positions and had a mentor to guide them, were better able to think critically, respond to patient need in a timely manner, and understand patient safety issues. These extended orientation programs gave the new graduates time to manage the multiple changes they were experiencing in both their professional and personal lives, and supported them as they continued to learn and engage with new knowledge and skills while managing the multiple demands of clinical practice (Duchscher, 2009; Hunsberger et al., 2012; Ulrich et al., 2010; Zinsmeister & Schafer, 2009). This extended support had a positive impact on the job performance of the new graduates (Cockerham et al., 2011; Friedman et al.,

2013; Rush et al., 2013; Ulrich et al., 2010).

Researchers recommended that specific elements be included in an extended orientation program to ensure that new graduates received the skills and knowledge necessary to move them to independent practice (Duchscher, 2009; Dyess & Sherman, 2009; Friedman et al., 2013; Rush et al., 2013). One of these elements was interpersonal communications skills (Duchscher, 2009; Dyess & Sherman, 2009; Rush et al., 2013). As discussed earlier, new graduates felt ill-prepared to manage the conflicts they might encounter as a member of the interdisciplinary team (Duchscher, 2009; Dyess & Sherman, 2009). New graduate nurses should be given the opportunity to discuss and role-play these difficult conversations in a safe, supported environment (Dyess & Sherman, 2009). They should be given strategies for managing the delegation and supervision of unlicensed health care team members (Duchscher, 2009; Dyess & Sherman, 2009). Specific information regarding horizontal violence and scripted responses should also be provided to new graduate nurses.

The use of simulation was found to be beneficial in extended orientation programs for new graduates (Friedman et al., 2013; Rush et al., 2013). Simulation scenarios gave the new graduates opportunities to practice their skills and critical thinking in a safe, supported environment. They were able to safely make mistakes and then discuss these errors and the thought processes that accompanied them (Friedman et al., 2013). These discussions helped to improve the new graduates' critical-thinking abilities. Weekly simulation scenarios also helped them develop confidence, competence, and readiness for independent practice (Rush et al., 2012).

***State of research.*** The theme of new graduates skills and knowledge was present in all nine articles reviewed. As with the previous themes much of the data supporting this theme

comes from qualitative studies and program evaluations. This somewhat limits the ability to generalize the findings. Further research could be done to attempt to quantify what skills and knowledge new graduates are coming out of their undergraduate education with and how those skills can best be acquired in their new roles.

**Retention and turnover.** Many factors influence retention and turnover of new graduate nurses (Friedman et al., 2013; Rush et al., 2013; Ulrich et al., 2010). Ulrich et al. (2010) found that work satisfaction, nurse satisfaction, and group cohesion all positively affected retention rates, while dissatisfaction with pay and work schedule negatively affected retention rates. Extended orientation programs were consistently found to improve retention rates (Friedman et al., 2013; Rush et al., 2013; Ulrich et al., 2010). Friedman et al. (2013) found that the retention rate at Cohen Children's Hospital went from 82% to 94% after the implementation of a residency program for new graduates. Similarly, Ulrich et al. (2010) found that the average turnover rate at organizations with the Versant® RN residency program went from 27% to 7.1% at 12 months post-employment, and from 49% to 19.6% at 23 months post-employment. In their review of 47 articles relating to new graduate nurse transition programs, Rush et al. (2013) reported that longer orientation programs were consistently correlated with lower turnover rates. Friedman et al. (2013) also found that new graduate nurses who participated in the residency program were employed at the organization significantly longer than those who did not participate in the program. By reducing the rate of turnover, health care organizations were not only able to reap significant cost savings (Friedman et al., 2013; Rush et al., 2013) but were also able to improve patient safety and quality of care (Rush et al., 2013; Ulrich et al., 2010).

**State of research.** The theme of retention and turnover was found in three of the reviewed articles. Two of these studies were program evaluations and one was an integrative

review. The integrative review included both quantitative and qualitative studies. By its nature, retention data is quantitative in nature. One limitation is the studies were retrospective in nature, so a reason for staff turnover is not stated. This limits the usefulness of the data as it is impossible to know if there are confounding factors.

### **Summary of the Research**

A review of the literature provided sufficient evidence to determine common themes in the transition process for new graduates, and to indicate how orientation programs could be designed to help new graduates through this process effectively. There is a more limited literature that relates specifically to the needs of the pediatric nurse, so I examined a combination of research relating to pediatric nurses and to new graduates' transition generally. It was clear that new graduates went through a significant transition period when they moved from being a graduate to becoming a professional nurse (Duchscher, 2009; Dyess & Sherman, 2009; Hunsberger et al., 2013; Rush et al., 2013; Ulrich et al., 2012; Zinsmeister & Schafer, 2009). New graduates often felt overwhelmed and stressed as they moved from the familiar academic setting to the unfamiliar professional practice setting (Duchscher, 2009; Rush et al., 2013; Zinsmeister & Schafer, 2009). They were unsure what their new role was and how to relate to other members of the health care team (Cockerham et al., 2011; Duchscher, 2009; Rush et al., 2013; Zinsmeister & Schafer, 2009). This uncertainty, coupled with their reluctance to ask their colleagues for help, led to new graduates often feeling isolated and alone (Duchscher, 2009; Zinsmeister & Schafer, 2009).

One of the most successful ways to support new graduates through the transition was to provide a supportive work environment (Cockerham et al., 2011; Duchscher, 2009; Dyess & Sherman, 2009; Hunsberger et al., 2013; Rush et al., 2013; Zinsmeister & Schafer, 2009). New

graduate nurses were severely impacted by both positive and negative interactions and relationships with their new colleagues (Duchscher, 2009; Rush et al., 2013; Zinsmeister & Schafer, 2009). Horizontal violence, and difficulties with the multidisciplinary team, led to more intense feelings of stress and being overwhelmed (Duchscher, 2009; Zinsmeister & Schafer, 2009). Positive interactions had a transformative effect on the new graduates' sense of self as professional nurses and helped decrease transition stress (Duchscher, 2009, Zinsmeister & Schafer, 2009). The assignment of a dedicated support person, such as a preceptor or mentor, helped to ensure a supportive environment for the new graduates (Cockerham et al., 2013, Duchscher, 2009; Dyess & Sherman, 2009; Hunsberger, 2013; Rush et al., 2013; Zinsmeister & Schafer, 2009). Preceptors and mentors were well placed to socialize the new graduates to their new units (Hunsberger et al., 2013; Rush et al., 2013), as well as to help them improve their clinical, critical thinking, time management, and organizational skills (Duchscher, 2009; Dyess & Sherman, 2009; Zinsmeister & Schafer, 2009).

New graduates did not come out of their undergraduate programs prepared to practice as independent practitioners (Cockerham et al., 2011; Duchscher, 2009; Hunsberger et al., 2013; Ryan & Tatum, 2013; Ulrich et al., 2010; Zinsmeister & Schafer, 2009). The health care organizations that hired them were required to take on the responsibility of ensuring that new graduates gained the missing skills and knowledge. An effective way to manage this was to institute extended orientation programs for new graduates (Cockerham et al., 2011; Duchscher, 2009; Friedman et al., 2013; Hunsberger et al., 2013; Rush et al., 2013; Ulrich et al., 2010). An extended orientation program allowed the new graduates to gain crucial knowledge and skills while being supported through the transition period (Cockerham et al., 2011, Friedman et al., 2013; Hunsberger et al., 2013; Rush et al. 2013; Ulrich et al., 2010). New graduates who

completed an extended orientation program had increased competency, increased job performance, and increased satisfaction (Cockerham et al., 2011; Friedman et al., 2009; Hunsberger et al., 2013; Rush et al. 2013; Ulrich et al., 2010).

The new graduates' experience of transition affected retention and turnover rates (Friedman et al., 2013; Rush et al., 2013; Ulrich et al., 2010). New graduates who had higher satisfaction were more likely to remain at an organization longer (Friedman et al., 2013; Ulrich et al., 2010). An extended orientation program for new graduates could lead to increased retention rates (Friedman et al., 2013; Rush et al., 2013; Ulrich et al., 2010).

**State of research.** Overall the ability to generalize the findings is somewhat limited. Three of the studies were qualitative in nature, which limit generalizability with small sample sizes, and three of the studies were program evaluations. As the transition experience is a subjective one, it is common to find qualitative studies depicting this phenomenon. Research in which participants are randomized into two orientation groups to examine retention rates, critical thinking skills, and skill attainment would add credibility to this area of study. One of the limitations of the reviewed literature was the high percentage of studies based in the United States. Six of the articles were United States based, and only three were Canadian. While there are similarities in the content nurses are taught and the methods of instruction, the United States nursing education system has one key difference from the Canadian system, which could impact the readiness of new graduate nurses to practice and the orientation programs required. The United States continues to offer a two-year Associate degree option for Registered Nurses. There is the potential for serious differences in the way new graduates nurse with an Associate Degree experience the new graduate transition experience compared with their Baccalaureate prepared counterparts. Although the studies based in the United States acknowledged the

demographic differences in the participants, there was no reporting of separate results for new graduates with an Associate degree versus a Baccalaureate degree. For this reason, is it important to view the results of the six articles from the United States with a degree of caution; it may not be plausible to apply the result directly to institutions in Canada. Ideally, further research should be conducted in Canadian pediatric institutions to evaluate new graduate pediatric nursing orientation programs with Canadian trained nurses.

### **Lessons Learned**

Based on the reviewed literature, I believe it is very important to provide an extended orientation program for new graduates to help move these nurses into independent practice. New graduates experience significant transition shock when entering the professional practice setting (Duchscher, 2009), and the standard orientation process is not adequate to support them through this period. Based on the literature, I believe a new graduate orientation program should be a year in length (Duchscher, 2009; Dyess& Sherman, 2009; Rush et al., 2013), with didactic content provided regularly for the first four months, and a formal, structured mentorship provided until the one-year mark. I hope that by providing didactic content for the first four months—the period with the highest stress—such a program will help new graduates engage in a setting that is similar to the academic environment they transitioned from (Duchscher, 2009). This academic setting will also enable new graduates to meet with their peers and will provide peer support, which was an important aspect lost when the new graduates left the academic setting (Rush et al., 2013). I hope that by providing a structured mentorship until the one-year mark, the program will support the new graduates through the difficult six- to nine-month period in which they engage in independent practice.

Education in interpersonal skills is somewhat lacking in undergraduate nursing programs

(Duchscher, 2009; Dyess & Sherman, 2009; Rush et al., 2013), so this will be an important part of the new graduate orientation curriculum. New graduates will be able to role-play with both their new graduate peers and other members of the health care team to learn how to manage difficult interactions. As delegation and supervision of unlicensed health care professionals is minimal in my facility, this will not be a focus of the orientation but could be added in other facilities. Other areas of focus will include medication administration, assessment skills, clinical skills, and time management (Rush et al., 2013).

If I am involved in implementing this curriculum, I would evaluate the success of the new graduate orientation program by analyzing turnover rates. As new graduate transition programs have been found to reduce staff turnover and increase retention (Friedman et al., 2013; Rush et al., 2013; Ulrich et al., 2010), this is one way to determine if the orientation program is effective at meeting the transitional needs of new graduate nurses.

### **Pediatric Standards of Practice**

Following the literature review, I carefully reviewed and mapped out the entry-to-practice competencies set out by the American Nurses Association (ANA) (2008) in *Pediatric Nursing: Scope and Standards of Practice*. The scope and standards of practice “describe aspects of competent nursing care and professional performance which are measurable, can be evaluated, and are common to nurses engaged in the care of children and their families” (ANA, 2008, p. xiii). The American Nurses Association and the Society of Pediatric Nurses developed these standards jointly in order to guide nurses in providing safe quality care to children and their families. The scope and standards of practice assume that care is individualized to a child and family’s unique needs and situation, and that nurses create partnerships with the child, family, and other healthcare providers (ANA, 2008). There are 16 standards, divided into standards of

practice and standards of professional performance (ANA, 2008). The standards of practice include assessment, diagnosis, outcomes identification, planning, implementation, and evaluation (ANA, 2008). The standards of professional performance include quality practice; professional practice evaluation; education; collegiately; ethics; collaboration; research, evidence-based practice, and clinical scholarship; resource utilization; leadership; and advocacy (ANA, 2008). Each standard includes a performance statement and criteria that allows the standard to be met (ANA, 2008).

The *Pediatric Nursing: Scope and Standards of Practice* (ANA, 2008) dovetailed extremely well with the *Entry-to-Practice Competencies for the Registered Nurse Profession* set out by the College and Association of Registered Nurses of Alberta (CARNA) (2013). As this curriculum is intended for a pediatric hospital in Alberta, it is important that the provincial standards are incorporated into the curriculum. The broad categories of competencies include: professional responsibility and accountability; knowledge-based practice; ethical practice; service to the public; and self-regulation (CARNA, 2013). Together, the *Pediatric Nursing: Scope and Standards of Practice* (ANA, 2008) and *Entry-to-Practice Competencies for the Registered Nurse Profession* (CARNA, 2013) informed every part of the new graduate orientation curriculum.

### **Review of Existing Orientation Curricula**

My final step before completing the curriculum was to review orientation curricula in place in pediatric hospitals across Canada. I reached out by email to clinical nurse educators at tertiary pediatric health care centres to request information regarding their orientation programs. I received responses from Alberta Children's Hospital in Calgary, Alberta (T. Reisig, personal communication, November 12, 2014), IKW Health Care Centre in Halifax, Nova Scotia (J.

Williams, personal communication, July 3, 2014), and British Columbia Children's Hospital (K. MacArthur, personal communication, February 2, 2015). None of the centres had an orientation curriculum dedicated to new graduate nurses. At all three centres, new graduates completed the same orientation as new hires with nursing experience. The orientation processes for Alberta Children's Hospital, IWK Health Care Centre, and British Columbia Children's Hospital were extremely similar, beginning with a week of classes that covered a variety of content. The first day included content related to the individual facility's policies and procedures, and an introduction to senior leaders. The remainder of the week focused on various aspects of pediatric nursing, such as assessments, medication administration, enteral feeding, and family-centred care. Time was dedicated to didactic teaching as well as skills labs. Alberta Children's Hospital also has a robust simulation program for new hires (T. Reisig, personal communication, November 12, 2014). The orientation program at British Columbia Children's Hospital included a validation day at three months to assess the new nurses progress and determine new learning goals (K. MacArthur, personal communication, February 2, 2015)

### **Curriculum Development**

The purpose of staff development is to prepare staff to provide quality, safe patient care, thereby improving patient and family health and quality of life (Richards, 2011). To achieve this goal, it is important that staff development is conceptualized to meet the needs of the learners; a well-designed curriculum will ensure this. A curriculum sets in place the philosophical and theoretical foundations, as well as outlines the teaching and learning outcomes of an educational program (Keating, 2011).

To develop a curriculum blueprint for new graduate nurses in the pediatric setting, I followed the steps described by Richards (2011). I began by identifying my theoretical lens and

related learning theories. I then conducted a needs assessment of both internal and external factors and created the curriculum blueprint, ensuring all components of the curriculum were present, as advised by Richards (2011).

### **Philosophical View of Teaching and Learning**

It is important to have a theoretical framework and lens on which to base any curriculum (Keating, 2011). This will help ensure that the curriculum remains a coherent program. This orientation program for new graduate nurses is based on social constructivism. Adult learning theory is also incorporated to ensure relevance to the selected audience. To assist with the development of learning outcomes, Fink's taxonomy of significant learning is used.

**Social constructivism.** My philosophical view of teaching and learning is based on social constructivism. The Oxford English dictionary defines the verb "learn" as meaning "to acquire knowledge of (a subject) or skill in (an art, etc.) as a result of study, experience, or teaching" (OED online, 2012, s.v. "learn, v."). This definition fits well with what I view as the learning experience. It does not limit learning to knowledge gained from an expert depositing facts, but includes experience as a way to acquire knowledge. This corresponds to the constructivist frame of learning, which states prior knowledge from experiences is what future learning is based on (Freire, 2005; Young & Maxwell, 2007). In addition, an important tenet of social constructivism is that all development, and therefore knowledge attainment, occurs as a result of social interactions (Young & Maxwell, 2007). Therefore, in my view of the orientation program, I see all the learners bringing prior knowledge with them, including both nursing and non-nursing knowledge. The relationships built and the content taught in the orientation program will simply be adding to their expanding knowledge bases. It is also important to allow for

interaction between all learners and the educator. This enables the learners and educators to become co-learners in the process (Freire, 2005).

I believe that the learner should be central to the learning process (Freire, 2005; Young & Maxwell, 2007). This means that the role of the teacher, and the purpose of teaching, is to support the learner through this process. The teacher should not be the central focus, but should rather become the facilitator, guide, and designer of learning experiences (Allen, 2010). Rather than standing in front of staff nurses as the “sage on the stage” (Young & Maxwell, 2007), I believe the relationship of teacher and learner in the clinical setting should have them standing next to one another, with the teacher supporting the learner (Allen, 2010). This means that the teacher supports and encourages learners on their quest for knowledge and supports them as they learn to integrate this knowledge into their knowledge base (Freire, 2005). The teacher also works to inspire learners to discover where they wish their educational experiences to go and helps create in them life-long learners (Allen, 2010; Welch, 2010). To achieve this, I must answer such question as who are the learners, what they bring to the learning experience, and how their learning styles can best be accommodated, rather than simply focusing on the content I will be teaching (Young & Maxwell, 2007).

**Learning theory.** As this was to be an educational program designed for adults, I used adult learning theory to guide the development of this curriculum blueprint. Adult learning theory has six major assumptions about learners: adults are autonomous and prefer to direct themselves; adults have life experiences and knowledge that need to be connected to the learning experience; adults desire an organized, well-defined program that is relevant to their personal goals; adults are concerned with relevancy; adults are practical; and, adults want respect (Saylor, 2011). It is important to remember that adults have a more problem-centred approach to learning

and wish to solve problems that are relevant to them at the time (Saylor, 2011). By keeping these assumptions in mind as I developed the blueprint, I ensured the program was both relevant and useful for the learner population.

**Educational taxonomy.** The use of an educational taxonomy in curriculum development is important as it “provides a common language for classifying, categorizing, and defining educational goals” (Candela, 2011, p. 71). Taxonomies can be used to assist educators with ensuring that learners progress towards meeting the larger program goals (Candela, 2011). Fink (2007) first developed his taxonomy of significant learning in 2003 (Appendix D). He based his taxonomy on the work of Bloom, but rather than creating a hierarchical taxonomy, Fink created a taxonomy that was interactive. Fink believed that for learning to occur a lasting change that was significant in terms of the learner’s life had to occur (2013).

Fink offers six categories of significant learning that work together interactively to help learners achieve a significant learning experience (Fink, 2007). The first category is foundational knowledge (Fink, 2013). This category included facts and principles that learners should understand and remember. The second category is application (Fink, 2013). Application requires that learners use the foundational knowledge they have gained in a meaningful way. The third category is integration (Fink, 2013). Integration occurs when learners connect concepts or subject matters and determine how they are similar or interact. The fourth category is the human dimension (Fink, 2013). The human dimension focuses on learners discovering something about themselves or how they interact with others. The fifth category is caring (Fink, 2013). Caring occurs when the learners had a change in attitude or renewed interest about a subject matter. The final category is learning how to learn (Fink, 2013). This category focuses on learners understanding how to continue their learning experience throughout their lives, rather

than only when engaged in formal educational programs. Instead of being hierarchical in nature or needing to be addressed one at a time, Fink's categories can all be dealt with at the same time. They complement each other on the journey to significant learning. Ideally, all six types of learning should be included in a course (Fink, 2007). Using a taxonomy that is relational and interactive instead of hierarchical will also help with ensuring that learning goals are not simply focused on content mastery and memorization of facts (Fink, 2013). When learners are able to apply the content and connect it with other knowledge, understand the human implications, come to care about the subject and learning how to keep learning, they are more likely to retain what they have learned and continue to strive towards learner more (Fink, 2013).

To assist with creating an environment in which significant learning can be achieved, Fink suggests using integrated course design (Fink, 2007; Fink, 2013). In integrated course design, educators move through a series of steps that ensure the course is not focused simply on content delivery (Fink, 2007). The first step is to determine the situation factors (Fink, 2007; Fink, 2013). Situational factors include the specific context, expectations of others, the nature of the subject, the nature of the students, and the nature of the teacher (Fink, 2007). The second step is to identify the important learning goals (Fink, 2007; Fink, 2013). Fink also offers a sentence completion exercise to help educators focus on learner outcomes. By completing the sentence "By the end of the course, my hope is that students will..." (Fink, 2007, p. 15), the educator will be able to create learner outcomes that will drive the creation of the curriculum. Ideally, there will be learning goals for each of the categories of significant learning. After determining the learner goals, the next step is to determine appropriate feedback and assessment procedures (Fink, 2007; Fink, 2013). It is important to ensure that these evaluative processes have clear criteria and standards and allow for opportunities for self-assessment (Fink, 2007).

After the evaluative processes have been determined, effective teaching and learning activities can be selected (Fink, 2013). Effective learning activities ensure that the students have a way to acquire the necessary information, are able to experience the content in some way, and are able to reflect on the meaning of the knowledge or experience (Fink, 2007). Finally, it is important to ensure that all of these components are integrated and will support the learner as they move towards significant learning (Fink, 2007; 2013).

I will use Fink's taxonomy of significant learning as I develop an orientation program, as I believe it fits well with social constructivism. As stated earlier, Fink believed that for significant learning to occur a lasting change that was significant to the learner's life was required (Fink, 2013). This means that all learning must be related to the learner's past experiences and knowledge in a meaningful way. By linking new knowledge, skills, and experiences with meaningful knowledge and experiences from the past, the learner will continue to grow and develop his or her knowledge base (Fink, 2013; Freire, 2005). This linking of past knowledge and experiences with present is a central tenet of social constructivism (Freire, 2005). Learners must care about the subject matter they are learning and determine how to fit it in to their previous knowledge and experience (Fink, 2013). Fink's also recognized that how we interact and relate to others is an important component of the learning process (Fink, 2013). This learning through social interaction is also an important tenet of social constructivism (Young & Maxwell, 2007).

Social constructivism and Fink's Taxonomy of Significant Learning also fit well with my view of the nursing profession. I view nursing as an autonomous and collaborative profession. Social constructivism and Fink's Taxonomy of Significant Learning support the collaborative nature of nursing by placing social interactions at the heart of knowledge translation (Fink, 2013;

Young & Maxwell, 2007). Social constructivism also places the learners at the centre of the learning process, which encourages the autonomy of the learner (Freire, 2005; Young & Maxwell, 2007). The learner is encouraged and guided by the teacher to determine the learning pathway most suitable to their individual learning needs, giving control to the learner (Freire, 2005). By placing the learner at the centre of the learner experience, social constructivism also supports the feminist ideal of ending oppression in education (Freire, 2005; hooks, 2013).

### **Needs assessment**

Before developing a curriculum, it is crucial to carry out a needs assessment (Richards, 2011). Conducting a needs assessment both validates the currency and professional relevance of current educational program and establishes the feasibility of and demand for new programs (Keating, 2011). By conducting a needs assessment, I was able to determine that there was a need for an orientation program for new graduate nurses and that while the existing program was adequate for nurses with previous professional nursing experience, it was inadequate for new graduate nurses and should be redeveloped (Keating, 2011). The two major categories of the needs assessment are external and internal frame factors (Richards, 2011). External frame factors include factors that are outside the institution, which can include, among others, the community, the population, and the health care system (Keating, 2011). The internal frame factors are those factors within the institution, such as the vision, mission, and goals of the institution; the economic situation of the institution; and the resources within the institution (Keating, 2011). The needs assessment ensured I would not only work within the needs of the institution but could also account for any limitations. This helped make sure I created a curriculum that was viable for the long term.

**External frame factors.** Stollery Children's Hospital (SCH) is a tertiary pediatric

hospital in Edmonton, Alberta. We have 110 acute care inpatient beds and 38 critical care beds. We service northern Alberta, parts of northern Saskatchewan, Northwest Territories, and Nunavut. We also have a large cardiac surgery and extracorporeal life support program that services all of Western Canada. The population of Edmonton was 877,926 in 2014 (City of Edmonton, 2015). In 2011, 17.7% of the population was between the ages of 0 and 14 (Statistics Canada, 2015). Edmonton is home to a vibrant immigrant community; 21% of the population identifies a language other than English or French as their mother tongue (Statistics Canada, 2015). SCH also receives patients from a number of First Nation reserves and remote northern communities.

In 2010, in large urban centres in Alberta, such as Edmonton, 11.4 percent of children are living in low-income families (Government of Alberta, n.d.). This increased to 17 percent for children ages 0-9 (Alberta Human Services, 2013). Aboriginal children experienced living in low-income families at a rate of 41 percent in 2006 (Alberta Human Services, 2013). In 2004, children in Alberta were less likely than other children in the remainder of Canada to be overweight or obese (Alberta Health Services, 2010). Children under the age of 11 in Alberta were overweight at a rate of 10.9 percent, compared to a national average of 16.3 percent. In Alberta, children under the age of 11 were obese at a rate of 5.8 percent compared to a national average of 7.4% (Alberta Health Services, 2010). Children residing in Edmonton were immunized at a rate approximately 2 percent above the provincial average for all vaccines (Government of Alberta, 2015). Immunization rates from 2008-2013 ranged from a low of 75.5 percent for the fourth dose of the Diphtheria, Tetanus, Polio, Pertussis, and Haemophilus Influenza vaccine to a high of 96.8 percent for the first dose of the Meningococcal vaccine for children in Edmonton (Government of Alberta, 2015).

The vast majority of our patients are covered under Alberta Health Care. Very rarely we will admit a Canadian patient whose family has opted out of health care coverage or a patient from out of the country who does not carry health insurance. Many of our patients do not have supplemental health insurance, which may impact the patient and family. For example, some families cannot afford the treatments the patient requires on discharge because they do not have the correct coverage. We have a team of social workers at SCH who help families manage these problems. We also have access to several funds, such as the Kids With Cancer fund, which provide extra resources to patients who fall within a specific patient population.

**Internal frame factors.** As a clinical nurse education at SCH, I was able to assess the internal frame factors from a unique perspective as someone familiar with the both the hospital and education programs. SCH is a tertiary/quaternary pediatric hospital that is part of Alberta Health Services. The mission of Alberta Health Services is “To provide a patient-focused, quality health system that is accessible and sustainable for all Albertans.” (Alberta Health Services, 2015, n.p.). The seven core values of Alberta Health Services are respect, accountability, transparency, engagement, safety, learning, and performance (Alberta Health Services, 2015). We work to follow that mission and those values at SCH. One way we encourage accountability, transparency, engagement, and safety is by practicing family-centred care. A child’s family is the most important support and resource for that child; therefore, we make all our decisions based on what is best for our patients and their families.

Approximately 30% of the patients admitted to SCH are there for specialty services such as cardiac surgery or neuro-surgery. The other 70% are admitted for medical/surgical concerns such as common childhood illnesses, fractures, and minor surgical procedures. We also have patients admitted for the care of chronic conditions such as cerebral palsy and dependence on

mechanical ventilation. Our patient population is as diverse as the communities we serve.

SCH employs approximately 1,300 nurses, with 600 of them working on the acute care inpatient units. Of these nurses, 70% are RNs, while the remaining 30% are Licensed Practical Nurses. The nurses employed at SCH come from a wide variety of backgrounds. We have a large population of internationally educated nurses, with many coming from the Philippines. These internationally educated nurses have met the requirements of their regulatory bodies for licensure in Canada before they begin work at SCH. We have 20 Nurse Practitioners who work in a variety of areas. We do not have any Clinical Nurse Specialists on the acute care inpatient units. This leaves an unfortunate gap in the support we are able to provide to new graduate nurses as an institution. The Nurse Practitioners are focused on direct patient care and have little time to provide expert support and guidance to new graduates. The clinical education team is also unable to provide as much support as is necessary as much of their time is dedicated to classroom orientation and continuing education sessions. Clinical nurse specialists could provide expert knowledge and assist the new graduate nurses with integrating evidence into their practice from the beginning. Due to the high acuity of our patient population and the fact that we usually run at between 95 and 105% capacity, we often face staffing shortages. New nurses are constantly being recruited into the casual and float pools to attempt to alleviate some of these shortages.

Over the past three years SCH has undergone changes to the staff mix. A higher proportion of Licensed Practical Nurses are being integrated into the units, with the medicine units have an almost 50/50 split of Registered Nurses and Licensed Practical Nurses. This has implications for availability of preceptors for new graduate nurses and continued support of new graduates from seasoned practitioners. New graduate nurses also find themselves responsible for assisting Licensed Practical Nurses with unstable and deteriorating patients sooner than if there

were more Registered Nurses working on the units. These staff mix changes have also impacted the ability of the unit manager to provide support to new graduate nurses. Unit managers are functioning in the dual role of charge nurse and manager due to the decrease in Registered Nurses. When acting as charge nurse the unit managers has many responsibilities to ensure the unit functions optimally, which leaves little time to support new graduate nurses in their new practice

The needs of the staff employed at SCH are diverse. We have nurses with a broad range of skills and experiences. We frequently hire new graduate nurses to all areas of SCH. These new graduates have needs that are different from those of new staff members who are experienced nurses. In my experience, new staff members with previous nursing experience generally require only educational content related to the specifics of pediatric nursing care—most notably, medication administration. They have already developed skills in time management, organization, and critical thinking. The new graduates, however, require content related to general patient care activities such as assessment, clinical skills, time management, organization, and clinical thinking. They also require content related specifically to the pediatric population such as family-centred care and medication administration. Along with these clinical skills, the new graduates also require support for their transition from student to nurse. Providing orientation for experienced nurses and new graduates together means that either the experienced nurses are receiving much more training than required, or the new graduates are not receiving enough training and support. In my experience, at SCH it is the new graduates who are not receiving enough support. New graduates often struggle when they move to independent practice, and they frequently require a formalized learning plan. This is a difficult process for the new graduates, because they feel as if they are being singled out from their peers and punished

with a learning plan. This feeling decreases their already low self-confidence.

The Alberta provincial government has recently forecast a seven-billion-dollar budget shortfall, which will seriously impact the health care system. Alberta Health Services is currently cutting costs. While an orientation program for new graduates may reduce costs in the long run, there is not a large budget at this time to make sweeping additions to SCH's educational offers. Even though there is strong evidence in the literature to support a formalized, year-long, extended orientation program for new graduates, an extended orientation at SCH will have to be somewhat more modest in order to meet budgetary constraints.

The SCH inpatient education team has nine clinical nurse educators (CNE), with a total full-time equivalency of 7.2. This is slightly lower than Alberta Children's Hospital, which is a comparable size, but has a CNE full-time equivalency of 9 (T. Reisig, personal communication, November 12, 2014). Six of the CNEs are designated as unit educators, and three are designated as core educators. The core CNEs manage programs such as Stollery Orientation and Stollery-wide Education Days. There is one small classroom dedicated to inpatient education. Other rooms can potentially be booked, but their size and the information technology resources they offer limit the functionality of some of them. The education team has access to laptops and projectors to make educational offerings more portable.

**Lessons learned from needs assessment.** After completing the needs assessment I discovered that the SCH services a wide variety of patients and families. Being a tertiary hospital we see many of the most acutely ill children and children who require specialty services. It is important that the staff nurses are comfortable caring for these acutely ill children. As many new graduates are hired it is crucial that a supportive orientation program is provided. The education team currently appears to have adequate resources to manage an additional orientation

program.

Although there are the resources available to manage an additional orientation program, there are challenges in meeting the best practices of a new graduate orientation program in the current healthcare and economic climate. One of the common recommendations for a new graduate orientation program is that is at least one year in length to provide the optimal level of support throughout the most difficult portions of the transition process (Duchscher, 2009; Dyess & Sherman, 2009; Rush et al., 2013). This is difficult to accomplish both because of limited budget and the need to continually hire new nurses. It is not feasible in the current economic climate for a new graduate to be in a supernumerary position for one year. It is also not possible with the current turnover rates; there is a requirement for new staff to be independent as soon as possible. The other difficult with extended preceptorships is the lack of competent nurses to act as preceptors. There is not currently enough preceptors to manage a full year preceptorship at the rate we are currently hiring. There is also evidence to support having educators dedicated to simply running and maintaining the orientation program (Friedman et al., 2013; Ulrich et al., 2010). This person could ensure that the orientation curriculum is kept up-to-date and ensure timely evaluation of the program is done. This is also not feasible in the current healthcare climate. There is not enough funds to create additional CNE positions and would cause problems with other education offerings if a CNE was moved from other duties. Finally, there is also evidence to support regular meetings with senior management to assist the new graduates in their transition (Cockerham et al., 2011; Dyess & Sherman, 2009; Hunsberger et al., 2013; Rush et al., 2012; Zinsmeister & Schafer, 2009). This would also be difficult to implement and sustain due to the increasing commitments on the leadership and the high number of new staff. The senior leadership team would have difficulty providing the level of support recommended for all

of the new graduates hired.

By recognizing both best practices and the challenges we face in implementing them, it is easier to determine a way forward through those challenges. By using creative solutions, such as a structured mentorship for the last 8 months of the year-long orientation program instead of a preceptorship, the needs of the healthcare system can be met while providing the best support possible for the new graduate nurses.

### **Curriculum Blueprint**

The new graduate orientation program I created is a year-long program intended to support new graduate Registered Nurses<sup>1</sup> as they transition into the role of professional pediatric nurse. As previously mentioned, most baccalaureate educational programs offer little in the way of pediatric content (Society of Pediatric Nurses, n.d.). Thus, new graduates struggle with the transition from student to practitioner, so they require additional support to make a successful transition to the role of competent pediatric nurse. The orientation program presented here is a structured program that aims to ensure that all new graduates are provided with optimal support. (See Appendix E for details.) This orientation program is built on the principles of social constructivism, ensuring that students are placed at the centre of the learning experience and educators engage as co-learners in this process. New graduates will move through this educational experience with the end-goal of becoming autonomous, caring professionals who are capable of providing safe, compassionate care to pediatric patients and their families.

### **Program Components**

This orientation curriculum has three main components: the classroom component, the clinical component, and the mentorship component. The classroom and clinical components will

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<sup>1</sup> For the purpose of this project, a new graduate nurse will be defined as one who has been graduated from a baccalaureate nursing program for less than one year.

run simultaneously. The mentorship component begins once the clinical component is completed.

**Classroom component.** The first four months of this orientation program will include a variety of classroom learning sessions. These will include case studies, case-based simulation scenarios, and skills labs. The new graduates will spend the first week in the classroom. The content covered in that week will include topics such as growth and development, pediatric assessment, basics of medication administration, and basic skills labs. Following this week of classes, the new graduates will return to the classroom one day every two weeks. By spreading out the remainder of the didactic content, I hope that the new graduates will not become too overwhelmed with new information. Throughout the course of the classroom component, topics covered will include interpersonal conflict, time management, simulation sessions, transition shock, and advanced medication management. As the new graduates continue to engage in clinical practice throughout this period, they will be able to start relating what they are learning to the clinical setting. This will help the new graduates better integrate the new knowledge into their existing knowledge base.

The classroom days will be structured around the six standards of practice of the *Pediatric Nursing: Scope and Standards of Practice* (ANA, 2008). This will also help guide the new graduate nurses through the nursing process as they work through case studies. The standards of professional practice (ANA, 2008) will be woven in through every activity.

**Clinical component.** While participating in the classroom component, new graduates will also participate in the clinical component, which will begin in the second week of orientation. The first week of clinical practice will consist of five instructor-led shifts, similar to instructor-led student practicums. I hope the familiarity of the instructor-led group will ease the

transition into a new practice setting. Instructor-led clinical shifts will include a pre- and post-conference to assist the new graduates as they develop care plans for their patients and to debrief any incidents at the end of the shift. Following the five instructor-led shifts, the new graduates will begin their preceptorship with a dedicated preceptor. Nurses who act as preceptors will be expected to undergo formal preceptor training to ensure the best experience possible for the new graduate nurses. The preceptorship will be a minimum of eight weeks but can be extended if necessary. Due to current financial constraints, it is not feasible to plan for all preceptorships to be longer than eight weeks.

**Mentorship component.** Following the completion of the preceptorship, a structured formal mentorship will begin and will last until the one-year mark. Each new graduate will be assigned a dedicated mentor. If the relationship between the preceptor and new graduate was strong, and the preceptor is an appropriate mentor, then the preceptor may become the mentor. As well, the mentor will preferably be someone the new graduate works with often. The mentor should be available to answer questions and discuss concerns regularly (Beecroft, Santner, Lacy, Kunzman, & Dorey, 2006; Duchscher, 2009). Where operationally possible, when the new graduate and mentor are working the same shift, the mentor and new graduate will be given complementary assignments so that the mentor is readily accessible to the new graduate. The mentor and new graduate will meet every two weeks for structured meetings after the didactic component has been completed. This will ensure that the mentor can continue to assist the new graduate as he or she learns and integrates new knowledge (Beecroft et al., 2006; Cockerham et al., 2011). This will also allow the mentor to watch for problems or concerns with the new graduate's transition before larger problems develop (Duchscher, 2009). The formal mentorship will end one year after the new graduate is hired, but the mentor and new graduate are

encouraged to continue the mentoring relationship on an informal basis.

### **Components to be Woven Throughout the Curriculum**

To ensure this orientation program prepares new graduate nurses who are capable of providing excellent care to patient and their families, there are two concepts that must be woven throughout all components of this curriculum. These concepts are family-centred care and social determinants of health.

**Family-centred care.** Family-centred care is philosophy of care that recognizes that family is the constant in a child's life and the context in which all health care occurs (Harrison, 2010; Mikkelsen & Frederiksen, 2010; McCarthy & Wyatt, 2014). It describes an approach to health care that includes the family of a patient as a vital member of the health care team (Mikkelsen & Frederiksen, 2010). Nurses caring for pediatric patients must consistently include that family in all aspects of care (Harrison, 2010; Mikkelsen & Frederiksen, 2010). It is important that this approach to care is cultivated in new graduate nurses from the moment they begin engaging with pediatric patients and their families. Because of the extreme importance of the family-centred care, this concept will be a key focus in all three components of this curriculum. This means that it will be included in all aspects of the content covered in the classroom component.

**Social determinants of health.** Health care is not provided free of social context. The patients and families that receive care in the hospital have a complex set of factors and conditions that impact their level of health and shape the care that is provided (Public Health Agency of Canada, 2013). It is important that nurses providing care for pediatric patients and their families are aware of this social context and attune to how their patients are impacted both in the hospital environment and when they return home. There are 12 key determining factors

that shape health; these are referred to as the social determinants of health (Public Health Agency of Canada, 2013). These 12 determinants are income and social status; social support networks; education and literacy; employment/working conditions; social environments; physical environments; personal health practices and coping skills; health child development; biology and genetic endowment; health services; gender; and culture (Public Health Agency of Canada, 2013). It is important that nurses care for pediatric patients view these determinants from a family-centred perspective and consider how they impact each family member separately and the family unit as a whole. To ensure that the new graduate nurses engage in nursing care from a holistic perspective, care will be taken to assist them in engaging with the concepts inherent in the determinants of health throughout this orientation curriculum. Nurses are uniquely situated in the health care system to assess the patient and family's health through the lens of the social determinants of health. In an inpatient setting nurses are able to spend extended periods of time with the patient and family and develop therapeutic relationships that will encourage discussion and collaboration around these potentially difficult issues. The new graduate nurses will also be introduced to Alberta's Social Policy Framework (Government of Alberta, 2013) in this orientation to guide them in providing care that improves the long-term health outcomes of their patients and families through the guiding principles of this provincial framework.

### **Teaching Strategies**

To support learning a variety of teaching strategies will be used. This will help to ensure that the learners are able to interact with each other and the instructor in a multitude of ways. This will also ensure that learners who struggle with a particular method of instruction can be engaged in different ways. As mentioned above, teaching strategies will include case stories, simulation sessions, and role-plays.

**Case stories.** The majority of the classroom sessions will be framed around a case story. Traditional case studies “apply theories and didactic content to simulations of real-life situations” (Tomey, 2003, p. 34). Case stories are similar, however they are able to delve further into the socioeconomic and political factors in a case (Young, 2007), which is important when viewing nursing care through a holistic lens. Presenting material through the use of a case story will help to ensure that family-centred care and the social determinants of health are woven throughout the content. Each day will revolve around one case with other learning activities being presented throughout to introduce various concepts. By presenting a case story and allowing for discussion it will allow the students to direct the content in a way that is meaningful and relevant to their own practice (Mikol, 2005). It will also provide an opportunity for the educator to reframe the relevancy of the content in a new way. This may be especially helpful with newly graduated nurses, as they may not yet have the context to understand the relevancy of this content. A case story allows the material to become flexible to the individual group of students (Harrison, 2012, Young, 2007). Presenting the content as a case story will also allow the students and educator to become true co-investigators in learning (Freire, 2005; Young, 2007). The educator can integrate the learners’ currently knowledge into the case story while continually building the knowledge base (Young, 2007). This teaching style allows for nurses who may have experience with the topics being addressed to share their knowledge with the group. This sharing of knowledge may allow the group to see a piece of the content in a different way. The newer nurses may have new resources or literature that they studied in school to contribute (Tomey, 2003). By doing a case story everyone is encouraged to contribute as much as they can while at the same time learning from the group (Brown & Rodney, 2007). Presenting a case story also presents opportunities for learning in all of the dimensions of significant learning (Fink, 2013).

By presenting the content as a real patient the learners are more likely to understand the human dimension and care more deeply about the subject material.

### **Evaluation**

When developing a curriculum for staff development programs, it is important to incorporate a plan for evaluation (Fink, 2013; Richards, 2011). Both the individual learners and the program as a whole should undergo regular evaluation.

**Learner evaluation.** It is important that learners receive ongoing evaluation as they move through the orientation program (Richards, 2011). This should include both self-assessment and formal and informal assessment by the instructor. The learners will be continually evaluated using the learner objectives developed for each session. The instructor will note how engaged each learner is in classroom activities and if they are meeting the class objectives. This evaluation will be continued outside the classroom by the preceptors and mentors. It is important that the preceptors and mentors have a solid understand of the *Pediatric Nursing: Scope and Standards of Practice* so they can measure the new graduates' progress against these standards (Yonge & Myrick, 2007). The preceptors will evaluate primarily by assess the new graduate in practice scenarios and opening up a dialogue on how the new graduate preformed and what went well and what improvements could be made (Yonge & Myrick, 2007). The preceptors will also write a brief summative evaluation half way through and at the end of the preceptored period to provide formal feedback on how the new graduate is meeting the standards of practice.

**Program evaluation.** Ongoing evaluation of both the program as a whole and the various components is important to ensure that the curriculum continues to meet its goals (Young, Maxwell, Patterson, & Wolff, 2007). This evaluation can be both formal and informal,

but should always strive for transparency and involvement of the stakeholders (Young, Maxwell, Patterson, & Wolff, 2007). Retention and turnover data will be analyzed as one method of formal evaluation. If new graduate nurses are provided a more supportive environment when they transition from student to professional nurse, they generally stay with a healthcare environment longer (Friedman et al., 2013; Rush et al., 2012; Ulrich et al., 2010). An increase in the retention of new graduates after the implementation is one way to determine if the program is meeting its goals. Formal feedback will also be sought from the participants of the program to ensure it is meeting their needs. This will be done in the form of surveys that are to be completed by the new graduates at the end of the preceptorship component, the classroom component, and once they have completed the orientation program. Informal evaluations will also be completed with the new graduates throughout the program to gain insight in real-time of what is working and not working for them.

It is also important to determine if the orientation program is meeting the needs of the organization. To do this, surveys will be provided for the nurse managers and educators to complete after each group of new graduates completes the classroom component and at the end of the program. This survey will include questions related to how well the new graduate is prepared for independent practice at the end of the preceptorship. Surveys will also be given to the preceptors and mentors to elicit their feedback on the orientation program.

Once the qualitative data from the surveys are collected, the education team will engage in thematic analysis, as described by Braun and Clarke (2006) to code the data and discover over-arching themes. This will enable the education team to discover the strengths and weaknesses of the orientation program. The education team will also compare the retention rates from before and after the new orientation program is implemented to determine if the new

program is increasing the retention of new graduate nurses. A literature review will also be conducted to determine the reliability and validity of existing quantitative curriculum evaluation tools, but that is outside the scope of this project.

### **Conclusion**

The transition from student to professional nurse can be extremely difficult for new graduate nurses, particularly in settings such as acute pediatric care. Because this is a time fraught with extreme stress, anxiety, and uncertainty, it is important for nurse educators to have a comprehensive understanding of what the transition experience is like for new graduates and to be aware of how they can use educational strategies to help support new graduates through this transition. By creating a curriculum blueprint for a new graduate orientation program, I hope to ensure that better support is provided for new graduates entering acute care pediatric nursing.

## References

- Alberta Health Services. (2013). *Childhood overweight and obesity*. Retrieved from <http://www.albertahealthservices.ca/poph/hi-poph-surv-phids-childhood-overweight-obesity-2010.pdf>
- Alberta Health Services. (2015). *Mission and strategic direction*. Retrieved from <http://www.albertahealthservices.ca/190.asp>
- Alberta Human Services. (2013). *An analysis of poverty in Alberta: Final report*. Retrieved from [http://povertyreduction.alberta.ca/files/documents/povertymatrixreport\\_final\\_report\\_may\\_2013.pdf](http://povertyreduction.alberta.ca/files/documents/povertymatrixreport_final_report_may_2013.pdf)
- Allen, S. (2010). The revolution of nursing pedagogy: A transformational process. *Teaching and Learning in Nursing*, 5(1), 33-38. Doi: 10.1016/j.teln.2009.07.001
- Almada, P., Carafoli, K., Flattery, J.B., French, D.A., & McNamara, M. (2004). Improving the retention of newly graduated nurses. *Journal for Nursing in Staff Development*, 20(6), 268-273.
- American Nurses Association. (2008). *Pediatric nursing: Scope and standards of practice*. Silver Spring, Maryland: American Nurses Association.
- Anderson, E. (2011). Feminist epistemology and philosophy of science. In E.N. Zalta (Ed.), *Stanford encyclopedia of philosophy*. Retrieved from <http://plato.stanford.edu/archives/spr2011/entries/feminism-epistemology/>
- Beecroft, P.C., Santner, S., Lacy, M.L., Kunzman, L., & Dorey, F. (2006). New graduate nurses' perceptions of mentoring: Six-year programme evaluation. *Journal of Advanced Nursing*, 55(6), 736-747.

Brown, H., & Rodney, P. (2007). Beyond case studies in practice education: Creating capacities for ethical knowledge through story and narrative. In L.E. Young & B.L. Paterson (Eds.), *Teaching nurses: Developing a student-centered learning environment* (pp. 141-163). Lippincott Williams & Wilkins: New York.

Bowell, T. (2011). Feminist standpoint theory. In J. Fieser & B. Dowden (Eds.), *Internet encyclopedia of philosophy*. Retrieved from <http://www.iep.utm.edu/fem-stan/>

Braun, V., & Clark, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*, 77-101.

Bultas, M.W. (2011). Enhancing the pediatric undergraduate nursing curriculum through simulation. *Journal of Pediatric Nursing, 26*(3), 224-229. Doi: 10.1016/j.pedn.2010.06.012

Canadian Nurses Association. (2009). *Return on investment*. Retrieved from [https://www.cna-aicc.ca/~media/cna/page-content/pdf-en/roi\\_nurse\\_turnover\\_2009\\_e.pdf?la=en](https://www.cna-aicc.ca/~media/cna/page-content/pdf-en/roi_nurse_turnover_2009_e.pdf?la=en)

Candela, L. (2011). Taxonomies and critical thinking in curriculum design. In S.B. Keating (Ed.), *Curriculum development and evaluation in nursing* (2nd ed.) (pp. 71-86). New York: Springer Publishing.

City of Edmonton. (2015). *Municipal census results: Edmonton census 2014*. Retrieved from [http://www.edmonton.ca/city\\_government/facts\\_figures/municipal-census-results.aspx](http://www.edmonton.ca/city_government/facts_figures/municipal-census-results.aspx)

Cockerham, J., Figueroa-Altmann, A., Eyster, B., Ross, C., & Salamy, J. (2011). Supporting newly hired nurses: A program to increase knowledge and confidence while fostering relationships among the team. *Nursing Forum, 46*(4), 231-239. doi:10.1111/j.1744-6198.2011.00236.x

College and Association of Registered Nurses of Alberta. (2013). *Entry-to-practice competencies*

*for the Registered Nurse profession.* Retrieved from

[http://www.nurses.ab.ca/content/dam/carna/pdfs/DocumentList/Standards/RN\\_EntryPracticeCompetencies\\_May2013.pdf](http://www.nurses.ab.ca/content/dam/carna/pdfs/DocumentList/Standards/RN_EntryPracticeCompetencies_May2013.pdf)

Duchscher, J.E.B. (2008). The prevailing winds of oppression: Understanding the new graduate experience in acute care. *Nursing Forum*, 43(4), 191-206.

Duchscher, J.E.B. (2009). Transition shock: The initial stage of role adaptation for newly graduated Registered Nurses. *Journal of Advanced Nursing*, 65(5), 1103-1113. Doi: 10.1111/j.1365-2648.2008.04898.x

Duclos-Miller, P.A. (2011). Successful graduate nurse transition: Meeting the challenge. *Nurse Leader*, 9(4), 32-35, 49. doi: 10.1016/j.mnl/2011.05.006

Dyess, S.M., & Sherman, R.O. (2009). The first year of practice: New graduate nurses' transition and learning needs. *The Journal of Continuing Education in Nursing*, 40(9), 403-410.

Fink, D.L. (2007). The power of course design to increase student engagement and learning. *Peer Review: Emerging Trends and Key Debates in Undergraduate Education*, 9(1), 13-17.

Fink, D.L. (2013). *Creating significant learning experiences: An integrated approach to designing college courses*. San Francisco, CA: Jossey-Bass.

Freire, P. (2005). *Pedagogy of the oppressed* (30<sup>th</sup> Anniversary ed.). New York: Continuum.

Friedman, M.I., Delaney, M.M., Schmidt, K., Quinn, C., & Macyk, I. (2013). Specialized new graduate RN pediatric orientation: A strategy for nursing retention and its financial impact. *Nursing Economics*, 31(4), 162-170.

Fulton, S., Krainovich-Miller, B., & Cameron, C. (2013). Finding and appraising the literature. In G. LoBoindo-Wood & J. Haber (Eds.), C. Cameron & M.D. Singh (Canadian Eds.),

- Nursing research in Canada: Methods, critical appraisal and utilization* (3rd Canadian Ed.) (pp. 90-111). Toronto: Elsevier.
- Georges, J.M. (2005). Linking nursing theory and practice: A critical feminist approach. *Advances in Nursing Science*, 28(1), 50-57.
- Government of Alberta. (2013). *Alberta's social policy framework*. Retrieved from <http://socialpolicyframework.alberta.ca/files/documents/ahs-nonannotatedfrmwrk-webfinal.pdf>
- Government of Alberta. (2015). *Childhood coverage rates (2008-2013)*. Retrieved from [http://www.ahw.gov.ab.ca/IHDA\\_Retrieval/selectSubCategoryParameters.do](http://www.ahw.gov.ab.ca/IHDA_Retrieval/selectSubCategoryParameters.do)
- Government of Alberta. (n.d.). *Together we raise tomorrow*. Retrieved from [povertyreduction.alberta.ca/files/documents/child\\_poverty\\_fact\\_sheet.doc](http://povertyreduction.alberta.ca/files/documents/child_poverty_fact_sheet.doc)
- Harrison, E. (2012). How to develop well-written case studies: The essential elements. *Nurse Educator*, 37(2), 67-70. Doi: 10.1097/NNE/0b013e3182461ba2
- Harrison, T. M. (2010). Family-centered pediatric nursing care: State of the science. *Journal of Pediatric Nursing*, 25, 335-343. doi: 10.1016/j.pedn.2009.01.006
- hooks, b. (2015). *Feminism is for everyone: Passionate politics*. New York: Routledge.
- Hunsberger, M., Baumann, A., & Crea-Arsenio, M. (2013). The road to providing quality care: Orientation and mentorship for new graduate nurses. *Canadian Journal of Nursing Research*, 45(4), 72-87.
- International Council of Nurses. (2014). *Definition of nursing*. Retrieved from <http://www.icn.ch/about-icn/icn-definition-of-nursing/>
- Keating, S.B. (2011). Needs assessment in curriculum development. In S.B. Keating (Ed.), *Curriculum development and evaluation in nursing* (2nd ed.) (pp. 87-90). New York:

Springer Publishing.

- McCarthy, A.M., & Wyatt, J.S. (2014). Undergraduate pediatric nursing education: Issues, challenges and recommendations. *Journal of Professional Nursing, 30*(2), 130-138. Doi: 10.1016/j.profnurs.2013.07.003
- Mikkelsen, G., & Frederiksen, K. (2011). Family-centred care of children in hospital – a concept analysis. *Journal of Advanced Nursing, 67*(5), 1152-1162. Doi: 10.1111/j.1365-2648.2010.05574.x
- Mikol, C. (2005). Teaching nursing without lecturing: Critical pedagogy as communicative dialogue. *Nursing Education Perspectives, 26*(2), 86-89.
- Moher, D., Liberati, A., Tetzlaff, J., & Altman, D.G. (2009). Preferred reporting items for systematic reviews and meta-analyses: The PRISMA statement. *Annals of Internal Medicine 151*(4), 264-269.
- Newhouse, R.P., Dearholt, S.L., Poe, S.S, Pugh, L.C., & White, K.M. (2007). *Johns Hopkins nursing evidence-based practice model and guidelines*. Indianapolis, IN: Sigma Theta Tau International.
- OED Online. (2012a). Learn, V. In F. MacPherson & R. Holden (Eds.), *Oxford English Dictionary*. Retrieved from <http://www.oed.com.ezproxy.library.uvic.ca/view/Entry/106716?redirectedFrom=learn>
- Patterson, B., Bayley, E.W., Burnell, K., & Rhoads, J. (2010). Orientation to emergency nursing: Perceptions of new graduate nurses. *Journal of Emergency Nursing, 36*(3), 203-211. doi: 10.1016/j.jen.2009.07.006
- Public Health Agency of Canada. (2013). *What makes Canadians healthy or unhealthy?* Retrieved from <http://www.phac-aspc.gc.ca/ph-sp/determinants/determinants-eng.php>

- Richards, J. (2011). Curriculum development and evaluation in staff development. In S.B. Keating (Ed.), *Curriculum development and evaluation in nursing* (2nd ed.) (pp. 269-295). New York: Springer Publishing.
- Rush, K.L., Adamack, M., Gordon, J., Lilly, M., & Janke, R. (2013). Best practices of formal new graduate nurse transition programs: An integrative review. *International Journal of Nursing Studies*, *50*(3), 345-356. Doi: 10.1016/j.ijnurstu.2012.06.009
- Ryan, C., & Tatum, K. (2013). Customizing orientation to improve the critical thinking ability of newly hired pediatric nurses. *The Journal of Nursing Administration*, *43*(4), 208-214. Doi: 10.1097/NNA.0b013e31829588d
- Saylor, C. (2011). Learning theories applied to curriculum development. In S.B. Keating (Ed.), *Curriculum development and evaluation in nursing* (2nd ed.) (pp. 49-69). New York: Springer Publishing.
- Scott, E.S., Keehner-Engelke, M., & Swanson, M. (2008). New graduate nurse transitioning: Necessary or nice? *Applied Nursing Research*, *21*, 75-83. Doi: 10.1016/j.apnr.2006.12.002
- Society of Pediatric Nurses. (2014). *Position statement on child health content in the undergraduate curriculum*. Retrieved from <http://www.pedsnurses.org/p/cm/ld/fid=57&tid=28&sid=67>
- Statistics Canada. (2015). *Focus on geography series, 2011 Census: Census metropolitan area of Edmonton, Alberta*. Retrieved from <http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-cma-eng.cfm?LANG=Eng&GK=CMA&GC=835>
- Tertiary health care. (2013). In M. O'Toole (Ed.), *Mosby's dictionary of medicine, nursing, and health professions* (9<sup>th</sup> ed.) [Adobe Digital Editions version]. Retrieved from

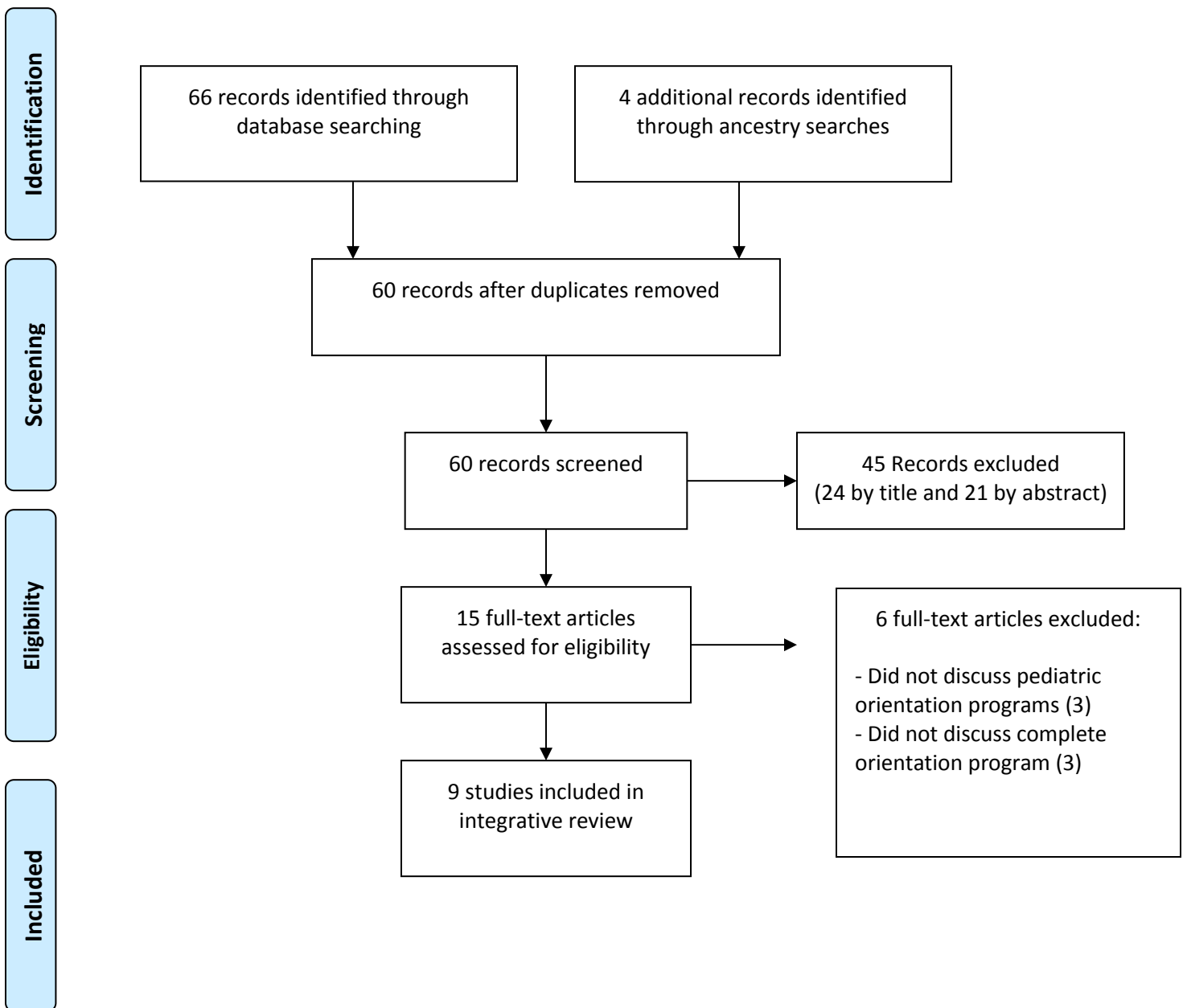
[www.kobo.com](http://www.kobo.com)

- Tomey, A.M. (2003). Learning with cases. *The Journal of Continuing Education in Nursing*, 34(1), 34-38.
- Ulrich, B., Krozek, C, Early, S., Ashlock, C. H., Africa, L. M., & Carman, M.L. (2010). Improving retention, confidence, and competence of new graduate nurses: Results from a 10-year longitudinal database. *Nursing Economics*, 28(6), 363-375.
- Welch, S. (2011). Nursing caps to feminist pedagogy: Transformation of nursing education. *Teaching and Learning in Nursing*, 6(3), 102-108. Doi: 10.1016/j.teln.2010.12.002
- Whittemore, R., & Knafl, K. (2005). The integrative review: Updated methodology. *Methodological Issues in Nursing Research*, 52(5), 546-553.
- Yonge, O.J, & Myrick, F. (2007). Preceptorship pathways for the senior undergraduate nursing student. In L.E. Young & B.L. Paterson (Eds.), *Teaching nursing: Developing a student-centered learning environment* (pp. 403-419). New York: Lippincott Williams & Wilkins.
- Young, L. (2007). Story-based learning: blending content and process to learn nursing. In L. Young & B. Paterson (Eds.), *Teaching nursing: Developing a student-centered learning environment* (pp. 164-188). Philadelphia: Lippincott Williams & Wilkins.
- Young, L.E., & Maxwell, B. (2007). Student-centered teaching in nursing: From rote to active learning. In L.E. Young & B.L. Paterson (Eds.), *Teaching nursing: Developing a student-centered learning environment* (pp. 3-25). New York: Lippincott Williams & Wilkins.
- Young, L.E., Maxwell, B., Paterson, B., & Wolff, A. (2007). Decision making in nursing education: A model to support student centered learning. In L.E. Young & B.L. Paterson

(Eds.), *Teaching nursing: developing a student-centered learning environment* (pp. 26-55). New York: Lippincott Williams & Wilkins.

Zinsmeister L.B., & Schafer, D. (2009). The exploration of the lived experience of the graduate nurse making the transition to Registered Nurse during the first year of practice. *Journal for Nurses in Staff Development*, 25(1), 28-34.

Appendix A  
PRISMA Flow Diagram



(Moher, D., Liberati, A., Tetzlaff, J., & Altman, D.G., 2009)

Appendix B

Literature Review Summary

Article Citation	Purpose	Methods	Setting and Sample	Findings
<p>Cockerham, J., Figueroa-Altmann, A., Eyster, B., Ross, C., &amp; Salamy, J. (2011). Supporting newly hired nurses: A program to increase knowledge and confidence while fostering relationships among the team. <i>Nursing Forum</i>, 46(4), 231-239. doi:10.1111/j.1744-6198.2011.00236.x</p>	<p>To help better support new graduates through the orientation process, a general pediatric unit at Children’s Hospital of Philadelphia implemented a post-orientation education program for all new hires to the unit. The aim of this study was to evaluate this educational program.</p>	<p>This orientation program was evaluated using pre/post tests and written evaluations. The post-orientation program is a 10-week program that sees newly hired nurses engaging with members of the unit leadership team on a weekly basis for 30-minute meetings. These meetings were structured and included the opportunity to discuss the weekly assignment the new hire completed. These assignments were based on common pediatric diagnoses and clinical skills. The new hire would be expected to come to the meeting with the assignment completed and would there discuss the diagnosis, treatments, lab values, and medications with the member of the leadership team. The leadership nurse would also ask open-ended questions to stimulate critical thinking in the new nurse. The meeting would also focus on relationship building and integration into the unit culture. Pre- and post-program knowledge tests were completed by the new</p>	<p>This program evaluation took place at Children’s Hospital of Philadelphia. Eighteen nurses participated in the program when it was evaluated.</p>	<p>As the new graduates progressed through the program, the new hires began to feel more comfortable with the leadership nurses. They were able to ask questions of the leadership nurses without feeling intimidated and were more willing to discuss their weekly assignments as they realized that the leadership nurses were there to help guide and support them, not judge them. Because of the meetings, these new hires were able to improve their clinical knowledge and decision-making skills. The new hires felt that the weekly meetings with a leadership nurse were positive, educational, and successful. The average score for the pre-test was 66% while the average score for the post-test was 92%. This indicates that the new hires had increased clinical knowledge at the end of the program. In the written evaluation of the</p>

		<p>hires.                  A focus group was held with a few of the new hires during the program to discuss the weekly meetings with the leadership team.                  To evaluate the outcome of the program, the new hires completed pre- and post-program knowledge tests as well as written and oral evaluations.</p>		<p>program, the new hires indicated that they had increased confidence during patient rounds, increased knowledge surrounding each diagnosis, improved critical thinking skills, increased ability to teach at the bedside, clarity during nurse handoff, increased ability to meet patient needs, and gained useful tips from more experienced nurses.                  Prior to the implementation of the program 59% of new hires provided safe, effective patient care up to one year after hire, whereas 100% of participants in the post orientation education program provided safe, effective care one year after hire. Finally, new hires reported that the structured meetings allowed them to develop supportive relationships with the members of the leadership team. Based on the pre- and post-test scores and the written evaluations, the post-orientation education program was deemed a success.</p>
<p>Duchscher, J.E.B. (2009).                  Transition shock: The initial</p>	<p>The aim of this paper was to provide a</p>	<p>The data used for this theoretical framework originated from a 10-</p>	<p>The data used for this study originated from</p>	<p>Transition shock describes the experience new nurses</p>

<p>stage of role adaption for newly graduated Registered Nurses. <i>Journal of Advanced Nursing</i>, 65(5), 1103-1113. Doi: 10.1111/j.1365-2648.2008.04898.x</p>	<p>theoretical framework for the initial transition period of a new graduate nurse to assist nurse leaders with supporting them.</p>	<p>year period of study that encompassed four qualitative studies focusing on the new graduate transition experience. The first study was a six-month phenomenological study of five new graduate nurses during their initial transition to professional practice. The second study was a four-month exploration of the experiences of four new graduate nurses and five seasoned nurses. The third study was a retrospective analysis of the qualitative data from a three-part study examining new graduate nurses' self-concept and retention plans. The fourth study was a generic qualitative study conducted over 18-months of 15 new graduate nurses. A grounded theory process was used with semi-structured interviews being conducted at three months intervals. Participants also completed monthly journals and engaged in focus groups. The author also reviewed over 1000 publications related to new graduate transitions.</p>	<p>four qualitative studies over a period of 10-years. The first study was of five new graduate nurses entering independent practice. The second study was of four new graduate and five seasoned nurses. There is no sample size given for the third study. The fourth study was of 15 new graduate nurses.</p>	<p>face when they move from being a student to being a professional practicing nurse. The move from the familiar world of academia to the unfamiliar professional nursing world causes significant stress and anxiety. New graduate nurses are unprepared for the number and magnitude of changes that they must fact in a short period of time. They also expect that they will be entering a supportive environment with manageable transition expectations, but find that this is not the case, which adds to the stress and anxiety. The most difficult time in the transition period what from 1-4 months post-orientation when they are left to practice independently for the first time. New graduates are often so exhausted from the intense stress they face during this period that they intentionally retreat at the end of this period. The expressions of transition shock can be broken down into four categories, emotional; physical; sociocultural and</p>
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				developmental; and intellectual.
<p>Dyess, S.M., &amp; Sherman, R.O. (2009). The first year of practice: New graduate nurses' transition and learning needs. <i>The Journal of Continuing Education in Nursing, 40</i>(9), 403-410.</p>	<p>The aim of this study was to discover what the new graduate transition period is like and what learning needs new graduates have. Recommendations for continuing education initiatives are also offered.</p>	<p>This was a qualitative study, which used hermeneutic analysis. Pre- and post-program focus groups, conducted by experienced facilitators with no connection to the study, were used to collect the data. Experienced focus group facilitators who had no connection to the program conducted pre- and post-program focus groups with the participants. The focus group participants were asked the following six semi-structured questions:</p> <ol style="list-style-type: none"> <li>1) How would you describe yourself as a new nurse?</li> <li>2) What topics/discussion/content areas do you suggest for the Novice Nurse Leadership Institute program to support you in your practice?</li> <li>3) What are some of the best things and worst things about being a nurse?</li> <li>4) What is going on in your practice setting?</li> <li>5) Describe your typical workday.</li> <li>6) Share some of your new nurse experiences that are memorable.</li> </ol> <p>Sessions were audiotaped; transcribed; and key themes and emerging patterns were coded. The data was reviewed multiple</p>	<p>A convenience sample of new graduates nurses participating in the Novice Nurse Leadership Institute in South Florida was used for this study. Participants who completed the program between 2006-2008 were included. Eighty-one participants were included, 51% with a Bachelor of Science in Nursing and 49% with an Associates Degree in Nursing.</p>	<p>The analysis of the data showed six key themes that describe the transition experience of new graduates. The first theme was confidence and fear. The second theme was less than ideal communication. New graduates found they were not well prepared to communicate with members of the interdisciplinary team. The third theme was experiencing horizontal violence. Many of the focus group participants reported experiencing unkind and unsupportive co-workers. The fourth theme was perception of professional isolation. The fifth theme was complex units require complex critical decision-making. Many new graduates are entering specialty units immediately and are required to manage complex patients and situations independently.. The sixth and final theme was contradictory information. New graduates found that they would receive a variety of answers, some completely</p>

		times while being coded.		contradictory, when asking co-workers questions.
Friedman, M.I., Delaney, M.M., Schmidt, K., Quinn, C., & Macyk, I. (2013). Specialized new graduate RN pediatric orientation: A strategy for nursing retention and its financial impact. <i>Nursing Economics, 31</i> (4), 162-170.	A Pediatric Nurse Fellowship Program was developed at Cohen Children’s Medical Hospital to help new graduates transition to independent practice. The aim of this study was to determine the effect of this specialized pediatric orientation program on the retention of new graduate nurses and the cost of the orientation program.	This program was evaluated using a retrospective descriptive evaluative design. Retention of both groups was measured using data retrieved from human resources. Retention data was collected without names and it was simply indicated if they were or were not employed at the 3, 6, 9, or 12 month marks. Financial impact of the orientation programs was assessed using the costs of filling positions with temporary workers, turnover, and retention rates. Collected data was initially analyzed using basic descriptive statistics. The data on retention was then analyzed using Pearson chi-square tests and two-sample t-tests. The financial data collected was analyzed to determine the net financial impact of the new orientation program.	This study was conducted at Cohen’s Children’s Hospital. A nonprobability convenience sample was used for this retrospective, descriptive study. There were two sample groups. The first group was comprised of 28 nurses who participated in the standard orientation process. The second group was comprised of 49 nurses who participated in the Pediatric Nurse Fellowship Program.	Retention rates were compared at the 3,6,9, and 12 month marks. There was a significantly significant increase in retention rates at the 9-month mark. Financial impact of the orientation programs was assessed using the costs of filling positions with temporary workers, turnover, and retention rates. The Pediatric Nurse Fellowship Program group showed a significant cost savings with compared with the standard orientation group.
Hunsberger, M., Baumann, A., & Crea-Arsenio, M. (2013). The road to providing quality care: orientation and mentorship for new graduate nurses. <i>Canadian Journal of Nursing Research, 45</i> (4), 72-87.	The Ontario health ministry developed an employment policy that allowed new graduates to have extended orientations, up to 6-months, that involved remaining in a supernumerary position and having a	A mixed-methods approach was used for this longitudinal trend study that was conducted over a three-year period. Each year different participants were chosen from the same population. Quantitative methods used included online surveys of new graduates and employers. The survey data was then summarized using descriptive statistics and	This study was conducted in Ontario. The population studied was new graduate nurses who were participants in the New Graduate Guarantee program. There were 998 new graduates surveyed	The survey results showed that across the three years an average of 90% of new graduate nurses agreed or completely agreed that the extended orientation program facilitated their transition to nursing. An average of 93% of employers thought the extended orientation program was good, very good, or

	<p>dedicated mentor. The aim of this study was to examine the impact of this extended orientation on both the employer and employee.</p>	<p>compared across the three years. Qualitative methods included focus groups with employers and interviews with new graduates and mentors. Invitations to participate in the survey were sent to all newly graduated nurses in Ontario who registered for the New Graduate Guarantee program and all employers eligible to participate. One-third of new graduates and over three-quarters of employers responded to the surveys. Eligible employers were invited by email to participate in the focus groups. New graduates who responded to the survey were asked to express interest in individual interviews. A convenience sample was then chosen from those who had expressed interest. Interview data was coded using QSR NVivo version 7.0. Texts were then interpreted using thematic analysis. Three independent member of the research team carried out the initial coding. Following the initial coding, the team members collaborated to determine the final themes.</p>	<p>in 2008, 1348 in 2009, and 1457 in 2010. There were 254 employers surveyed in 2008, 162 in 2009, and 163 in 2010. Across the three years, 21 employee-focus groups were conducted with 106 healthcare organizations; 53 new graduate interviews were conducted; and 15 interviews with mentors.</p>	<p>excellent. The analysis of the interviews and focus groups identified 5 main themes. The first theme was that stress is associated with transition to clinical practice. Both new graduates and mentors found that new graduates lack confidence when coming out of school. This lack of confidence and fear of making a mistake causes much stress. The second theme was that there is significant value in mentored time. Sharing an assignment with a mentor allows for protected time when the new graduate can focus on learning. The extended time with a mentor also allows for a more gradual build to independent patient care. The third theme was mentorship allowed new graduates to develop better clinical decision making skills and provide safer patient care. The fourth theme was an extended orientation led to greater productivity of new graduate nurses when they began independent practice. Mentors were able to demonstrate effective time</p>
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				<p>management and give real time advice on organizing patient care. This allowed new graduates to practice these skills in a supported environment and were able to more effectively organize their day than if they had needed to learn these skills while also trying to manage a full patient assignment independently. The fifth theme was that new graduate nurses who participated in this program were more easily integrated into the workplace.</p>
<p>Rush, K.L., Adamack, M., Gordon, J., Lilly, M., &amp; Janke, R. (2013). Best practices of formal new graduate nurse transition programs: An integrative review. <i>International Journal of Nursing Studies</i>, 50(3), 345-356. Doi: 10.1016/j.ijnurstu.2012.06.009</p>	<p>Due to factors such as a developmental lag between being a student and entering the workforce and differing expectations between the educational and practice settings new graduate nurses are not meeting entry-level competency standards. New graduate nurse transition programs have been developed to help mitigate these factors and support new nurses in their</p>	<p>Cooper’s five-stage approach was used to guide the integrative review. Studies were identified through a number of databases including PubMed and CINAHL. A final number of 47 articles fit the criteria to be included in the review.</p>	<p>Not applicable</p>	<p>Three common features of transition programs emerged. These included a defined resource person, mentorship, and peer support opportunities. Although a standard definition of the role and title of this support person was not clearly presented across the literature, the common focus of this support person was to assist with socialization of the new graduate nurse. This was a person who connected one-on-one with the new graduate and responded to any issues and concerns. Mentorship was a common</p>

	<p>transition from student to practitioner. An integrative review was completed to identify best practices in these transition programs.</p>		<p>element through the transition programs that enhanced new graduate retention. Mentors were able to act as both stress reducers and provided guidance and support. New graduate nurses found that having structured opportunities to meet with their peers to discuss their experiences assisted with their abilities to cope with the stress and emotions related to the transition.</p> <p>Across the literature evidence was presented that showed that new graduate transition programs improved the rates of turnover and retention. Only four studies, though, examined pre- and post-transition program implementation data. Nine studies also examined the cost benefits of transition programs and all nine studies gave evidence that these programs provided cost saving benefits to health organizations.</p> <p>The key findings from the stronger research suggests that new graduate education should focus on practical skill development, preceptors should receive a level of</p>
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				<p>formal training, formal training should be available at least through the six to nine month post-hire period, opportunities for connections with peers should be provided, and organizations should strive to ensure clinical units with healthy work environments.</p>
<p>Ryan, C., &amp; Tatum, K. (2013). Customizing orientation to improve the critical thinking ability of newly hired pediatric nurses. <i>The Journal of Nursing Administration, 43</i>(4), 208-214. Doi: 10.1097/NNA.0b013e31829588d</p>	<p>Children’s Healthcare of Atlanta introduced a computer-based examination to assess the critical thinking ability of nurses and determine areas of weakness. The aim of this study was to determine if customizing orientation using this examination given during the hiring process decreased the amount of time newly hired nurses spent in orientation.</p>	<p>This was a descriptive, correlation study that measure critical thinking using the Prerequisite exam for Pediatrics (PREP). The reliability of the PREP to measure critical thinking was determined by the Kuder-Richardson Formula, which indicated the exam had a good statistical measure of reliability. After hire the new nurses wrote the PREP on a computer. In the second phase, the PREP scores were shared with the new nurses manager and educator and a remediation plan was put into place for those with low scores. PREP scores were compared to length of orientation.</p>	<p>A convenience sample of 182 RNs applying for clinical nursing positions at the participating pediatric health care system was used for this descriptive, correlational study. There were two sample groups. The first group, phase one participants, was comprised of 98 newly hired nurses who completed the Prerequisite Exam for Pediatrics (PREP) as a group during their first week of classroom orientation and did not have the results shared with nursing leadership. The second group, phase two</p>	<p>The results of this study show the benefits of customizing orientation based on a tool that measures critical thinking ability. New nurses were able to demonstrate competency and increase critical thinking abilities sooner when they were able to focus on areas of weakness. This in turn lead to nurses who were ready for independent practice and could transition out of the orientation phase more quickly. Reducing the time of orientation allows for significant cost savings to the organization. Adding the PREP to the hiring process also lowered the attrition rate. Finally, the use of computer-based remediation that was tied to specific concepts on the PREP allowed new staff to receive a baseline level of</p>

			<p>participants, was comprised of 84 newly hired nurses who completed the PREP individual during the hiring phase and had the results shared with the manager and unit educator.</p>	<p>instruction that would not have been possible if all didactic information was provided by clinical educators or preceptors.</p>
<p>Ulrich, B., Krozek, C, Early, S., Ashlock, C., Africa, L, &amp; Carman, M.L. (2010). Improving retention, confidence, and competence of new graduate nurses: Results from a 10-year longitudinal database. <i>Nursing Economics</i>, 28(6), 363-375.</p>	<p>Children’s Hospital Los Angeles developed the Versant® RN residency program to assist new graduates with making the transition to independent practice. The purpose of this study was to evaluate the Versant® RN residency program using data collected over 10 years.</p>	<p>This orientation program was evaluated was a variety of system metrics and survey results. Outcomes of the Versant® RN residency program were measured using metrics such as turnover; organization return on investment; demographic information; individual, component, and RN residency evaluations; residency status reports; focus groups; and surveys. Data collected from the residency program was compared with new graduates who had been hired in the two years prior to the implementation of the residency program. Data was collected at specified time points throughout the residency and up to 60 months after the start of a cohort on all participants in the program. This data was housed in the Versant National Database. Concept measurements such as competency, satisfaction, confidence, empowerment, group</p>	<p>The data collected was from a 10-year time frame. In this time frame 6000 graduates completed the Versant® RN residency program. These participants came from a range of health care facilities. Cohort sizes for the residency program ranged from 4-110 participants. The majority of participants had either an Associate degree in nursing or a Baccalaureate degree in nursing. The participants had a large range of ages, but the majority were in their 20s.</p>	<p>The results of this 10-year study demonstrate the success of this program. Both competency and self-confidence were found to develop faster than in the comparison groups. The increased competence and self-confidence reduced the risk of new graduates making errors and increased the ability to catch potential errors. The correlations found in this data match previous studies. Reducing new graduate turnover had a significant positive impact on the organization. In one hospital, by reducing the turnover rate from 35% at month 12 to 5.36% a savings of up to approximately \$2,904,000 was generated. Along with the positive financial impacts, hospitals also found improvements in</p>

		<p>cohesion, and turnover intent were used to collect information regard individual RN progression, to compare cohorts of residents, and to improve the program. All measurement instruments used had been validated and used in other studies.</p> <p>The data collected in the Versant National Database was analyzed using data reduction and multiple imputation, correlation matrix analysis, generation and inspection of descriptive statistics for demographic variables for each scale and subscale, and regression analysis. Three models of the data were developed and analyzed, using regression analysis, based on employment status and turnover intention as the outcome variables of interest.</p>	<p>communication, patient satisfaction, and employee engagement. These improvements all made a positive impact on the hospitals with the residency program.</p> <p>Through this 10-year study it was found that a successful RN residency program must include a defined set of standards, must teach to, monitor and manage adherence to those standards. It is also important that success in achieving the competencies is objectively measured. Residency programs should also be structured and standardized; use an evidence base for content and residency practices; have a clinical immersion experience with dedicated preceptors; provide support for those in the program; have process that encourage transparency, accountability, and effective communication; have active stakeholder engagement; be rigorously evaluated; provide for performance and outcomes management; continuous research and development; and have a</p>
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				<p>disciplined structural framework. It is also important to have an 18-week clinical immersion experience with support continued throughout the first year.</p>
<p>Zinsmeister L.B., &amp; Schafer, D. (2009). The exploration of the lived experience of the graduate nurse making the transition to Registered Nurse during the first year of practice. <i>Journal for Nurses in Staff Development</i>, 25(1), 28-34.</p>	<p>The aim of this study was to answer the research question “What is the lived experience of the graduate nurse during the first six months to one year of nursing practice?”</p>	<p>This was a phenomenological, qualitative study. Interviews were conducted by several different data collectors in private areas at the participants’ places of employment. A standardized, open-ended interview technique was used to decrease variation between data collectors. The six semi-structured interview questions used by interviews were:          1) What stands out in your transition period during your first year as a nurse?          2) How has your perception of nursing changed since you first started?          3) How do you feel about the expectations of your new role?          4) How have your professional relationships influenced your transition process?          5) How has the orientation process related to your transition in this first year?          6) How has the environment of your unit impacted your transition?</p>	<p>This study was conducted in a health-care system on the east coast of the United States. A purposive sample was used for this study. All nurses who met the criteria of graduate nurses working in the specified health-care organization for between six months and one were sent letter of invitation to the study. Nine nurses who met these criteria indicated interest in participating and were included in the study. The age of the participants ranged from 22-38 years. Three participants graduated with a bachelor’s degree in nursing, five with an</p>	<p>Providing support to new graduate nurses is an important way to improve staff retention. To assist new graduates with transition from student nurse to professional it is important to provide a supportive work environment, a positive preceptor experience, and a comprehensive orientation process. It is also important to provide time and opportunities for their self-confidence to develop. Finally, it is important to provide clear role expectations and provide support as they meet these expectations. Along with providing support and guidance to new graduate nurses, it is also crucial to provide adequate support, guidance, and education to preceptors to maximize the positive experience and transition of the new nurses.</p>

		<p>The use of these questions allowed for interviews that were structured the same by all interviewers but allowed other subject areas that surfaced during the interviews to be explored. Interviews were conducted before or after the participants working hours and general lasted approximately 30 minutes. Two researchers then independently analyzed and coded the data using a four-level coding scheme. Once the data was coded independently, the researchers compared their results.</p>	<p>associate's degree in nursing, and one with a diploma in nursing.</p>	
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## Appendix C

## Strength of Evidence

Article Citation	Evidence Level	Quality Rating
Cockerham, J., Figueroa-Altmann, A., Eyster, B., Ross, C., & Salamy, J. (2011). Supporting newly hired nurses: A program to increase knowledge and confidence while fostering relationships among the team. <i>Nursing Forum</i> , 46(4), 231-239. doi:10.1111/j.1744-6198.2011.00236.x	5	B
Duchscher, J.E.B. (2009). Transition shock: The initial stage of role adaption for newly graduated Registered Nurses. <i>Journal of Advanced Nursing</i> , 65(5), 1103-1113. Doi: 10.1111/j.1365-2648.2008.04898.x	5	A
Dyess, S.M., & Sherman, R.O. (2009). The first year of practice: New graduate nurses' transition and learning needs. <i>The Journal of Continuing Education in Nursing</i> , 40(9), 403-410.	3	B
Friedman, M.I., Delaney, M.M., Schmidt, K., Quinn, C., & Macyk, I. (2013). Specialized new graduate RN pediatric orientation: A strategy for nursing retention and its financial impact. <i>Nursing Economics</i> , 31(4), 162-170.	5	B
Hunsberger, M., Baumann, A., & Crea-Arsenio, M. (2013). The road to providing quality care: Orientation and mentorship for new graduate nurses. <i>Canadian Journal of Nursing Research</i> , 45(4), 72-87.	3	B
Rush, K.L., Adamack, M., Gordon, J., Lilly, M., & Janke, R. (2013). Best practices of formal new graduate nurse transition programs: An integrative review. <i>International Journal of Nursing Studies</i> , 50(3), 345-356. Doi: 10.1016/j.ijnurstu.2012.06.009	5	B
Ryan, C., & Tatum, K. (2013). Customizing orientation to improve the critical thinking ability of newly hired pediatric nurses. <i>The Journal of Nursing Administration</i> , 43(4), 208-214. Doi: 10.1097/NNA.0b013e31829588d	3	B
Ulrich, B., Krozek, C, Early, S., Ashlock, C., Africa, L., & Carman, M.L. (2010). Improving retention, confidence, and competence of new graduate nurses: Results from a 10-year longitudinal database. <i>Nursing Economics</i> , 28(6), 363-375.	5	A
Zinsmeister L.B., & Schafer, D. (2009). The exploration of the lived experience of the graduate nurse making the transition to Registered Nurse during the first year of practice. <i>Journal for Nurses in Staff Development</i> , 25(1), 28-34.	3	B

**Evidence Level**

Level 1: Experimental study or Meta-Analysis of randomized controlled trials

Level 2: Quasi-experimental study

Level 3: Non-experimental study, qualitative study, or meta-synthesis

Level 4: Systematic review or clinical practice guideline

Level 5: Organizational, expert opinion, case study, or literature review

### **Quality Ratings**

#### ***For Evidence Levels 1-3***

A High quality: consistent results, sufficient sample size, adequate control, and definitive conclusions; consistent recommendations based on extensive literature review that includes thoughtful reference to scientific evidence.

B Good quality: reasonably consistent results, sufficient sample size, some control, and fairly definitive conclusions; reasonably consistent recommendations based on fairly comprehensive literature review that includes some reference to scientific evidence

C Low quality or major flaws: little evidence with inconsistent results, insufficient sample size, conclusions cannot be drawn.

#### ***For summative reviews***

A High quality: well-defined, reproducible search strategies; consistent results with sufficient numbers of well-designed studies; criteria-based evaluation of overall scientific strength and quality of included studies, and definitive conclusions

B Good quality: reasonably thorough and appropriate search; reasonably consistent results, sufficient numbers of well-designed studies, evaluation of strengths and limitations of included studies, with fairly definitive results

C Low quality or major flaws: undefined, poorly defined, or limited search strategies; insufficient evidence with inconsistent results, conclusions cannot be drawn

#### ***For expert opinions***

A High quality: expertise is clearly evident.

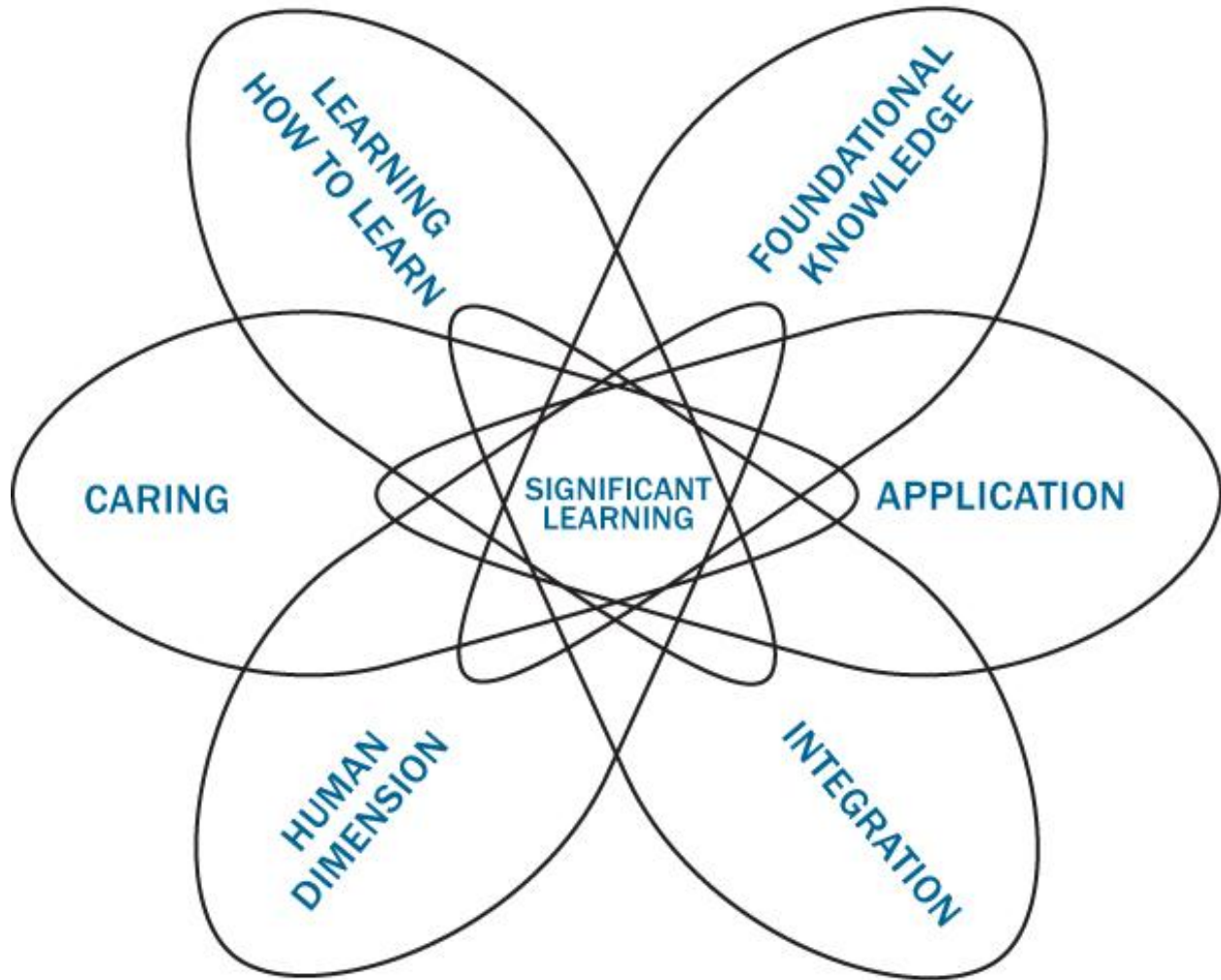
B Good quality: expertise appears to be credible.

C Low quality or major flaws: expertise is not discernable or is dubious.

(Newhouse et al., 2007)

Appendix D

Fink's Taxonomy of Significant Learning



(Fink, 2007, p. 13)

## Appendix E

### An Orientation Program for New Graduate Nurses in the Pediatric Setting: Curriculum Blueprint

#### **Curriculum Goal:**

The purpose of this orientation program is build upon prior knowledge, skills, and experiences of new graduate nurses to prepare them to practice competently and safely as novice nurses on a general pediatric nursing unit and to support these nurses through the transition from student to professional practicing pediatric nurse.

#### **Curriculum Description:**

This is a one-year orientation program to prepare nurses working in a tertiary children's hospital to provide care to infants, children, and adolescents and their families. Most baccalaureate nursing programs offer minimal preparation in pediatric nursing; the aim of this program is to fill this gap. This program consists of a 13-day classroom component, a 9-week clinical experience, and a 10-month mentorship. The guiding framework ensures that the program is delivered in a student-centered, constructivist model. Courses offered in this program will be offered through a variety of modalities including simulation, classroom, and clinical experiences.

#### **Curriculum Objective:**

To prepare new graduate nurses for their role as advanced-beginner nurses in the pediatric acute care/inpatient? clinical setting.

#### **Learner Outcomes:**

Upon completion of this orientation the learner will be able to:

- 1) discuss growth and development of children and apply developmental approaches to all interactions with pediatric patients;
- 2) analyze assessment findings and formulate a plan of care for pediatric patients;
- 3) implement and coordinate the plan of care for a full patient assignment;
- 4) evaluate care provided to pediatric patients and modify the plan of care as required;
- 5) collaborate with families and the interdisciplinary team when planning, implementing, and evaluating care;
- 6) discuss and apply principles of Family Centered Care throughout the continuum of care;
- 7) recognize the importance of the social determinants of health in determining the health of patients and families and incorporate these into the plan of care; and
- 8) develop a learning plan to direct continual learning and attainment of educational goals.

**Required Text:**

Ateah, C. A., Scott, S.D., & Kyle, T. (Eds.). (2013). *Canadian essentials of pediatric nursing*.

Philadelphia: Lippincott Williams & Wilkins.

**Classroom Component Content Overview:**

The classroom component will consist of 13-days spent reviewing the basics of pediatric care. The Standards of Pediatric Nursing Practice (American Nurses Association, 2008) will act as a guide for content development and as a tool for evaluation. The first two days will consist of a general welcome and introduction to Alberta Health Services and Stollery Children's Hospital as well as what to expect from the new graduate experience and orientation. The content of the next 10 days will be built around a main case story for each day focusing on a common pediatric illness or surgery. The case stories will cover a wide range of developmental stages, which will assist the learners in gaining a more thorough understanding of growth and development. Family centred-care will be inherent throughout every case stories and opportunities for discussion and engagement with these concepts will occur throughout every classroom day. Activities will be added to the case study to ensure important concepts are integrated throughout the program. The structure of the case studies will follow a similar pattern, which will mirror the nursing process. Concepts that will be revisited throughout the entire curriculum include family-centred care, developmentally appropriate care, prioritization of care, time management, the social determinants of health, communication, and documentation.

***Organizational Orientation:***

The organization orientation will introduce new graduates to Alberta Health Services and the University of Alberta Hospital, where Stollery Children's Hospital is housed. This will include content such as Alberta Health Services mission, vision and values; infection control practices; and workplace health and safety. This day is a building-wide, multidisciplinary session, which is hosted by the University of Alberta Hospital Education Team.

**Objectives:**

Upon completion of this session, the learner will be able to:

- 1) recognize the value of the mission, vision, and values of Alberta Health Services; and
- 2) identify multidisciplinary resources available at the University of Alberta Hospital.

***Classroom Day 1: Becoming a Pediatric Nurse***

The focus of classroom day one is to introduce the new graduates to Stollery Children's Hospital and their role as new nurses. The new graduates will have the opportunity to gain an understanding of what transition shock is, how this may impact them in the coming months, and the supports that are available to them through this process. The Standards of Pediatric Nursing Practice will be introduced. They will also be introduced to family-centred care with an opportunity to interact with past family members and patients.

**Objectives:**

Upon completion of this session, the learner will be able to:

- 1) critically reflect on the process of transition from student to professional practicing nurse;
- 2) commit to providing family-centred care to all patients and families;
- 3) integrate the Standards of Pediatric Nursing Practice into everyday nursing practice; and
- 4) reflect on potential knowledge gaps and develop an initial learning plan of how to fill those gaps.

***Classroom Day 2-11: Case Stories***

The concepts of pediatric care will be introduced and reviewed through the use of case stories that represent the most common reasons for hospital admission at SCH. The case stories will allow the learners to move through the components of the nursing process while discussing a real patient. The case stories will begin with assessing the patient, then move through diagnosing, identifying expected outcomes, planning care, implementing the plan, and evaluating the care provided. Each case story will introduce concepts and interdisciplinary team members relevant to the specific case being discussed. The importance of referral and collaboration to various members of the interdisciplinary team will be included and discussed throughout all case stories, even if that member is not specific introduced.

**Objectives:**

By the end of the case study sessions, the learner will be able to:

- 1) analyze the assessment data and formulate nursing diagnoses based on that data;
- 2) determine the expected outcomes and develop a plan of care based on those outcomes;
- 3) collaborate with the patient's family and the interdisciplinary team to implement the plan of care;
- 4) evaluate and document care provided; and
- 5) identify areas of further interest in the case study topic.

***Classroom Day 2: Respiratory Day***

This case story will focus on a 6-month old infant with bronchiolitis from a low-income family. Specific areas of focus will include the anatomical differences between children and adults; role of the respiratory therapists; oxygen therapies; and inhalation medications.

**Objectives:**

By the end of this session, the learner will be able to:

- 1) recognize the anatomical and physiologic differences between adults and children.
- 2) Conduct a family assessment using a family assessment tool.
- 3) Reflect on individual understanding of poverty and discuss how poverty impacts patients and families.

***Classroom Day 3: Gastrointestinal Day***

This case story will focus on an 18-month old toddler with gastroenteritis and dehydration from a single-parent family, with poor social networks. Specific areas of focus will include role of the rapid response team, intravenous therapy, and fluid balance.

**Objectives:**

By the end of this session, the learner will be able to:

- 1) explain how fluid balance impacts the systems of the body and how we use intravenous fluids to manage dehydration;
- 2) describe how to support a single-parent with poor support through the deterioration of his or her child; and
- 3) demonstrate empathy for the patient and family and identify potential sources of social support for the parent both in and out of hospital.

***Classroom Day 4: Surgical Day 1***

This case story will focus on a 4-year old child who is post-tonsil/adenoidectomy of a family in which both parents are illiterate. Specific areas of focus will include post-surgical care, pain management, intravenous medication administration, and role of the child life specialists.

**Objectives:**

By the end of this session, the learner will:

- 1) be aware of own biases regarding pain management and how this may impact the plan of care;
- 2) assess patients and families for barriers to health care and health education, such as literacy; and
- 3) identify supports to assist family with their literacy goals.

***Classroom Day 5: Complex Care Day***

The focus of this case story is an 8-year old patient with cerebral palsy in a family where both parents are unemployed. Specific areas of focus will include role of the occupational therapist, gastric tube care, complex discharge planning, and time management.

**Objectives:**

By the end of this session, the learner will be able to:

- 1) collaborate with the interdisciplinary team to coordinate care for a patient with complex needs;
- 2) demonstrate competent gastric tube management;
- 3) educate the family on caring for a child with complex needs; and
- 4) provide and access resources to assist family with managing financial concerns and collaborate with other members of the health care team to provide assistance with employment concerns.

***Classroom Day 6: Neurology Day***

The focus of this case story is a 12-year old patient with epilepsy and intractable seizures whose family is homeless. Specific areas of focus will include role of the EEG technician, seizure precautions, and direct intravenous medication administration.

**Objectives:**

By the end of this session, the learner will be able to:

- 1) demonstrate competent administration of direct intravenous medications;
- 2) reflect on individual feelings of homelessness;
- 3) assist families with accessing resources to find safe, secure housing;
- 4) teach parents how to manage seizures safely in an unstable environment; and
- 5) collaborate with the interdisciplinary team to ensure the family is able to manage the patient's medical needs in a safe environment on discharge.

***Classroom Day 7: Surgical Day 2***

The focus of this case story is a 15-year old patient with a fractured femur who is in traction. The patient also suffers from anxiety and depression, with past suicidal ideal. She is trans-gendered and has just informed her parents. Specific areas of focus will include traction care and mental health assessment.

**Objectives:**

By the end of this session, the learner will be able to:

- 1) recognize the value of the mental health assessments and the mental health team in pediatric care;
- 2) demonstrate competent traction care;
- 3) reflect on own understanding of gender;
- 4) advocate for trans-gendered patient and their family;
- 5) provide support and empathy to patient and family;
- 6) reflect on own perceptions of mental health in the pediatric population; and
- 7) collaborate with the interdisciplinary team to access the mental health resources required.

***Classroom Day 8: Pediatric Emergency Assessment, Recognition, and Stabilization course***

This course assists nurses in recognize and stabilizing deteriorating children. Course outline and objectives as per the American Heart Association.

***Classroom Day 9: Endocrine Day***

The focus of this case story is a 10-year old newly diagnosed insulin dependent diabetic patient in diabetic ketoacidosis whose mother is also an insulin dependent diabetic, but is not compliant with treatment. This case story will also include aspects of physical abuse and neglect

perpetrated by the mother's partner. Specific areas of focus will include interpretation of blood gases, role of the Diabetic Education Clinic nurses, complex intravenous medication administration, and subcutaneous medication administration.

**Objectives:**

By the end of this session, the learner will be able to:

- 1) manage complex intravenous medications and infusions;
- 2) analyze and interpret blood gas results;
- 3) educate patients and families on diabetic management;
- 4) provide education related to healthy life choices and importance of adherence to the plan of care to patient and family;
- 5) collaborate with interdisciplinary team to assist patient and family with managing a new diagnosis of diabetes;
- 6) reflect on own perception of child abuse; and
- 7) collaborate with the interdisciplinary team to ensure patient and mother's safety both in the hospital and on return home.

***Classroom Day 10: Cardiology Day***

The focus of this case story is a 4-month patient with hypoplastic left heart syndrome who is post-Norwood procedure and who is a first child to young parents. Specific areas of focus include role of the social worker and central venous access device care.

**Objectives:**

By the end of this session the learner will be able to:

- 1) demonstrate competent central venous access device care;
- 2) educate parents on healthy child development and resources available in the community; and
- 3) teach parents how to care for a medically complex child at home, including central venous access device care.

***Classroom Day 11: Emergency Response Day***

The focus of this case story is a 6-year old patient in septic shock of a First Nations patient who lives with her family on a remote Reservation that does not have running water or electricity. Specific areas of focus include role of the code team, fluid resuscitation, and a mega-code.

**Objectives:**

By the end of this session, the learner will be able to:

- 1) act as a team member in a resuscitation;
- 2) support a family through the crisis of a cardiac arrest;
- 3) assess the family's living context and collaborate with the family to ensure they can care for their child in a safe environment that promotes health following discharge; and
- 4) collaborate with the interdisciplinary team to ensure the family is supported while their child is admitted.

***Classroom Day 12: Putting it all Together***

The focus of classroom day 12 is on integrating the concepts learned about pediatric nurse over the last 16 weeks and having an opportunity to discuss them as a group. The Standard of Pediatric Nurse Practice will be revisited and the new graduates will discuss how their opinions and views of the practice standards have altered since they started orientation. There will also be continued discussion on transition shock and what additional supports are available as the new graduates continue in this process. The new graduates will also have the opportunity to reexamine and discuss their learning plans with their mentors.

**Objectives:**

By the end of this session, the learner will be able to:

- 1) commit to practicing within the *Pediatric Nursing: Scope and Standards of Practice*;
- 2) feel confident about his or her role as a professional practicing nurse;
- 3) and identify supports available to assist with the continued transition process.

**Clinical Experience Component Overview:*****Instructor-Led Clinical***

This is a five-shift practicum on an inpatient pediatric unit taught by a dedicated instructor. There will be a maximum of five learners per group. The instructor and new graduate will work together to ensure that the new graduate has a variety of experiences and the opportunities to begin to coordinate care for a patient and family with the instructor's assistance. The clinical group will engage in a pre-shift conference where the care planned for assigned patients will be discussed, and a post-shift conference, with debriefing of the shift, everyday. The experiences gained in this clinical experience will assist with developing the new graduates learning plan.

***Preceptored Shifts***

This is an 8-week preceptorship on a dedicated inpatient pediatric unit with one preceptor. Following the developing learning plan, the new graduate will work with the preceptor to begin coordinating and providing care independently for patients and families. The new graduate and preceptor will share one patient assignment with the goal that the new graduate will provide care to the entire assignment using the preceptor as a resource only by the end of the module. The new graduate and preceptor will work together at the beginning of the experience to develop a plan of how this goal will be accomplished.

**Objectives:**

By the end of this experience, the learner will be able to:

- 1) coordinate nursing care for 2-3 pediatric patients and their families;
- 2) integrate pediatric theory into practice by constructing individual care plans for each patient and family;

- 3) collaborate and communicate with families and patients utilizing the tenets of Family Centred Care; and
- 4) reflect on performance throughout the clinical experience and develop an action plan for continued growth and development.

**Mentorship Component Overview**

Following the completion of the preceptored experience the new graduate nurse will engage in a formal mentorship with an experienced staff nurse until one year post-hire. The preceptor may continue as the mentor of the relationship is developing well and positive. The mentor and new graduate will meet a minimum of every two weeks for structured meetings. These meetings will include discussion of an assigned pediatric case study and a review of the new graduates learning plan. Meetings may be more frequently than every two weeks if the new graduate requires extra support. The new graduate and mentor will meet with the unit clinical nurse educator a minimum of every two months throughout the mentorship experience. The mentorship may continue in an informal capacity after the one-year mark.

**General Orientation Schedule**

Week	Monday	Tuesday	Wednesday	Thursday	Friday
Activities					
1	Organizational orientation	Class day 1	Class day 2	Class day 3	Class day 4
2	Instructor-led clinical	Instructor-led clinical	Instructor-led clinical	Instructor-led clinical	Instructor-led clinical
3	Class day 5	Preceptorship			
4	Preceptorship				
5	Class day 6	Preceptorship			
6	Preceptorship				
7	Class day 7	Preceptorship			
8	Preceptorship				
9	Class day 8	Preceptorship			
10	Meeting with mentor	Independent practice			
11	Class day 9	Independent practice			
12	Meeting with mentor	Independent practice			
13	Class day 10	Independent practice			
14	Meeting with mentor	Independent practice			
15	Class day 11	Independent practice			
16	Class day 12-wrap up	Independent practice			
New graduate and Mentor will have structured meetings every two weeks from Week 17-52.					
Optional Simulation Scenarios every Thursday Afternoon: New graduates must attend at least 12 throughout the first year.					

### Course Layout

<b>Organizational Orientation</b>	Introduction to Alberta Health Services - Mission, Vision, and Values	
	Introduction to University of Alberta Hospital	
	Protection services	
	Workplace health and safety	
	Infection control practices	
	Emergency codes	
	Fire procedures	
	Hospital tour	
<b>Class Day One</b>	<b>Becoming a pediatric nurse</b>	
	Introduction to Stollery Children's Hospital	0700-0730
	Meet the interdisciplinary team	0730-0815
	From student to professional– Transition shock	0815-0930
	Coffee break	0930-1000
	Supporting the transition – The orientation process	1000-1045
	What is pediatric nursing? – Scope and standards of practice	1045-1200
	Welcome lunch – Meet your preceptor!	1200-1245
	Family centred care	1245-1445
	The way forward – The learning plan process	1445-1515
<b>Class Day 2</b>	<b>Respiratory day</b> Case Study: 6-month old with bronchiolitis	
	Who are my Patient and family? - Introduction to pediatric assessment - physical assessment (with expected findings) - anatomical differences - growth and development - family assessment	0700-0800
	Diagnosing the problem - Nursing diagnoses for the patient with bronchiolitis and the patient's family	0800-0900
	Coffee Break	0900-0930
	Where should the patient and family be going? – Identifying outcomes	0930-1030
	How to we get to where we need to be? - Planning care and collaborating with the patient and family	1030-1145
	Collaborating with the interdisciplinary team: Meet the Respiratory Therapists!	1145-1215
	Lunch	1215-1300
	Getting to where we're going – Implementing the plan - oxygen therapy - medication administration (inhalation, oral) - discharge planning (including patient and family teaching, home environment, social context of discharge)	1300-1400
	How did we do? – Evaluating care	1400-1445

	The way forward – updating learning plans	1445-1515
<b>Class Day 3</b>	<b>Gastrointestinal day</b> Case Study: 18-month old with gastroenteritis/dehydration	
	Who are my patient and family? - Assessment - physical assessment (with expected findings) - growth and development - family assessment - lab work	0700-0800
	Diagnosing the problem - Nursing diagnoses for the patient with gastroenteritis and dehydration and the patient’s family	0800-0900
	Coffee break	0900-0930
	Where should the patient and family be going? – Identifying outcomes	0930-1030
	How to we get to where we need to be? - Planning care and collaborating with the patient and family	1030-1115
	Collaborating with the interdisciplinary team: Meet the Rapid Response Team!	1115-1145
	Lunch	1145-1230
	Getting to where we’re going – Implementing the plan - intravenous therapy - discharge planning (including patient and family teaching, home environment, social context of discharge)	1230-1400
	How did we do? – Evaluating care	1400-1445
	The way forward – Updating learning plans	1445-1515
<b>Class Day 4</b>	<b>Surgical day 1</b> Case Study: 4-year old post-Tonsil/Adenoidectomy	
	Who are my patient and family? - Assessment - physical assessment (with expected findings) - growth and development - family assessment - reading the surgical chart	0700-0800
	Diagnosing the problem - Nursing diagnoses for the post-surgical patient and the patient’s family	0800-0900
	Coffee Break	0900-0930
	Where should the patient and family be going? – Identifying outcomes	0930-1015
	How to we get to where we need to be? - Planning care and collaborating with the patient and family	1015-1100
	Collaborating with the interdisciplinary team: Meet the Child Life Specialists!	1100-1115
	Lunch	1115-1200
	Getting to where we’re going – Implementing the plan - medication administration (oral, intravenous) - pain management - discharge planning (including patient and family teaching,	1200-1430

	home environment, social context of discharge)	
	How did we do? – Evaluating care	1430-1500
	The way forward – Updating learning plans	1500-1515
<b>Class Day 5</b>	<b>Complex care day</b> Case Study: 8-year old patient with cerebral palsy	
	Who are my patient and family? - Assessment - physical assessment (with expected findings) - growth and development - family support	0700-0745
	Diagnosing the problem - Nursing diagnoses for the patient with cerebral palsy and the patient's family	0745-0830
	Coffee Break	0830-0900
	Where should the patient and family be going? – Identifying outcomes	0900-1000
	How to we get to where we need to be? - Planning care and collaborating with the patient and family	1000-1045
	Collaborating with the interdisciplinary team: Meet the Occupational Therapists!	1045-1130
	Lunch	1130-1215
	Getting to where we're going – Implementing the plan - time management/prioritization - introduction to gastric tubes - discharge planning (including patient and family teaching, home environment, social context of discharge)	1215-1415
	How did we do? – Evaluating care	1415-1500
	The way forward – Updating learning plans	1500-1515
<b>Class Day 6</b>	<b>Neurology day</b> Case Study: 12-year old with epilepsy and intractable seizures	
	Who are my patient and family? - Assessment - physical assessment (with expected findings) - growth and development	0700-0800
	Diagnosing the problem - Nursing diagnoses for the patient with seizures and the patient's family	0800-0900
	Coffee Break	0900-0930
	Where should the patient and family be going? – Identifying outcomes	0930-1015
	How to we get to where we need to be? - Planning care and collaborating with the patient and family	1015-1100
	Collaborating with the interdisciplinary team: Meet the EEG Techs!	1100-1115
	Lunch	1115-1200
	Getting to where we're going – Implementing the plan - medication administration (direct IV) - seizure precautions - discharge planning (including patient and family teaching, home environment, social context of discharge)	1200-1415

	How did we do? – Evaluating care	1415-1500
	The way forward – Updating learning plans	1500-1515
<b>Class Day 7</b>	<b>Surgical day 2</b> Case Study: 15-year old with fractured femur, in traction	
	Who are my patient and family? - Assessment -physical assessment (with expected findings) - growth and development - mental health assessment	0700-0800
	Diagnosing the problem - Nursing diagnoses for the patient with a fracture, anxiety, and depression and the patient’s family	0800-0900
	Coffee Break	0900-0930
	Where should the patient and family be going? – Identifying outcomes	0930-1015
	How to we get to where we need to be? - Planning care and collaborating with the patient and family	1015-1100
	Collaborating with the interdisciplinary team: Meet the Physiotherapists!	1100-1115
	Lunch	1115-1200
	Getting to where we’re going – Implementing the plan - medication administration (intravenous) - traction care - pain management - discharge planning (including patient and family teaching, home environment, social context of discharge)	1200-1415
	How did we do? – Evaluating care	1415-1500
	The way forward – Updating learning plans	1500-1515
<b>Class Day 8</b>	Pediatric emergency assessment, recognition, and stabilization course	0700-1515
<b>Class Day 9</b>	<b>Endocrine day</b> Case Study: 10-year old patient in diabetic ketoacidosis	
	Who are my patient and family? - Assessment -physical assessment (with expected findings) - growth and development - interpreting blood gases	0700-0830
	Diagnosing the problem - Nursing diagnoses for the patient in DKA and the patient’s family	0830-0915
	Coffee Break	0915-0945
	Where should the Patient and family be going? – Identifying outcomes	0945-1045
	How to we get to where we need to be? - Planning care and collaborating with the patient and family	1045-1130
	Collaborating with the interdisciplinary team: Meet the nurses of the Diabetic Education Clinic!	1130-1145
	Lunch	1145-1230
	Getting to Where We’re Going – Implementing the Plan - medication administration (complex intravenous, sub-	1230-1430

	cutaneous) - discharge planning (including patient and family teaching, home environment, social context of discharge)	
	How did we do? – Evaluating care	1430-1500
	The way forward – Updating learning plans	1500-1515
<b>Class Day 10</b>	<b>Cardiology day</b> Case Study: 4-month old with hypoplastic left heart syndrome – Post-Norwood procedure	
	Who is my patient? - Assessment -physical assessment (with expected findings) - growth and development	0700-0800
	Diagnosing the problem - Nursing diagnoses for the patient with cardiac defects and the patient’s family	0800-0900
	Coffee Break	0900-0930
	Where should the patient and family be going? – Identifying outcomes	0930-1030
	How to we get to where we need to be? - Planning care and collaborating with the patient and family	1030-1115
	Collaborating with the interdisciplinary team: Meet the Social Work team!	1115-1130
	Lunch	1130-1215
	Getting to where we’re going – Implementing the plan - central venous access device care - discharge planning (including patient and family teaching, home environment, social context of discharge)	1215-1430
	How did we do? – Evaluating care	1430-1500
	The way forward – Updating learning plans	1500-1515
<b>Class Day 11</b>	<b>Emergency response day</b> Case Study: 6-year old patient in septic shock	
	Who is my patient? - Assessment - physical assessment (with expected findings) - growth and development	0700-0800
	Diagnosing the problem - Nursing diagnoses for the patient in a state of shock and the patient’s family	0800-0900
	Coffee Break	0900-0930
	Where should the patient and family be going? – Identifying outcomes	0930-1030
	How to we get to where we need to be? - Planning care and collaborating with the patient and family	1030-1115
	Collaborating with the interdisciplinary team: Meet the Code Team!	1115-1130
	Lunch	1130-1215
	Getting to where we’re going – Implementing the plan -fluid resuscitation -simulation scenario – Mega-code - discharge planning (including patient and family teaching,	1215-1415

	home environment, social context of discharge)	
	How did we do? – Evaluating care	1415-1500
	The way forward – Updating learning plans	1500-1515
<b>Class Day 12</b>	<b>Putting it all together!</b>	
	Putting it all together – What does it mean to be a pediatric nurse?	0700-0930
	Coffee Break	0930-1000
	Time management and planning care – What have we learned?	1000-1130
	Lunch	1130-1215
	Additional supports – Employee assistance program	1215-1315
	The way forward – Updating learning plans	1315-1415
	Wrap-up tea – with mentors	1415-1515