

# Examining Knowledge and Skill Requirements in Nursing: A Pilot Study in Pediatric Home Care



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## Executive Summary

Changes in government health care spending in the 1990's led to large-scale restructuring and changes to the way nursing care is provided. Pediatric patients requiring complex care are now discharged home earlier to be cared for in ambulatory or home care settings, resulting in a steady increase in the demand for home care services. Since the need for complex pediatric home care has escalated, it is unclear whether the distinction between adult and pediatric care requirements that exist in the acute care settings has been supported in home care. This project examined the unique skill and knowledge needs of today's pediatric home care nurses.

The objectives of this study were to identify the (a) mechanisms currently used to measure nursing productivity in a sample of Community Care Access Centres (CCACs) and home care provider agencies in Ontario, and (b) individual strategies and efforts employed within these settings to enhance the knowledge development of nurses in relation to pediatric patient care. Consultations to determine the knowledge and skill requirements of nurses that CCACs, home care provider agencies, and others (i.e., referring pediatric hospitals and children's treatment centres) need to invest in to create a productive nursing workforce for pediatric home care in Ontario, and verify indicators of human capital investment that can be linked to pediatric nursing productivity in CCACs and home care provider agency environments in Ontario. These indicators related to the pediatric knowledge and skill of professional nurses (i.e., level of education attained, continuing career development, ongoing educational pursuits, perceptions of autonomy, satisfaction with work, and organizational commitment), all components of human capital theory. Finally, nurses and provider agencies verified the proposed pediatric nursing knowledge indicators and nursing productivity indicators for relevance and feasibility.

### The Changing Face of Pediatric Home Care

Phase one surveys of senior personnel in CCACs and home care provider agencies supplied information on the pediatric client population they serve, the mechanisms currently in use to measure nursing productivity, and the individual strategies and efforts employed by their organizations to enhance the pediatric knowledge development of nurses. Health care provider agencies identified that the most common pediatric client diagnoses cared for by nursing staff were respiratory illnesses, post-operative cardiac diagnoses, wounds, burns, cancer patients, developmentally delayed children and children with neurodegenerative disorders. Common pediatric nursing care procedures provided to these clients ranged from intravenous infusions and intravenous therapy teaching to ventilator management with tracheostomy care and suctioning. A multitude of highly technological equipment is commonplace for health care provider agencies. Many of the health problems, interventions, and technologies employed by nurses caring for pediatric patients in the home are complex. Pediatric patients may comprise a small number of the provider agency's clientele, but they are a highly resource-intensive group. Most pediatric home care is provided by resource-intensive "shift" nursing.

Consultation sessions uncovered a further wealth of information pertaining to the knowledge and skill requirements on hiring, the impact of a changing health care environment and future investments needed. The consultation sessions highlighted the challenges of providing pediatric home care nursing in Ontario. The current nursing shortage has caused excessive strain on those currently in the workforce, resulting in a stressful and demanding work environment. Combined with the increased acuity of cases being discharged from hospitals, nurses are required to sustain a more advanced skill set than historically required. The current pediatric home care nurse must possess a broad command of disease processes, advanced clinical and technical skills, an ability to teach many of those skills to families, and strong advocacy skills to traverse a complex and splintered network of services. The stakeholders interviewed in these four consultations implied the need for investment in the education and training of nurses, followed by improved and streamlined communication among professionals and enhanced day-to-day support of frontline pediatric home care practitioners. According to the participants, these measures would bring Ontario closer to sustaining a productive nursing workforce.



## Knowledge and Skill of the Pediatric Home Care Provider

The minimum educational standard set by health care provider agencies for nurses working with pediatric patients was an RN Diploma, although some agencies were more stringent. Provider agencies offered newly hired nurses in-house classroom training and some added “in-home” orientation. Some facilities provided preceptorship for new “visiting” nurses and orientation was provided by an advance practice nurse. Pediatric education tailored to the specific needs of children and, in some agencies, the specific needs of individual nurses was included. Nurse participation in ongoing educational and career development opportunities was supported both financially and in terms of work scheduling. Agencies encouraged annual upgrading and education, although there were no mandatory minimum standards for attendance. In some agencies attendance in the in-house education sessions provided was an expectation.

CCACs demand that home care provider agency nurses are compliant with the standards of practice of the College of Nurses of Ontario and within the Regulated Health Professions Act and hold current nursing education and/or work experience in pediatrics. CCACs require home care provider agencies to provide personnel with specialized training, certification, knowledge, and the ability to meet the needs of clients requiring child and family nursing services. The CCACs employ pediatric case managers who work exclusively with the pediatric clients and their families and have experience both in pediatrics and community settings. CCACs partner with other organizations, using their pediatric proficiencies to provide educational opportunities for nurses who provide care to pediatric clients and their families.

The consultation sessions highlighted that pediatric home care nursing is clearly a challenging area of the nursing profession in Ontario. A shortage of nurses overall has put tremendous pressure on those currently in the workforce, creating a stressful and demanding work environment. Adding to the challenge of the nursing shortage, and stemming from it, is the increased acuity of cases being discharged from hospitals, requiring nurses to maintain a more sophisticated repertoire of skills than ever before. The pediatric home care nurse of today must possess a general command of disease processes, specific pediatric experience, advanced clinical and technical skills, an ability to convey these techniques to families who are required to be more independent in the system, and strong advocacy skills to navigate a complex and fractured network of services. The stakeholders interviewed in these four consultations implied the need for investment in the system across a variety of areas. Chief among them is the education and training of nurses, followed by improved and streamlined communication among professionals and enhanced day-to-day support of frontline pediatric home care practitioners. According to the 41 participants, these measures would bring Ontario closer to the successful sustenance of a productive nursing workforce.

Surveys completed by nurses working in pediatric home care provided demographic information and identified indicators of nursing knowledge and skill. The majority of nurses surveyed were female and were RNs (rather than RPNs), most were diploma prepared and worked in shift nursing rather than visiting. The mean age of respondents in this study was 46 years of age. The nurses generally had substantial pediatric experience, less with specific experience in home care nursing. Most were satisfied with their work status.

When asked about the availability of on-site education, the majority of respondents indicated that nothing was available to them on-site. Of those who did attend educational sessions, just over a quarter indicated that they had received compensation for attending. For off-site educational programs most nurses reported attending at least one per year.

Knowledge and skills required to work in pediatric home care were identified and ranged from caring for children with enteral feeds to listening and communicating with parents. Regarding career planning, the pediatric home care nurses forming this study sample scored above average in scanning their environment, self-assessment activities, reality checks, creating their career vision, understanding their career options, and developing a career plan. Nurses in the sample experienced moderately high levels of job satisfaction with the exception of extrinsic rewards (i.e., salary, benefits, and compensation) and professional opportunities (i.e., participation on committees). Also, high levels of organizational commitment were detected in the sample.

## Conclusions

Findings from this study begin to address an important gap in the literature and research on the area of nursing knowledge development in pediatric home care. A number of key issues have been identified. These were related to workforce planning as well as linkages and relationships between the acute care and home care sectors regarding care delivery for this population.

## Workforce Planning

Similar to other sectors of the healthcare system, it is clear that pediatric home care has an aging nursing workforce. This study provides evidence of some specific needs related to succession planning for pediatric home care nurses. A number of extrinsic factors may influence the home care nursing workforce, such as the visible salary discrepancy with the hospital sector. Opportunities for continuing education for home care staff are needed, with incentives that overcome obstacles such as distance.

## Sector Linkages

Communication and linkages between the acute care and the home care sector at the time of discharge are crucial for successful integration of the pediatric client back into his/her home. Ongoing consultation and communication is integral for this to occur. Staff in each sector should be sensitized to the challenges of both environments, through cross-training and consultation sessions.

## Summary

The findings of this study provide the opportunity for dialogue between the acute care and home care sector on the following key priority areas:

- improving communication between providers, CCACs, hospitals, and other sectors within the health care continuum
- ensuring that new staff have the basic skill set
- providing regular updates for home care nurses
- maximizing technological opportunities for education and consultation
- communicating with Ryerson University regarding the pediatric nursing program (i.e., how it meets the needs from all sectors and what its outreach potential is for the province)
- providing opportunities for staff exchange experiences

As well, these findings provide the sector with needed information for further dialogue with the Ontario Ministry of Health and Long Term Care regarding nursing workforce planning and the salary and wage discrepancies between the sectors.



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# Chapter One: Introduction

## 1.1 Background

## 1.2 Theoretical Approach/Framework

## 1.1

### Background

Recent government initiatives redirecting resources earmarked for health service delivery have prompted health care administrators to engage in large-scale restructuring initiatives designed to demonstrate fiscal accountability without compromising patient safety. Many restructuring initiatives have resulted in recommendations to change the way nursing care is provided. Examples include retraining, redeploying, or reducing professional nursing resources. At a time following substantial health service restructuring, pediatric patients are discharged home earlier to be cared for in ambulatory or home care settings. In recent years statistics have indicated that there has been a steadily increasing demand for home and community services across the province (Ontario Ministry of Health and Long Term Care, 2000). In a review of the six Community Care Access Centres (CCACs) in Toronto, data indicates that these broad provincial trends were paralleled by dramatic growth in demands for child and family services in their first 3 years of operation. The actual services increased by 300% while referrals from hospitals (e.g., same day surgeries, emergency departments, inpatient and outpatient services) constituted the single most important source (Eakin, 1999). Moreover, these data suggest that more and more children are being discharged from hospitals to complete complex recoveries at home, and/or receive home-based therapies which also require increasingly heavy and more complex care.

There are three major, but as yet to be fully evaluated, justifications for the shift out of hospitals: (1) evidence that many procedures done in hospitals can be done just as effectively in the home and community; (2) evidence that care in the home and community can achieve cost-efficiencies compared to care in institutional settings (Chappel, 1994; Coyte & Young, 1999; Hollander, 1994, 1999; Jackson, 1994); and (3) the belief that services provided “closer to home” can enhance consumer choice, independence, and quality of life, and will positively affect health and well-being (British Columbia Royal Commission on Health Care and Costs, 1991; Shapiro, 1992). In pediatrics, this has resulted in an increase in the number of patients being cared for in the community requiring complex treatment and therapies.

Most provinces have hospitals and other institutions dedicated to the care of children, created on the grounds that children’s needs are different and that they require special treatment including specialized nursing services. However, it is not clear the extent to which the current approaches to home and community care preserve this distinction. In comparison to adults, skills and technology for children must be calibrated to small growing bodies; care must be continuously adapted to varying developmental levels; and the family, rather than the individual, often becomes the unit of care, which places special demands upon families, social networks, and health professionals (American Academy of Pediatrics [AAP], 1995; Canadian Association for Community Care [CACC], 1995; Karr, Locke, & Leonard, 1993). While care for children, as for adults, may include curative and rehabilitative services provided by professionals alone or in teams, by trained lay persons, or by family members and caregivers, such care must be adapted to the social, developmental and physiological characteristics of children in the context of home and family (AAP, 1995; Kaufman & Hardy-Ribakow, 1987; Richardson, Studen, O’Boyle, Smyth & Wheeler, 1992; Smith, Layne & Garrell, 1994).

Thus, it is essential that these patients have access to a nursing staff with specialized skills and knowledge (i.e., intellectual capital) that are specific to the pediatric population. When making home care staffing recommendations, decision-makers have limited reliable information on productivity indicators for nursing and how these relate to pediatric patient care. Concerns have emerged that patient safety may be jeopardized as efforts to restructure patient care continue. Little attention has been given to the contribution that professional nursing knowledge and intellectual capital provide to productivity in home care nursing. This research examined current approaches used to measure nursing productivity in a convenience sample of home care settings in the greater metropolitan Toronto area in Ontario, and proposes a new approach for examining productivity in home care nursing that is reflective of knowledge and skill requirements. A model for determining productivity in the home care nursing sector, integrating the economic theory of human capital theory, was explored in relation to nursing knowledge and skill requirements in this population (McGillis Hall, 2003a).

Within the discipline of nursing, productivity has been described as a measure of the efficiency with which labour, materials, and equipment are converted into goods and services (Edwardson, 1985). Theoretical models that appear to evolve from general systems theory have been used to guide interpretations of nursing productivity as a ratio of outputs to inputs (Edwardson; Fox, Fox & Wells, 1999; Jelinek & Dennis, 1976). While economic theories of productivity are apparent, their application is often described in relation to inputs and outputs of the system (Edwardson; Van Slyck, 1991). Little or no attention has been paid to the role of individual nursing skill and knowledge (i.e., nursing intellectual capital) in assessments of nursing productivity. Within the nursing profession, periods of nursing shortage continue to be experienced. Nursing positions have decreased (McGillis Hall, 1997; Strasen, 1987) and investments in nursing such as orientation and ongoing education have declined. These changes may indicate a continued trend to view nursing productivity from the production orientation of inputs and outputs. Recent studies in the nursing sector suggest that nurses no longer feel their work is valued and nurses are concerned with the quality of care being provided to patients (Baumann et al., 2001; McGillis Hall, 2003b).

## 1.2 Theoretical Approach/Framework

Theories of human capital evolving from the field of economics suggest that devoting resources to the education, career development and orientation of individuals constitutes an investment that will produce future returns for an organization (Flamholtz & Lacey, 1981; McGillis Hall, 2003a; Schultz, 1981). Economic labour theories suggest that the structure and total amount of labour inputs affect the price or cost of that labour (DeBrizzi, 1983; Fine, 1998; Mohun, 1994; Wunderlin, 1992). Human capital combines with structural variables within an organization to create intellectual capital (Edvinsson & Malone, 1997). As well, intellectual capital can be seen as a combination of individual characteristics, education, experience, and attitudes (Hudson, 1993; Flamholtz & Lacey). Since individuals differ in intelligence, skills, motivation and personality it is essential that organizations determine what qualities are desirable in recruiting new staff and what ongoing educational and career development programs should be provided to them to ensure they are functioning in a productive capacity in the organization.

Drucker (1993) suggests that knowledge is the basic means of production in current organizations. Knowledge has been recognized as the preeminent economic resource in successful organizations and effective knowledge creation depends on a number of activities existing within an organization designed to enable knowledge development in staff (Stewart, 1999; Von Krogh, Ichijo, & Nonaka, 2000). The concept of the knowledge-intensive workplace staffed by a workforce comprised of knowledge workers appears to fit well with the health care environment, and specifically the nursing profession (Grantham, Nichols, & Schonberger, 1997; Sorrells-Jones & Weaver, 1999). Health care organizations today are experiencing unparalleled change in both their structure and their processes of care delivery. Preparing nurses, the largest employee group in most health care organizations, to anticipate and respond to organizational change and enabling them to take greater responsibility for their career goals is critical to maintaining organizational viability. Regardless of whether change is planned or unplanned, initiated by the employee or the employer, there are many factors that influence a nurse's ability to thrive on the opportunities created, growing with and being productive with change, rather than merely reacting against it. Ongoing education and career development can offer nurses the means to respond to both short- and long-term changes in their profession and in the health care system. Valued, career-oriented nurses are more likely to be productive and safe practitioners and stay within an organization, thereby producing the long-term investment of human capital. Theoretically, if a human capital approach were applied to the nursing labour market in Ontario, it is feasible that the cyclical nature of nursing shortages could be controlled. The theoretical framework used to guide this study is presented in Figure 1.

**Figure 1. A conceptual model for nursing intellectual capital (McGillis Hall, 2003a)**

Individual Nurse Characteristics	Organization Strategies/Effort	Nursing Productivity
<p><b>KNOWLEDGE &amp; SKILL</b></p> <ul style="list-style-type: none"> <li>• Education</li> <li>• Experience</li> <li>• Ongoing education</li> <li>• Career development &amp; planning</li> </ul>	<p><b>KNOWLEDGE DEVELOPMENT</b></p> <ul style="list-style-type: none"> <li>• Ongoing education programs offered</li> <li>• Supports for education</li> <li>• Learning organization principles</li> </ul>	<p><b>NURSE</b></p> <ul style="list-style-type: none"> <li>• Organizational commitment</li> <li>• Autonomy</li> <li>• Career planning &amp; development</li> <li>• Satisfaction</li> </ul> <p><b>SYSTEM</b></p> <ul style="list-style-type: none"> <li>• Nursing costs</li> <li>• Nursing turnover</li> <li>• Nursing absenteeism</li> <li>• Nursing replacement costs</li> <li>• Nursing orientation costs</li> <li>• Nursing education costs</li> </ul> <p><b>PATIENT</b></p> <ul style="list-style-type: none"> <li>• Nursing errors related to patient safety</li> </ul>

# 2

## Chapter Two: Design

2.1 Purpose

2.2 Objectives

2.3 Methods

2.4 Instruments

2.5 Study Procedure and Sample

## 2.1 Purpose

The purpose of this research was to examine current approaches to and explore a new method for measuring nursing productivity in a convenience sample of home care settings in Ontario in relation to nurse and system outcomes. Specifically, this pilot study investigated the type of mechanisms used to measure home care nursing productivity in Ontario (i.e., the quantity of nursing inputs – the mix of nursing labour) and the structures in place in CCACs and home care provider agencies to promote the development of knowledge work in nursing (i.e., ongoing education programs offered, support for education, evidence of learning organization principles). Next, a new approach for measuring home care nursing productivity based on human capital theory that was developed by the principal investigator formed the basis for determining indicators of nursing intellectual capital in pediatric home care (McGillis Hall, 2003a).

## 2.2 Objectives

The objectives of phase one of this study were to identify the (a) mechanisms currently used to measure nursing productivity in a sample of CCACs and home care provider agencies in Ontario, and (b) individual strategies and efforts employed within these settings to enhance the knowledge development of nurses in relation to pediatric patient care. Phase two involved consultations to (a) determine the knowledge and skill requirements of nurses that CCACs, home care provider agencies, and others (i.e., referring pediatric hospitals and children's treatment centres) need to invest in to create a productive nursing workforce for pediatric home care in Ontario, and (b) verify indicators of human capital investment that can be linked to pediatric nursing productivity in CCACs and home care provider agency environments in Ontario. These indicators related to the pediatric knowledge and skill of professional nurses (i.e., level of education attained, continuing career development, ongoing educational pursuits, perceptions of autonomy, satisfaction with work, and organizational commitment), all components of human capital theory. Phase three objectives involve nurses and provider agencies verifying the proposed pediatric nursing knowledge indicators and nursing productivity indicators for relevance and feasibility.

## 2.3 Methods

The study was conducted in three phases extending over 31 months. A descriptive, exploratory research design was used to address the objectives of the study phases. In *phase one*, senior nursing personnel in six CCACs and three pediatric home care provider agencies in the greater Toronto area were surveyed to determine the mechanisms currently in use to measure nursing productivity, and the individual strategies and efforts employed by their organization to enhance the pediatric knowledge development of nurses. Once permission to conduct the study was obtained, the senior nursing officer (SNO) at each of the agencies was provided with a letter that explained the study as well as a copy of the study protocol. The investigators met with the SNO, and any relevant Managers to discuss and respond to any questions pertaining to the study. Following this meeting, the investigator/research coordinator set up information sessions that were open to all registered nurses employed in the agency to explain the study. Opportunity was given to discuss and respond to any questions related to the study.

*Phase two* of the study involved consultations with health care stakeholders (e.g., home care/community nurses; nurse managers; case managers; community organization executives; referring hospitals; nursing union, regulatory, and professional associations; funders; policy makers; and consumers) to identify the knowledge and skill requirements of nurses needed to create a productive home care nursing workforce with pediatric expertise, and to determine and validate indicators of human capital investment that can be linked to nursing productivity in CCACs and community nursing work environments in Ontario. A list of stakeholders for participation in these consultations was generated by the study investigator with input from the co-investigators. Stakeholders were sent a letter outlining the purpose of the consultations and inviting their participation. Four consultation sessions were held to capture input from the distinct areas represented by study co-investigators (i.e., provider agencies, CCACs, hospital nurses, and pediatric home care nurses). Data obtained from these sessions was used to formulate the nursing knowledge and

productivity indicators that were assessed in phase three of the study. *Nursing knowledge indicators* are aimed at identifying individual nurse characteristics that may be expected to affect the productivity of care provided by nurses while *nursing productivity indicators* focus on how the system and patients are affected by their interaction with individual nursing staff (McGillis Hall, 2003a).

In *phase three* of this study, the reliability, content validity and relevance of the indicator data for pediatric home care nurses were examined. Phase three involved collecting survey data from staff nurses on the *nursing knowledge indicators* relating to educational preparation, experience, ongoing education, career planning and development stage, satisfaction, autonomy and organizational commitment. These data also included some subjective measures that have well established reliability and validity. As well, provider agencies provided information related to the knowledge and skill development opportunities they provide for nurses.

## 2.4 Instruments

**Nursing Knowledge and Skill** – The type of nursing knowledge and skills that nurses require were identified for validation in this study. These indicators related to specific pediatric nursing knowledge and skills that were deemed necessary following a review of the literature, and subsequent surveys and consultations with stakeholders.

**Career Planning Activities Measure** – A measure of the activities that each participant had undertaken related to career planning as outlined in the six stages of the Donner & Wheeler (1999) model, including scanning, self assessment, reality checking, visioning, understanding opportunities, and developing a career plan, was utilized in this study. This scale contains 44 Likert-like items with 1-5 response categories ranging from “strongly disagree”, “disagree”, “neither agree nor disagree”, “agree” to “strongly agree”. The scale items are coded such that a 1 was equal to “strongly disagree” and a 5 is equal to “strongly agree”. A high score on this scale indicates a high degree of use of career planning activities. Cronbach’s alpha for the subscales ranged from .66 to .92 in an earlier study (McGillis Hall, Waddell, Donner & Wheeler, 2004), and .61 to .96 in this study sample.

**Job Satisfaction** – A measure of registered nurse satisfaction with specific facets of their work including satisfaction with extrinsic rewards, scheduling, family/work balance, co-workers, interaction, professional opportunities, praise/recognition, and control/responsibility was obtained using the *McCloskey-Mueller Satisfaction Scale (MMSS)* (Mueller & McCloskey, 1990). This scale contains 31 Likert-like items with 1-5 response categories ranging from “very dissatisfied”, “moderately dissatisfied”, “neither satisfied nor dissatisfied”, “moderately satisfied”, to “very satisfied”. The scale items were coded such that a 1 was equal to “very dissatisfied” and a 5 was equal to a “very satisfied”. A high score on this scale indicated a high degree of job satisfaction. Cronbach’s alpha was reported as .89 by the instrument developers and both construct and criterion-related validity were also demonstrated (Mueller & McCloskey). Cronbach’s alpha was .92 in this study.

**Organizational Commitment** – A measure of registered nurses’ acceptance of the organization’s goals and values, readiness to exert effort on behalf of the organization, and strong desire to remain a member of the organization were obtained using the *Organizational Commitment Questionnaire* (Mowday, Steers & Porter, 1979). This scale contains 15 items that measure three dimensions of organizational commitment: (a) a strong belief in and acceptance of the organization’s goals and values; (b) a willingness to exert considerable effort on behalf of the organization; and (c) a strong desire to maintain membership in the organization. This 7-point scale asks participants to indicate their own feelings about the particular organization in which they now work. Cronbach’s alpha has been reported as ranging from .82 to .93, and construct validity, test-retest reliability and convergent validity have also been established (Mowday et al.). Cronbach’s alpha was .89 in this study.

**Demographics** – A measure of selected demographic characteristics including work-related information and educational preparation has also been included.

## 2.5 Study Procedure and Sample

The Human Subjects Committee for the University of Toronto provided ethical approval to conduct this study. As well, expedited review from the Research Ethics Committee of the CCACs and provider agencies was obtained. Following this, the SNOs at the CCACs and provider agencies were provided with a letter that explained the study as well as a copy of the study proposal. The investigators met with the SNO and case managers to discuss and respond to any questions pertaining to the study. Following this meeting, the investigator/research coordinator set up information sessions that were open to all registered nurses employed in the setting to explain the study. Opportunity was given to discuss and respond to any questions related to the study.

All pediatric registered nurses who were employed at each of the provider agencies received a letter that introduced the investigator and assured confidentiality. Enclosed with this letter was an envelope containing the questionnaire and a consent form. Written instructions were also provided to ensure consistent use of the tool. Participants were asked to complete the questionnaire and consent form, seal it in the envelope provided, and return it to the investigator in the pre-paid stamped envelope. The questionnaire could be completed in approximately 45 minutes.



# 3

## **Chapter Three: Knowledge Development in Home Care Provider Agencies and Community Care Access Centres**

### **3.1 Assessing Nursing Productivity**

### **3.2 Perceptions of Pediatric Home Care Client Needs**

#### **3.2.1 Provider Agencies**

#### **3.2.2 Community Care Access Centres**

### **3.3 Productivity Assessment and Knowledge Development of Nurses**

#### **3.3.1 Provider Agencies**

#### **3.3.2 Community Care Access Centres**

## 3.1 Assessing Nursing Productivity

In phase one of this study, conducted from May to October of 2001, senior nursing personnel in the three home care provider agencies in Toronto contracted to provide paediatric services and the six Toronto CCACs were surveyed to determine an understanding of the pediatric client population they serve, the mechanisms currently in use to measure nursing productivity, and the individual strategies and efforts employed by their organization to enhance the pediatric knowledge development of nurses.

## 3.2 Perceptions of Pediatric Home Care Client Needs

### 3.2.1 Provider Agencies

Health care provider agencies identified that the most common pediatric client diagnoses cared for by nursing staff were respiratory illnesses (i.e., asthma and chronic tracheostomy), post operative cardiac diagnoses (i.e., complex and multiple cardiac problems such as hypoplastic left heart syndrome), wounds, burns, cancer, developmental delays and neurodegenerative disorders. The most common nursing procedures provided to these clients included intravenous infusions and intravenous therapy teaching, complex wound care including complex dressing changes and dressing/skin care teaching, nasogastric and g-tube feeds, ventilator care with tracheostomy care and suctioning, range of motion exercises with cast care, medication management and administration, pain management, and teaching related to hydration/feeding.

Common technological devices and equipment that nurses work with regularly when caring for pediatric home care clients include infusion pumps (i.e., Cadd plus, pain, flowguard, kangaroo feeding, and patient controlled analgesia [PCA]), tracheostomy tubes, access and maintenance of intravenous access devices (i.e., Peripherally Inserted Central Catheter [PICC lines], port-a-cath, Hickman lines, midlines, peripheral lines, subclavian lines, and insuflon catheter), TeleHomeCare monitoring devices (i.e., respiratory, cardiac, and pulseoximetry), assisted mobility devices (i.e., braces, standers, walkers, crutches, and hoier lifts), chest tubes, peritoneal dialysis or hemodialysis equipment, ventilators, oxygen, and weigh scales.

Provider agencies estimated that the majority of “visiting” nursing personnel caring for the average pediatric home care patient require one to one-and-a-half hours of time, with “a handful of visits” less than one hour in length. In contrast, “shift” nurses spend anywhere from 4 to 12 hours with the patient, with the majority of shifts being 8 hours in length. The majority of care provided to pediatric home care clients in this study was provided by a single agency, which stated that a high percentage of their overall client population was pediatric. The other two agencies identified that a small percent of their overall client population was comprised of pediatrics, most of which is care provided through “shift” nursing. The latter provider agencies identified that “although the percentage of total client population is small, the resource intensity is great, and the resources required to support a quality pediatric program are significant regardless of the size of the program”. The percentages reported are obviously reflective of the agencies that participated in this study, and cannot be generalized to the provincial level.

### 3.2.2 Community Care Access Centres

The community care access centres (CCACs) in this study sample identified that anywhere from 10 to 22 percent of their client population was comprised of children and youth under the age of 18 years. CCACs identified three care provider agencies that have contracts to provide nursing services to their pediatric clients. For the most part, all CCACs identified that compliance with the standards of practice for registered nurses [RNs] and registered practical nurses [RPNs] set by the College of Nurses of Ontario and within the Regulated Health Professions Act was expected from the provider agencies, as was current nursing education and/or work experience in pediatrics.

## 3.3 Productivity Assessment and Knowledge Development of Nurses

### 3.3.1 Provider Agencies

Health care provider agencies identified that the basic educational requirement for nurses who work with pediatric patients in the community was a diploma for RNs, although some indicated that preference was given to baccalaureate-prepared nurses. RPNs were also employed by these agencies, with most required to have certification to administer medications and in the principles of asepsis. Personal support workers (PSWs) were provided by some agencies for homemaking services in pediatric settings.

One agency stipulated additional education requirements for nurses including a minimum of 3 years of nursing experience, preferably in a pediatric setting. As well, “a love of children”, “understanding and skill in G-tubes, tracheostomy care, knowledge of growth and development” and a current cardiopulmonary resuscitation (CPR) certificate were required.

Provider agencies offered between 8 and 14 hours of in-house classroom orientation regarding policies and procedures. This was followed, in some agencies, by “in-home” orientation that could last from 2 days to 2 weeks or longer, depending on the nurse’s comfort and experience. Some facilities provided preceptorship in the district for “visiting” nurses with an experienced pediatric nurse for up to 140 hours over 2 to 4 weeks. During this time, the nurse’s independence is gradually increased. “Shift nurses” received a one-day preceptorship with a visiting nurse (i.e., 7.5 hours) and received up to one full shift of orientation to any “new child” assignment.

Orientation was provided by a combination of people including senior nurses, nurse educators, and clinical nurse specialists where available. Specific content areas of the orientation included pediatric health assessment and documentation, pediatric cardiology, pediatric respiratory care, pediatric nutrition, pediatric neurology including developmental delay and seizures, and family coping and dynamics. Some agencies discussed individual needs and goals of the new staff member and set up individualized education for them.

Ongoing educational opportunities were provided by agencies who worked with nurses individually and assessed their strengths, weaknesses, and subsequent learning needs. Nurse-visitor programs were encouraged with a local pediatric teaching hospital to further skill development related to understanding specialty areas such as tracheostomy and ventilator care. Agencies estimated providing an average of 32 hours of ongoing education to nurses annually. Support for ongoing education occurred in a number of ways including financial reimbursement, time off to attend ongoing educational sessions, on-site educational program offerings, paid education, and tuition. Support for clinical fellowships from the Registered Nurses Association of Ontario that are 3 months in duration, support to attend conferences ranging from 1 to 3 days in duration and in-service events such as speakers and skills workshops from 2 to 4 hours in duration were also provided. In addition, nurses received paid meeting time to share experiences and learn from each other at a rate of approximately 2 hours per week.

Expectations for the ongoing educational development of pediatric home care nurses that were considered by agencies were individualized specific to each nurse’s experience. Agencies encouraged attendance at two to three seminars annually for upgrading and education, although there was no mandatory minimum standard for attendance. Some agencies expected nurses to prepare for client care by attending the in-house sessions and by obtaining the information necessary by accessing colleagues, reading, and researching new information.

Provider agencies had a number of structures in place to support nursing knowledge development including access to on-site pediatric nurse educators or clinical nurse specialists and access to senior nurses who act as resources for more junior nursing staff. One agency employed a Master’s educated pediatric clinical consultant who was available by pager during daytime hours, attended group practice meetings and iden-

tified trends and issues in clinical care. A number of other supports were described by individual agencies including flexible work hours to support ongoing educational efforts, in-services, weekly team meetings, internet access in every service delivery centre, and textbooks, journals and learning materials on site in each service delivery centre.

### 3.3.2 Community Care Access Centres

CCAC expectations of the home care provider agencies regarding the ongoing educational development of nurses providing care to pediatric patients were limited due to the organization of home care delivery. CCACs develop standards of service provision while the home care provider agencies develop standards of nursing care. Any clinical expectations must be developed by the contracted agencies to ensure safe service delivery. CCACs identified that they expected the service providers to stay current with procedures and qualifications. They were expected to have a process in place to evaluate trends in service delivery and remain current with research protocols. All personnel were required to be competent in the delivery of all procedures listed in the Standards of Practice for the College of Nurses in Ontario. The providers were responsible for all staff (i.e., RNs and RPNs) educational development for pediatric clients. Although the CCAC will invite providers to CCAC in-services, workshops, etc., the responsibility for nursing education rests with the provider agency. Educational development opportunities for pediatric home care nurses provided by the CCACs were not evident, as it is an expectation that provider agencies were ensuring that nurses were current in their educational development. At times, CCACs will offer funding for providers specific to clients being discharged from hospital. The CCACs have a number of mechanisms and established administrative processes in place to monitor the performance of home care provider agencies including occurrence reporting, quality monitoring, consistency and conformity of provider staff, client satisfaction and/or complaints, performance report cards, provider audits, and other performance indicators.

The CCACs in this study all had case managers who worked exclusively with the pediatric clients and their families. These individuals were health care professionals including nurses, therapists, or social workers who had a background in case management, pediatric experience, and experience in community settings. Some CCACs indicated that a Baccalaureate education was preferred for these roles, although that comment was not consistent across respondents. The training expectations of case managers differed between the adult and pediatric population with pediatric case managers required to attend a general 3 week orientation, if new to the setting, prior to doing “hands on” care with a pediatric care coordinator/mentor for 2-3 weeks. The aim was for them to learn the linking and knowledge requirements specific to pediatric community care.

CCACs identified that they currently have partnerships at work with other organizations to provide educational opportunities for nurses who provide care to pediatric clients and their families. The six CCACs within Toronto work closely together to address these needs, and also meet quarterly with the Greater Toronto Area CCACs to facilitate work in this area.

# Chapter Four: Consultation Sessions

## 4.1 Consultation Methodology

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### 4.3.1 Nurses

## 4.4 Future Investments Needed

### 4.4.1 Provider Agencies

### 4.4.2 Community Care Access Centres

### 4.4.3 Nurses

## 4.5 Summary

## 4.1

### Consultation Methodology

In the winter and spring of 2002, the phase two consultations were held with stakeholders including nurses, case managers, provider agencies, brokers, and consumers. Each of four stakeholder consultations was moderated by the principal investigator. The first consultation was held at a provider agency where nine representatives of provider agencies were in attendance. In the second consultation, seven representatives of the CCACs attended. The third consultation took place at a pediatric in-patient facility with nine hospital and pediatric home care nurses, and the fourth consultation occurred at a second pediatric in-patient facility with 16 hospital and pediatric home care nurses.

Four central questions framed the discussions that took place. First, investigators were interested in establishing the perceived knowledge and skill requirements of pediatric home care nurses in Ontario today and in the past. Second, researchers probed gaps in this process from the perspective of the stakeholder groups. Third, participants were invited to comment on the changes to the knowledge and skill requirements of pediatric home care nurses in Ontario given the evolving health care environment. And last, respondents' recommendations as to the investments required to ensure the availability of a productive pediatric community nursing workforce were solicited.

Following transcription of the focus group sessions, a process of qualitative analysis was utilized to reveal thematic commonalities and differences in the responses of the four stakeholder groups to each of the above questions.

## 4.2

### Knowledge and Skill Requirements on Hiring

In order to understand nursing productivity in home care settings in Ontario, the investigator began by establishing a baseline of knowledge and skills among pediatric home care professionals. The consultations were held with key stakeholders to determine the knowledge and skills required of pediatric community nurses upon hiring and the extent to which this has changed over time. CCACs, providers, and nurses all identified a similar set of technical clinical skills as well as knowledge skills necessary to be a successful pediatric home care nurse. These knowledge skills concerned communication and the ability to achieve consent with child patients and their families. While the process of evaluating a nurse's skill level was unanimously described as fairly subjective and minimally rigorous in the past, today that process is more precise. Each group of stakeholders also described several factors unique to their positions that influence the determination of a referral.

When queried as to the process for determining the knowledge and skill requirements for nurses related to pediatric home care nursing in the past, all three stakeholder types (i.e., nurses, provider agencies, and CCACs) described a very informal system of evaluation that has since grown far more sophisticated. Past practice involved little more than an assessment/requirement of some pediatric nursing experience with little or no regard to setting or duration.

#### 4.2.1

##### Provider Agencies

Providers generally agreed that while past practice may have been less rigorous and demanding of specific pediatric experience, current practice finds agencies will only rarely hire a pediatric nurse without prior pediatric experience. "With the exception of one person, in the last year we haven't hired anyone who didn't come with pre-existing pediatric and perinatal knowledge." The more precise system of evaluation today is focused on more specific technical skills as well as seasoned communication skills, problem solving, and critical thinking. "As the population of [pediatrics] grew in the community, the level of discomfort for the generalist nurses increased, and so there was a need from them to have a specialized group of people who felt more comfortable working with children."

In one case the agency evaluates every nurse on the basis of a competency checklist. The evaluation takes place over a period of precepting/observation for the nurse equivalent to five full workdays, though it may be completed in a longer series of partial shifts. This is especially necessary for nurses who may already be attending to patients at various shifts through another agency, or for those employed part-time in a hospital setting. “There is a competency checklist that is filled out by both the preceptor and the preceptee.”

Providers expressed a need for nurses to appreciate the finer points of communication and consent with children. Providers also looked for sensitivities to working with parents among nurses. One provider referred to this as the need for nurses to understand the rubrics of “parenting an adult”. “Parenting an adult or coaching, fostering, teaching – you know, at least, working with them in an area which is very different – you are in their home and you often have to take on a parent role for the parent.” These skills are increasingly important as a shortage of nurses requires them to engage in a great deal more health teaching and health promotion with families than in the past. For example, community nurses today routinely teach family members technical care skills such as insertion of a gastrointestinal-tube, where previously they would have attended to this exclusively themselves. “So the skill set of the nurse needs to be more integrated. Not nursing skill related – disease related. And I think that’s what we have to aim for because the pediatric nurse has to be a specialist in many ways, a multi-specialist, so it’s sort of picking up the skills of the specialist and deploying them. That is a pediatric nurse.”

In order to ensure the best possible care for a patient, several providers regularly conduct orientation with nurses. This orientation includes technical skills, but it may also provide an introduction to the care setting and/or the patient, as needed. “In our orientation, it was a general orientation, but in turn there were a lot of areas to touch on in reference to special procedures for trach care and different IV lines.” Overall, providers agreed that the needs of the community dictate the knowledge and skill requirements of the nurses. At one agency, for example, an increasing pediatric caseload led the organization to form a pediatric-specific nursing team because there was increasing discomfort among families with general practitioner nurses. “The questions for the Peds teams really centre on understanding the issue around consent with pediatric clients. They centre on understanding family dynamics, understanding the difference between the client’s family as well as the child, how to win cooperation from a child and how to deal with pain and painful treatments, and how to present yourself.”

Before dispatching a nurse to a referral, providers also assess several additional factors. One of the most important factors is the comfort level of the nurse with the referral. Providers look for nurses who are comfortable addressing the requirements for care expressed by the patient. Specialty or complex care needs may mediate a provider’s choice of the nurse dispatched. Nurses must also be comfortable in the patient’s home setting. For this reason, previous experience with a client frequently is regarded as an advantage, and providers may therefore accommodate nurse or family requests for certain assignments. “And I somehow think that the managers have always sort of said, ‘How comfortable would you feel having to do this and how would you feel about doing that?’ And they assess my comfort level on being able to go from home to home to home and navigate the city.” Where possible, the nurse’s availability and lifestyle may also be taken into consideration, particularly where someone may have expressed a preference for working as a “visiting” nurse as opposed to a “shift” nurse. Because these two roles require different kinds of communication skills and stamina, nurses often are able to identify their strengths in one context versus the other.

Several factors pertaining to the patient may also influence a provider’s choice of nurse. First, the age of the client may eliminate the need for extensive pediatric training, particularly if the patient is a young adult. Similarly, the relative independence of the patient/client and their family may be considered. Last, the willingness of the patient’s insurance company to cover the cost of the service provided by a specific level of nurse (i.e., RN or RPN) may have an impact.



#### 4.2.2 Community Care Access Centres

CCACs noted that the requirements for pediatric nurses are more stringent and more carefully articulated and evaluated in the current health care environment. The supply of pediatric community nursing services begins with the CCAC. CCACs establish contracts with provider agencies through a request for proposal (RFP) process. These agencies then provide nurses upon referral. According to one participant, the contracts to which providers adhere typically have requirements specifically for the child and family population, unique from the adult population. “Next thing you know, you’re on the phone to an Ontario Works person and you are advocating for housing because this disabled child isn’t even in proper housing and the home situation is ridiculous and inhumane. This is by far becoming a big focus of what we do...” This was regarded by several brokers as a distinct change from the past, when pediatric nursing was even less distinguished as a specialty than it is today. “So our expectation of what nurses can do – the generalist Pediatric nurse – is much higher than it used to be.”

Technical skills are certainly a requirement in the current contracts, but the most unique aspect of pediatric nursing prioritized by the CCACs was related to nurse-patient communication and consent. From the perspective of CCACs, nurses need to understand how to communicate with children, appreciate their vulnerabilities as minors in the system with little or no agency, and appreciate that the client/patient ultimately includes the parents and other family members. These knowledge skills were in fact identified within all of the stakeholder groups as key to nurses’ productive work within the community in general and to the quality of the individual relationships with patients and their families. One CCAC also felt that communication skills are of somewhat greater importance to “shift” nurses than to “visiting” nurses, as shift nurses have more opportunity to establish the kind of trust and rapport that facilitates consent within families for nurses to perform technical procedures on children in need. “The focus in shift nursing tends to become more one of knowing the child, knowing how to communicate, really getting to know them as a parent would, with a de-emphasis on high tech skills, whereas visiting is more high-tech IV stuff.” “And the other thing I’m finding is the visiting nurses do the acute stuff, but the shift nurses sometimes get into doing non-nursing stuff like putting the laundry away.” For the majority of cases, however, CCACs noted that the technical skills required of pediatric community nurses are like those needed in caring for an adult, except in some critical care cases where specialty experience may be required around administering chemotherapy or inserting a peripheral intravenous line, for example. “...there’s a lot of technical stuff being done on kids at home these days.”

Some CCACs described the RFP process with providers as being very detailed in articulating specific technical and intervention skills. “I did the RFP, it is very specific about what the expectations are and what the skill level, down to specific interventions like IV skills, central line skills, that sort of thing.” Most contracts also require language skills, specifically bilingualism. This requirement is a source of frustration for those providers whose geographic area of need encompasses languages other than English and French, but for whom there is a shortage of bilingual nurses available. “Depending on where you are going to look in this province, if you look where we are now in Metropolitan Toronto, some of the knowledge and skill requirements might involve how nurses relate to people who don’t speak English.”

Because qualified respondents to the RFP have demonstrated the required level of knowledge and skill, CCACs are subsequently comfortable assuming that any nurse dispatched by the provider agency meets that standard. Still, to ensure the best possible fit between patient and nurse, CCACs gather as much detailed information about the patients, their condition and needs, and communicate this information when making the referral to the agency. “So your responsibility is communicating the volume of the need, the breadth of the need, and their responsibility is providing the appropriate staff provider based on what you’ve described. So, your description, the comprehensiveness of your work is vital.” There is no provincial protocol on how these referrals are handled. It is up to the agency to provide the appropriate person. “We give them as much information as we can get about the client, what their medical background is, what their family situation is, what their needs are, and then we send that all off to the agency and it’s up to them to decide if they have an appropriate nurse or not.”



All in all, brokers agreed that the baseline level of nursing skill has improved over the last 10 years. Some technical skills, such as inserting a G-tube, used to be considered a specialty, whereas now it is more routine. “I think though the baseline skill level for nurses has elevated extraordinarily in the last 10 years and I’ve been around long enough to see it.”

### 4.2.3 Nurses

Nurses’ perceptions of the knowledge and skill required to perform successfully resonated soundly with that described by providers and CCACs. “And what they tried to do was find those nurses in the community that did have some background in pediatrics.” Every nurse noted that agencies begin their interview simply by asking for subjective pediatric experience, and virtually all nurses hired for pediatric work today have such experience, although the setting in which it was attained may vary. “My experience has been that the home care providers have largely depended on pediatric nurses coming to them that had acquired that pediatric expertise in hospitals.” Community-specific experience has not been acquired by all nurses prior to hiring; experience garnered in a hospital setting is much more common. “They have determined the knowledge and skill requirement of pediatric home care nurses in the past by asking if you have any subjective experience and then they would take it from there.”

While a representative of one agency detailed a rather precise process of observation and evaluation of nurses culminating in the completion of a nursing skills checklist, the nurses themselves ultimately described a fairly simplistic approach to hiring. “You are hired as a general nurse in a way, but it depends on where the need is and I think also it goes according to your experience.” One nurse noted that some agencies simply require that nurses demonstrate experience in a level 3 setting. “I don’t think they needed to have pediatric backgrounds.” While not mandatory, nurses also remarked on a number of areas of knowledge that they considered fundamental to their practice. One nurse specified respiratory, gastrointestinal, and neurology as key areas of knowledge since these predominate in pediatric care. “So they can be very technically oriented around skills base - I think of things like suctioning, tracheotomy care and G-tube care.” Another spoke to the fundamentals of “developmental appropriate care for children” and “pediatric physical assessment.” Again, nurses noted that they are not assessed by agencies specifically for their expertise in these areas, but a command of each would represent a set of best practices in their view.

More nuanced judgment by providers, according to the nurses consulted, is executed at the time of referral. At this point, a case manager determines the needs of a patient and then communicates them to the agency. The objective is then to find the intersection between patient needs and nurse experience. “They’re trying to glean that from a home care referral that’s one page long when we’ve discharged a child that has 18 charts.” It is also at this time that the nurse may provide input about her availability and work lifestyle preferences. Families may have some say about the choice of community nurse dispatched. “So, it’s easier to bring familiar faces in to work with your child than to move out and to be discharged home and then have community nurses come in who don’t know the family, don’t know the child, so the child is going to have that uncomfortable stage where they have to try to build a relationship.” If their preferred nurse works part-time in the hospital, the nurse may also be available for home care nursing. The family who is already familiar and comfortable with a nurse may thus prefer to have the same nurse in their home. “Some nurses have, as you say, developed a bond and then come forth to the family, find out from the CCAC rep who the agencies are and they actually have to go through a formal process of being hired by the agency.”

Nurses also described a number of challenges in the referral process. For example, sometimes a nurse is referred for a case because s/he has experience with a particular specialty skill; however, that skill may not have been applied in some time. Alternatively, a referral may be made for a nurse with a general skill set when what is needed is someone with a specialty skill. By contrast, in other cases only a specialist nurse may be available for a referral when what is needed is more of a generalist. This experience was somewhat unique to nurses practicing at a pediatric in-patient facility where the pediatric focus of practice allows nurses to specialize even further in their field. “And there’s very specific things that are going on with a child when you’re with the same one for 8 hours a day, but they’re very specific to that one child and so there’s a different skill level there and I think that it really is comfort levels.”

The most common challenge articulated by nurses is acquisition of information. While brokers may feel that they provide comprehensive case descriptions, nurses commonly noted that the information contained on referral forms is inadequate, leaving them ill-prepared to do the job. The typical home care referral may be one page long, sometimes less – it varies considerably, whereas a typical hospital chart from which the referral is composed contains many, many pages of information. “There is a huge variance in the information that starts out from us. We can get a home care referral with three to four lines, ‘complex child, OT, G-tube feed’, and that’s it, and we expect the nurse in the home to care for this complex child. Or, you can get a very detailed care plan with symptoms, what to look for, and there is really no consistency across the institutions.”

Given these types of challenges, nurses generally agreed that opportunities for professional development and skills upgrading are essential. However, these opportunities are extremely difficult to attain given the highly varied schedules of community nurses and the high demand for service imposed on them. As one nurse said, the present health care environment has everyone “scrambling for resources, catching up,” unable to enjoy the luxury of foresight and strategic planning. As a result, the burden of education often falls to the individual nurse. “I think that because I am with the client 5 days a week, 8 hours a day, I must be very proactive in maintaining my knowledge and skills by making every effort to take care of other clients, otherwise I’m going to be caught in a rut.”

## 4.3 The Impact of a Changing Health Care Environment

If gaps or limitations exist in the process of determining pediatric home care nurse competencies as perceived above, they do so within the context, and as a result, of a changing health care environment. The two biggest changes observed in today’s health care system with reference to pediatric home care nurses are (a) the increased acuity of cases, and (b) the need for nurses to teach families health promotion. Three main gaps or limitations to the system were also identified. First, the most visible gap in the system is the basic shortage of home care nurses. Following that, the second most significant gap in the process concerns the continued education and development of the nursing workforce. Finally, gaps in the chain of communication among health care providers pose the third challenge to the profession.

These challenges all occur in a health care environment characterized by hospital closures and decreases in funding. As a result, the role of community nurses has taken on considerably greater complexity in the past decade. The pediatric home care nurse of today must possess a general command of disease processes, specific pediatric experience, a repertoire of technical skills, an ability to convey these techniques to families who are required to be more independent of the system, and the advocacy skills of a social worker able to navigate a complex and fractured network of services.

### 4.3.1 Provider Agencies

Providers identified the shortage of nurses overall and the consequent discharge of patients earlier and at a higher state of acuity as a key change in the healthcare environment in recent years. The shortage of pediatric homecare nurses has a negative impact not only on the communities they serve but on the nurses themselves, who are unable to provide back-up and relief to one another as often as needed. “I think we’re really speaking to resources, so actually, this is what it sounds like, that there’s not enough nurses to be able to take off if you need the day off, somebody to cover for you and then you feel responsible for the family.” On the other hand, one provider noted that shift nurses who spend all of their time with one patient often come to apply a repetitive set of skills and must therefore be proactive in pursuing their own professional development, if they are to remain a viable member of the workforce. Another result of the nursing shortage is that the work of an RN and an RPN has begun to overlap. “There comes a time when an RN is not available, so can they send an RPN? Over the last 4-5 years, because of the provisions of the College of Nursing, the work that is the part of the RN and RPN has become a very gray area.” One provider pointed to the increasing number of specialty consults hospital nurses are required to seek today. More specialty consults are solicited from respiratory therapists, physical therapists and occupational therapists than in the past, requiring the nurse to have a more integrated skill set, not nursing related, but rather disease related.

### 4.3.2 Community Care Access Centres

Time and again, the biggest change to the role of the pediatric home care nurse cited by CCACs is the responsibility of nurses to teach family members health care practices. Teaching is an increasing part of the job given shortages in resources. Participants suggested that teaching stretches the health care dollar by allowing the nurse to attend to a greater number of cases while families undertake more procedures independently. “For some of our CCACs teaching is an expectation, because we’re looking at dollars here and nursing visits are very expensive, so if you can teach a family to become more self-sufficient, there are a lot of benefits to that, but there are also economic benefits to it as well.” Similarly, community nurses now do some work typically associated with social service personnel, including such advocacy work as calling social assistance to request enhanced benefits, locating a translator, etc.

All of this work is taking place despite a profound shortage of nurses. “Our biggest challenge is just a lack of bodies.” This shortage is easily the number one challenge identified by brokers, providers and nurses alike. “The shortage is that the agencies are short staffed with those personnel and there is also a shortage of skill.” While brokers may complete an incident report if a provider fails to provide a qualified nurse when required, several brokers questioned the efficacy of doing so, as the nursing shortage has come, for some, to feel insurmountable. “It took me a year and a half to get the family the compliment of nursing to support them in the community because there was a lack of resources. There was just no nursing.” “I think that there’s a huge competition for people with pediatric skills in this environment. It’s a major challenge. It’s not just within the community. It’s within our institutions as well. We’re all competing with each other for a very limited resource.”

From the perspective of CCACs, needs that remain unaddressed in the pediatric home care nursing community often revolve around communication and the establishment of expectations among all parties involved in a case, but in particular, those of the patient and his/her family members. Several CCACs noted the need to better establish parents’ expectations of what is involved in pediatric home care nursing and how it differs from care provided in the hospital setting prior to discharge. It was acknowledged that things are often done differently in the home. A different set of resources is available, whether that be fewer professionals or less access to equipment. “It’s not a sterile environment where the procedures will be exactly as they were when you’re in hospital, so, probably their expectations, especially if they’ve been hospitalized for a long stay, and all of a sudden they’re home and they’re wondering why the nurse is coming in and doing things so differently.” One felt it would be ideal if the CCAC could coordinate with parents before making a referral.

Alternatively, CCACs noted that some agencies dispatch nurses ill-prepared with details of the case. As a result the parents, who typically have had more continual exposure and involvement, are frequently better informed and capable of participating in the child’s care than the home care nurse. One also noted that nurses may have received insufficient orientation to the cultural setting of the home and thus lack sensitivity to cultural practices or ways of interacting that differ from their own.

Some CCACs would also like to see more professionals involved in a case presentation at a discharge conference. This kind of cross-communication would maximize the degree to which the home care nurse and family are informed about a case, generally facilitate rapport in the community, and minimize any reluctance for future communication and cross-consultation about a case once the home care nurse has been dispatched.

Last, from the perspective of the CCACs, the proliferation of hospital-based clinics such as wound care clinics and IV clinics designed to fill in when agency appointed professionals are unavailable, has served to further fragment the care received by patients. This fragmentation, whereby a patient is managed by a case manager and served by a hospital nurse as well as other specialists, then dispatched and placed in the care of a home care nurse, while possibly making sporadic visits to hospital clinics, precludes any one individual professional from maintaining a holistic view of the health and well-being of the patient. The lack of a holistic appreciation of the patient, then, has obvious deleterious effects for them and the progress of their recovery.

Perhaps a sentiment expressed by one CCAC case manager best captures the atmosphere of instability, strain, and uncertainty experienced in community nursing today. She challenges, “What do we mean by home care? What do we expect from it? Are we willing to pay for it?”

### 4.3.3 Nurses

Those on the frontlines, the nurses, all pointed to the increased acuity of cases as the biggest change experienced in the home care context of late. “There is definitely more acuity going into the community, definitely.” Children are being discharged in more acute states without sufficient home care options to provide aid. As a result, more tertiary clinics are springing up, but these too operate on limited hours and are unable to meet everyone’s need. The logistics of providing care to families with round-the-clock needs is a formidable challenge. “I think that initially kids weren’t being discharged into the community as much. They were very stable when they were discharged and that doesn’t happen anymore.”

While earlier discharge may be the biggest change to take place, the concurrent need for education and skills upgrading to care for more acute cases is perhaps the biggest gap experienced by the nurses. Several of those interviewed expressed a need for more academic programs specifically focused on pediatric nursing. While some programs do exist, those identified do not separate labour and delivery from the kinds of care provided to an older adolescent child. The majority of programs also do not provide opportunities to experience different pediatric placement settings, something several nurses cited as vital to their preparedness.

Once outside of the education system, training and professional development is often even harder to attain. Nurses are rarely together as a group, so skills upgrading is difficult to deliver. A more significant obstacle, however, is the lack of a financial incentive to agencies to provide training. In the new managed care environment, agencies are competitive, so every moment a nurse is in training is one in which the nurse is not working, providing service and generating revenue for the agency. As more than one nurse pointed out, the shortage of nurses with certain specialties results in exploitation of nurses who do have those skills, and this increased reliance can lead to burnout sooner.

Misperceptions and inadequate communication, two inter-related issues identified by the brokers, also figured prominently among the nurses’ concerns. They experience firsthand the tensions created through incompatible expectations between parents and providers. For example, whereas a nurse may enter a home prepared to teach a parent how to deliver certain kinds of care independently, the parent may be expecting the nurse to provide them some respite. “Often times what the parents think nurses are there to do is not what the nurse has actually been sent to do. So you get them out with some of the services, but then their expectation is that the nurse is coming in to do the service, not to support them in what should have already been a foundation that we had been developing with them over the course of their stay.” The communication skills that are so vital to good pediatric nursing then come into play in helping the overwhelmed parent to cope effectively. “I think their independence is great and I think that even where I work, it needs to be drilled in more that all of the nurses should be teaching the families, because what happens when a February storm comes in and the nurse can’t get there for another 5 hours?”

In other cases, it is the nurse who suffers as a result of poor communication. Nurses repeatedly described a referral process that is simply inadequate to convey the complexity of a given case. Consequently, the home care nurse is at a knowledge disadvantage when it comes to the specifics of an individual, though the nurse may know the general rubrics of their condition. The situation is further hampered, according to several nurses interviewed, by the pervasive perception in the community that it is inappropriate or unacceptable for the home care nurse to call the contact person from the discharging facility for support. These kinds of communication gaps between CCACs, providers, discharge contacts and nurses again bear ultimately on the quality of care and support provided to the child and their family.

## 4.4 Future Investments Needed

Three central themes emerged from the stakeholders' comments concerning future investments needed in the pediatric home care nursing workforce. The most significant investment desired by those interviewed is for continued opportunities for education and professional development. In fact, four types of learning were identified including academic learning, professional development, practical experience, and knowledge sharing or cross-pollination between nurses in different care settings. Second, participants would like to see increased support to home care nurses on a day-to-day basis. Third, respondents would like to see improved communication among the many professionals involved in any one case. While not all of these issues were directly identified as areas for future investment, the profound need in these areas suggests such a response.

### 4.4.1 Provider Agencies

Providers identified education, communication, and support as key areas for investment. One provider agency representative called for more consistent, solid preceptorship programs as a means of ensuring that nurses are equipped with a thorough skill set for the job. "You get the right orientation and you have the right level of skills, but then you are on your own and even though there are all sorts of support available, there is not the kind of peer support that there is in an institutional setting." Another provider agency advocated ongoing mentoring of nurses. In-service programs also figured prominently in providers' comments about the need for more professional development opportunities for nurses. "The other difficulty I see is that the academic programs don't prepare you to be a specialist in pediatrics, so they're general programs." While many providers already attempt to offer in-service training, they are faced with two challenges in particular, as they do so. "The organization already, I think, provides in-service education, but I have not been able to take advantage of any or many of those in-service programs. Some of these periods should be kept alive as being compulsory so every nurse should." One is that the current competitive care environment does not compensate providers for time that nurses spend in activities outside of direct care. Thus, there is little financial incentive for providers to offer in-service training. As well, the simple logistics of bringing together a diverse workforce of nurses whose schedules and locations vary widely poses an obstacle to efficient delivery of training. On the matter of practical experience, one broker suggested a system by which nurses would rotate through care settings, including pediatric hospitals, as a way of maintaining competency in the community. This would address the need expressed by brokers for more cross-training. "You know, you're trained on the various floors in the hospital. You should be out in the community also applying these things, because then no matter where you end up after you finish, you've got a frame of reference that's real, as opposed to a perceived or an expectation or an assumption."

In terms of support, it was generally agreed that home care nurses struggle with isolation and would therefore benefit from more opportunities to work together. Providers recognized that home care nurses need more back-up. More bodies would simply allow more nurses to take time off when needed and to consult another professional for advice. Therefore, one provider advocated a system in which home care nurses work in pairs. Off-site support for nurses working in difficult situations or options for reporting problems or incidents was also called for by one provider.

At the macro level one provider suggested a needs assessment be conducted by the government, and another commented on the need for wage parity between hospital and home care nurses.

### 4.4.2 Community Care Access Centres

In addition to calling for a general investment from the government in "human capital" to stem the nursing shortage, CCACs also advocated for more educational opportunities for pediatric home care nurses. "You need the commitment from the provider as well to at least be able to say, 'Okay fine, we'll send x-number of nurses to go and learn this in your place, because you do most of it,' and then we can in turn follow it through and from the provider side, that might be a good thing about knowledge and skill."



In particular, CCACs cited a need for home care nurses to have more opportunities to be brought up to date on changes in pediatric practice originating in hospitals. For example, home care nurses may benefit from in-service opportunities to learn and practice new developments in techniques. “Cross-training is imperative as well as going back to school. It’s got to be mandatorily worked into the experiential piece of nursing.” Similarly, CCACs noted that hospital nurses would benefit from more exposure to the home care setting in order to better appreciate and support the home care nurse assigned to their former patient. “A hundred years ago when I was there, we spent all this time on [pediatrics]. How can that be different, because it’s part of the basic nursing course, but I guess it isn’t.”

According to CCACs, effective communication is a key element of quality care. Therefore, CCACs called for more communication among care providers prior to patient discharge. This would include more thorough briefing of parents and other care providers in order to establish clearer expectations. One CCAC representative also spoke to the need to offer nurses more opportunities for input. As well, one identified the need to provide better support to nurses who experience resistance from families. “Some of the circumstances families are dealing with at home are horrific and just one home visit from a hospital person can open their eyes.”

#### 4.4.3 Nurses

Not surprisingly, the nurses themselves had the most to say about proposed improvements to the system. First, they spoke to a need for increased hiring. More nurses are needed, specifically more nurses with specialty skills. In particular, one nurse identified venous access, the ability to manage PICC lines and midlines as key training needs.

As with providers and CCACs, education, communication, and support were also identified as key areas for investment. In terms of education, nurses were explicit in calling for more pediatric nursing programs in colleges and universities. “There needs to be more pediatric education, more formal education through the colleges and the universities, that the focus is on pediatrics whether it’s in the hospital or in the community, we need to have some programs that will legitimize pediatric nursing.” One nurse also called for more hiring of pediatric nursing teachers as well as increasing student admission enrollment. Another noted that academic programs need to offer more specific courses in pediatrics, separate from courses on labour and delivery. While several nurses felt that every pediatric nurse in training should have to do a placement in a hospital, others advocated more home care placements. As well, several specified three content areas as foundational learning – respiratory, gastrointestinal and neurology nursing.

The nurses interviewed also called for more professional development opportunities. Several nurses agreed that it is the responsibility of agencies to provide training and ensure that nurses feel competent. Therefore, one called for more opportunities for home care nurses to attend conferences and scholarly meetings to update their knowledge and skills. Another spoke directly to the need for government investment in ongoing training and professional development. She suggested that government investment in the agencies would provide them with the financial incentive they need to coordinate more training. Another nurse recommended the development of a position for an education coordinator among provider agencies. “I think the Ministry [of Health] needs to ensure that there is adequate funding to the provider agencies for development – staff development and training to enable the nurses that are working in the home to be in a training/learning environment on a very routine basis, not just an orientation, but an ongoing professional development program.”

Once in the workforce, the respondents noted that they would like to see improvements to the systems of communication between professionals in home care nursing. Improved communication would include rapport between professionals, environment (i.e., home care nurses should not feel hesitant to call hospital nurses) and technology. As one nurse said, “Voicemail’s been an enabler.” One nurse suggested a streamlining of the channels of communication in order to prevent miscommunication. “Maybe we need to build more formal relationships, partnerships between the community nurses and the hospital nurses

so that they're working together and there's a learning experience for both because I think that hospital nurses could probably learn a lot from the community nurses as well."

Better support for nurses was also widely recognized as a place for investment. One of the key issues identified is that home care nurses work very independently. "There are few times when they are together as a group, so in terms of upgrading their skills on an ongoing basis, it's a challenge." This could begin with improved gatekeeping by providers around the appropriateness of nurses dispatched for referrals. "There has to be the support systems there so that one particular nurse, no matter when she's working, should be able to pick up the phone and call for help to someone who has pediatric expertise, so she's not feeling alone, even when she is alone, she is not feeling alone." "Somebody on the end of a cell phone or a pager when you are there with a patient, that you can just speak to and, not even the fact that you do call them each time, but just knowing when you go in there that you have somebody that you can call, gives you clinical confidence going in." Those interviewed spoke to the need for more back-up to help the frontline people. This kind of support would include someone who can take calls in an emergency, provide counsel, and share expertise. "It is the agency's internal decision and responsibility to develop the support network for that nurse. Like, is there someone they can go to as a consultant and ask questions?" "And it doesn't seem to matter how often you write down 'Please don't hesitate to call. Contact me....number....etc.' There's a barrier to the perception of the person going into the home that it's an okay step to take." "The biggest gap is this linkage to the actual provider and home care – the communication linkage." As well, like providers, nurses identified the need for more bodies to enable those practicing to take holidays and attend to personal needs. Therefore, several nurses suggested that home care practitioners should work in pairs, if possible. "At least if you have somebody else in there you can get support from that co-worker or you can work together and, in turn, you can work out a plan."

At the macro level, the nurses interviewed identified four areas for improvement or investment. The most fundamental and material concerned wage parity between hospital nurses and home care nurses, as the latter are compensated less for their services. "Money's a huge issue. Nurses have gone on strike because they're not getting travel money." "I think that wage parity needs to be there, I think in order to attract and keep the pediatric nurses, or any nurses, in the community setting." One nurse also called for a revised framework for how people work together. Others advocated for better integration of pediatric services in the community, with integrated funding to support that. Finally, several nurses spoke to the need to promote pediatric home care nursing as a valuable, viable profession to attract more people to the field. They felt that there is a need to market the job better, position it more positively, and use mentors to highlight the value of the profession.

## 4.5 Summary

The consultation sessions highlighted that pediatric home care nursing is clearly a challenging area of the nursing profession in Ontario. A shortage of nurses overall has put tremendous pressure on those currently in the workforce, creating a stressful and demanding work environment. Adding to the challenge of the nursing shortage, and stemming from it, is the increased acuity of cases being discharged from hospitals, requiring home care nurses to maintain a more sophisticated repertoire of skills than ever before. The pediatric home care nurse of today must possess a general command of disease processes, specific pediatric experience, advanced clinical and technical skills, an ability to convey these techniques to families who are required to be more independent in the system, and strong advocacy skills to navigate a complex and fractured network of services. The stakeholders interviewed in these four consultations implied the need for investment in the system across a variety of areas. Chief among them is the education and training of nurses, followed by improved and streamlined communication among professionals and enhanced day-to-day support of frontline pediatric home care practitioners. According to the 41 participants, these measures would bring Ontario closer to the successful sustenance of a productive nursing workforce.





# 5

## **Chapter Five: Nurse Survey**

**5.1 Description of the Nurses Surveyed**

**5.2 Nurse Demographics**

**5.3 Ongoing Education of Pediatric Home Care Nurses On-Site**

**5.4 Ongoing Education of Pediatric Home Care Nurses Off-Site**

**5.5 Professional Knowledge Needs of Pediatric Home Care Nurses**

**5.6 Career Development Activities of Pediatric Home Care Nurses**

**5.7 Job Satisfaction of Pediatric Home Care Nurses**

**5.8 Organizational Commitment of Pediatric Home Care Nurses**

## 5.1 Description of the Nurses Surveyed

Phase three involved surveys of pediatric home care nurses to verify indicators of *nursing knowledge and skill* relating to educational preparation, experience, ongoing education, career planning and developmental stage, satisfaction, autonomy, and organizational commitment conducted from June, 2002 to February, 2003. In addition, provider agencies supplied information related to the knowledge and skill development opportunities they provide for nurses.

## 5.2 Nurse Demographics

Demographic data examined in the nurse surveys included general biographical data and data pertaining to educational preparation and work arrangements. Overall ( $n=54$ ), 37 (69%) of the sample were registered nurses, and 16 (30%) were registered practical nurses. The majority of survey respondents ( $n=38$ ; 70%) worked as shift nurses, while 15 (28%) were employed as visiting nurses. Most participants ( $n=49$ ; 91%) were female, and 2 (4%) were male. For the most part, nurses in this study had substantial experience, with the majority ( $n=35$ ; 67%) having over a decade of experience and an additional 20% ( $n=11$ ) having more than five years of experience (see Table 1). However, fewer had specific experience in home care nursing.

**Table 1. Nursing Experience**

Length of Employment	In Home Care Nursing (%)	In Nursing Overall (%)
< 1 year	8 (15)	0
1 - 2 years	6 (11)	1 (2)
2 - 3 years	9 (17)	2 (4)
3 - 4 years	6 (11)	0
4 - 5 years	7 (13)	4 (7)
5 - 10 years	12 (22)	11 (20)
> 10 years	2 (4)	35 (67)
Missing data	4 (7)	4 (7)
<b>Total</b>	<b>54 (100)</b>	<b>54 (100)</b>

Over half of the study participants are employed part-time ( $n=30$ ; 56%), while close to one-quarter ( $n=11$ ; 20%) are employed full-time, and another quarter ( $n=12$ ; 22%) are casual or contract workers (see Table 2).

**Table 2. Job Status**

Job Status	Respondents (%)
Full-time	11 (20)
Part-time	30 (56)
Casual	8 (15)
Contract	4 (7)
Missing data	1 (2)
<b>Total</b>	<b>54 (100)</b>

Almost three-quarters of respondents ( $n=40$ ; 74%) indicated that their work status was their own choice, with 12 respondents (22%) indicating that they would like a different work status (see Table 3).

Table 3. Choice of Work	
Job Status	Respondents (%)
My choice	40 (74)
Not my choice	12 (22)
Missing data	2 (4)
<b>Total</b>	<b>54 (100)</b>

Of the 12 participants who wished to see a change in their work status, 6 (11%) indicated that they would like to move to full-time employment, 3 (6%) indicated that they would like to work more, another 2 (4%) identified that they would like input into the expectations related to their availability, while 1 (1%) wanted to work less hours (see Table 4).

Table 4. Changes to Work Status	
Desired Change to Work Status	Respondents (%)
Would like to move to full time employment	6 (11)
Would like to work more	3 (6)
Would like input into availability/expectations	2 (4)
Would like to work less	1 (1)
Missing data	42 (78)
<b>Total</b>	<b>54 (100)</b>

The majority of nurses who participated in this study ( $n=43$ ; 80%) worked up to 40 hours per week, while 8 (15%) indicated that they worked more than that. A substantial number of respondents held other nursing jobs ( $n=20$ ; 37%), primarily in other provider agencies ( $n=7$ ; 12%), hospitals ( $n=6$ ; 11%), and other specialty organizations ( $n=7$ ; 12%). Of the 20 nurses who identified that they worked elsewhere, the number of other hours worked varied from up to one shift per week ( $n=6$ ; 11%), between one and two shifts per week ( $n=4$ ; 7%), between two and three shifts per week ( $n=4$ ; 7%), and from three to six shifts per week ( $n=6$ ; 11%; see Table 5).

Table 5. Distribution of Hours Worked Elsewhere	
Number of Hours Worked Elsewhere	Respondents (%)
Up to 8 hours per week	6 (11)
8 to 16 hours per week	4 (7)
16 to 24 hours per week	4 (7)
From 24 to 50 hours per week	6 (11)
Don't work elsewhere	34 (64)
<b>Total</b>	<b>54 (100)</b>

The mean age of respondents in this study was 46 years of age, although a substantial number of study respondents were over the age of 50 years ( $n=22$ ; 41%; see Table 6).

**Table 6. Age of Study Respondents**

Age of Study	Respondents (%)
Under 30 years of age	3 (5)
Between 30 and 40 years of age	7 (13)
Between 40 and 50 years of age	12 (23)
Between 50 and 60 years of age	18 (34)
Over 60 years of age	4 (7)
Missing data	10 (18)
<b>Total</b>	<b>54 (100)</b>

Most of the nurses in this study were diploma prepared ( $n=34$ ; 63%), with another nine (17%) holding baccalaureate degrees. 11 ( $n=20\%$ ) held RPN certificates. Only six of the respondents were currently enrolled in educational studies, all of which were baccalaureate nursing programs.

## 5.3

### Ongoing Education of Pediatric Home Care Nurses On-Site

Respondents were asked to provide information on the availability or accessibility of on-site educational programs throughout the year. The large majority indicated that no educational programs were made available to them on-site ( $n=35$ ; 65%), while nine respondents (16%) identified that two programs were offered per year, followed by eight respondents (15%) who identified that three programs were offered annually, and two respondents (4%) who indicated that one program was made available to them each year (see Table 7).

**Table 7. Number of On-Site Educational Programs Offered Annually**

Number of On-Site Educational Programs Offered Annually	Respondents (%)
None	35 (65)
One per year	2 (4)
Two per year	9 (16)
Three per year	8 (15)
<b>Total</b>	<b>54 (100)</b>

Corresponding with this information, of the respondents who had been offered on-site educational opportunities in the past year, four (7%) were provided with up to 8 hours of education, while seven (13%) were provided with between 8 and 16 hours of education, another five (9%) received between 16 and 24 hours of education, and three (5%) received over 24 hours of education per year (see Table 8).

**Table 8. Hours of On-Site Education Offered Annually**

Hours of On-Site Education Offered Annually	Respondents (%)
None	35 (66)
Up to 8 hours a year	4 (7)
8 to 16 hours a year	7 (13)
16 to 24 hours a year	5 (9)
Over 24 hours a year	3 (5)
<b>Total</b>	<b>54 (100)</b>

## 5.4

### Ongoing Education of Pediatric Home Care Nurses Off-Site

Fourteen (26%) of nurse respondents indicated that they had received compensation for attending ongoing educational events within their facility with a mean of 15 hours of compensated time. The amount of dollars of compensation provided ranged from \$27.00 to \$303.29.

Respondents were then asked to provide information on the availability of off-site educational programs offered to them throughout the year. Many identified that they attended no educational programs off-site ( $n=25$ ; 47%), while 14 respondents (26%) identified that two off-site programs were attended per year, 11 respondents (20%) identified that three off-site programs were attended annually, and 4 respondents (7%) indicated that one off-site program was made available to them each year (see Table 9).

**Table 9. Number of Off-Site Educational Programs Offered Annually**

Number of Off-Site Educational Programs Offered Annually	Respondents (%)
None	25 (47)
One per year	4 (7)
Two per year	14 (26)
Three per year	11 (20)
<b>Total</b>	<b>54 (100)</b>

The length or number of hours involved with off-site education was longer than that identified for on-site educational opportunities by this study sample. Six (11%) were provided with up to 8 hours of education, while 16 (30%) were provided with between 8 and 16 hours of education, another three (5%) received between 16 and 24 hours of education, and four (7%) received over 24 hours of education per year (see Table 10).

**Table 10. Hours of On-Site Education Offered Annually**

Hours of On-Site Education Offered Annually	Respondents (%)
None	25 (47)
Up to 8 hours per year	6 (11)
8 to 16 hours per year	16 (30)
16 to 24 hours per year	3 (5)
Over 24 hours per year	4 (7)
<b>Total</b>	<b>54 (100)</b>

Seven (13%) nurse respondents indicated that they had received compensation for attending ongoing educational events off-site with a mean of 36 hours of compensated time. The amount of dollars of compensation provided ranged from \$70.00 to \$600.00. The seven (13%) respondents indicated that the off-site education that they participated in was “required” education for them to practice in the home care clinical setting.

## 5.5

### Professional Knowledge Needs of Pediatric Home Care Nurses

The types of nursing knowledge and skills that pediatric home care nurses require were identified by nurse participants in this study. All of the *nursing knowledge and skill indicators* were identified as important aspects of pediatric home care nursing (see Figure 2). Indicators relating to caring for children with enteral feeds, listening to and communicating with parents, assessing family strengths and needs, providing care to children, caring for children with oxygen in the home, caring for children with multiple and complex problems, and providing infant care were considered the areas of greatest importance in terms of nursing knowledge and skill for pediatric home care.

**Figure 2. Professional knowledge needs of pediatric home care nurses**



## 5.6 Career Development Activities of Pediatric Home Care Nurses

Participants completed the *Career Planning Activities Measure* to identify activities that each has undertaken related to career planning including scanning, self assessment, reality checking, visioning, understanding opportunities and developing a career plan (McGillis Hall, Waddell, Donner & Wheeler, under review). A high score on this 5-point scale indicates a higher degree of use of the specific career planning activities. The mean scores for all of the career planning and development activities were above the midpoint of 3.00 suggesting that the pediatric home care nurses forming this study sample scored above average in scanning their environment, self-assessment activities, reality checks, creating their career vision, understanding their career options and developing a career plan (see Table 11).

**Table 11. Mean Scores for Career Planning and Development Activities**

Career Planning and Development Activities	$\bar{x}$ (SD)
Scanning your environment	3.83 (0.55)
Self-assessment	4.31 (0.41)
Reality check	4.02 (0.46)
Creating your own vision	3.44 (0.87)
Understanding your career options	3.70 (0.87)
Developing your career plan	3.20 (0.46)

## 5.7 Job Satisfaction of Pediatric Home Care Nurses

Nurses participating in this study completed the *McCloskey-Mueller Satisfaction Scale (MMSS)* (Mueller & McCloskey, 1990) which assesses satisfaction with specific facets of work including extrinsic rewards, scheduling, family/work balance, co-workers, interaction, professional opportunities, praise/recognition, and control/responsibility. A high score on this scale indicates a high degree of job satisfaction. The mean scores for most of the job satisfaction facets were above the midpoint of 3.00 suggesting that the pediatric home care nurses forming this study sample experienced moderately high levels of job satisfaction with the exception of extrinsic rewards (i.e., salary, benefits, and compensation) and professional opportunities (i.e., participation on committees, etc.; see Table 12).

**Table 12. Mean Scores for Job Satisfaction**

Job Satisfaction Facets	$\bar{x}$ (SD)
Extrinsic rewards	2.77 (0.94)
Scheduling	3.85 (0.90)
Family/work balance	3.64 (0.76)
Co-workers	4.18 (0.63)
Interaction opportunities	3.60 (0.82)
Professional opportunities	2.85 (0.60)
Praise and recognition	3.85 (0.78)
Control and responsibility	3.48 (0.68)
Overall	3.53 (0.57)

## 5.8 Organizational Commitment of Pediatric Home Care Nurses

Nurses participating in this study also completed the *Organizational Commitment Questionnaire* (Mowday, Steers, & Porter, 1979) to indicate their feelings about the particular organization in which they now work. A high score on this scale indicates a high degree of organizational commitment. The mean score for organizational commitment was 5.12 ( $SD=1.03$ ), well above the midpoint of 3.50 suggesting that the pediatric home care nurses forming this study sample experienced very high levels of organizational commitment.



# 6

## Chapter Six: Discussion

### 6.1 Overview

### 6.2 The Changing Face of Pediatric Home Care

### 6.3 Knowledge and Skill of the Pediatric Home Care Provider

### 6.4 Conclusions

#### 6.4.1 Workforce Planning

#### 6.4.2 Sector Linkages

### 6.5 Summary

## 6.1 Overview

Changes in government health care spending in the 1990's led to large-scale restructuring and changes to the way nursing care is provided. Pediatric patients requiring complex care are now discharged home earlier to be cared for in ambulatory or home care settings, resulting in a steady increase in the demand for home care services. Since the need for complex pediatric home care has escalated, it is unclear whether the distinction between adult and pediatric care requirements that exist in the acute care settings has been supported in home care. This project examined the unique skill and knowledge needs of today's pediatric home care nurses. The study was conducted with provider agencies, CCACs and institutions located in a large urban community. In this setting, the characteristics and volumes of pediatric home care clients may differ from those in rural settings or smaller urban communities. In addition, the sample size of nurse respondents was low thus limiting the generalizability of the results.

## 6.2 The Changing Face of Pediatric Home Care

Phase one surveys of senior personnel in CCACs and home care provider agencies supplied information on the pediatric client population they serve, the mechanisms currently in use to measure nursing productivity, and the individual strategies and efforts employed by their organizations to enhance the pediatric knowledge development of nurses. Health care provider agencies identified that the most common pediatric client diagnoses cared for by nursing staff were respiratory illnesses, post-operative cardiac diagnoses, wounds, burns, cancer, developmental delay and neurodegenerative disorders. Common pediatric nursing care procedures provided to these clients ranged from intravenous infusions and intravenous therapy teaching to ventilator management with tracheostomy care and suctioning. A multitude of highly technological equipment is commonplace for health care provider agencies. Many of the health problems, interventions, and technologies employed by nurses caring for pediatric patients in the home are complex. Pediatric patients may comprise a small number of the provider agency's clientele, but they are a highly resource-intensive group. Most pediatric home care is provided by resource-intensive "shift" nursing.

Consultation sessions uncovered a further wealth of information pertaining to the knowledge and skill requirements on hiring, the impact of a changing health care environment and future investments needed. The consultation sessions highlighted the challenges of providing pediatric home care nursing in Ontario. The current nursing shortage has caused excessive strain on those currently in the workforce, resulting in a stressful and demanding work environment. Combined with the increased acuity of cases being discharged from hospitals, nurses are required to sustain a more advanced skill set than historically required. The current pediatric home care nurse must possess a broad command of disease processes, advanced clinical and technical skills, an ability to teach many of those skills to families, and strong advocacy skills to traverse a complex and splintered network of services. The stakeholders interviewed in these four consultations implied the need for investment in the education and training of nurses, followed by improved and streamlined communication among professionals and enhanced day-to-day support of frontline pediatric home care practitioners. According to the participants, these measures would bring Ontario closer to sustaining a productive nursing workforce.

## 6.3 Knowledge and Skill of the Pediatric Home Care Provider

The minimum educational standard set by health care provider agencies for nurses working with pediatric patients was an RN Diploma, although some agencies were more stringent. Provider agencies offered newly hired nurses in-house classroom training and some added "in-home" orientation. Some facilities provided preceptorship for new "visiting" nurses and orientation was provided by an advance practice nurse. Pediatric education tailored to the specific needs of children and, in some agencies, the specific needs of individual nurses was included. Nurse participation in ongoing educational and career development opportunities was supported both financially and in terms of work scheduling. Agencies encouraged

annual upgrading and education, although there were no mandatory minimum standards for attendance. In some agencies attendance in the in-house education sessions provided was an expectation.

CCACs demand that home care provider agency nurses are compliant with the standards of practice of the College of Nurses of Ontario and within the Regulated Health Professions Act and hold current nursing education and/or work experience in pediatrics. CCACs require home care provider agencies to provide personnel with specialized training, certification, knowledge, and the ability to meet the needs of clients requiring child and family nursing services. The CCACs employ pediatric case managers who work exclusively with the pediatric clients and their families and have experience both in pediatrics and community settings. CCACs partner with other organizations, using their pediatric proficiencies to provide educational opportunities for nurses who provide care to pediatric clients and their families.

Surveys completed by nurses working in pediatric home care provided demographic information and identified indicators of nursing knowledge and skill. The majority of nurses surveyed were female and were RNs (rather than RPNs), most were diploma prepared and worked in shift nursing rather than visiting. The mean age of respondents in this study was 46 years of age. The nurses generally had substantial pediatric experience, less with specific experience in home care nursing. Most were satisfied with their work status.

When asked about the availability of on-site education, the majority of respondents indicated that nothing was available to them on-site. Of those who did attend educational sessions, just over a quarter indicated that they had received compensation for attending. For off-site educational programs most nurses reported attending at least one per year.

Knowledge and skills required to work in pediatric home care were identified and ranged from caring for children with enteral feeds to listening and communicating with parents. Regarding career planning, the pediatric home care nurses forming this study sample scored above average in scanning their environment, self-assessment activities, reality checks, creating their career vision, understanding their career options, and developing a career plan. Nurses in the sample experienced moderately high levels of job satisfaction with the exception of extrinsic rewards (i.e., salary, benefits, and compensation) and professional opportunities (i.e., participation on committees). Also, high levels of organizational commitment were detected in the sample.

## 6.4 Conclusions

Findings from this study begin to address an important gap in the literature and research on the area of nursing knowledge development in pediatric home care. A number of key issues have been identified. These were related to workforce planning as well as linkages and relationships between the acute care and home care sectors regarding care delivery for this population.

### 6.4.1 Workforce Planning

Similar to other sectors of the healthcare system, it is clear that pediatric home care has an aging nursing workforce. This study provides evidence of some specific needs related to succession planning for pediatric home care nurses. A number of extrinsic factors may influence the home care nursing workforce, such as the visible salary discrepancy with the hospital sector. Opportunities for continuing education for home care staff are needed, with incentives that overcome obstacles such as distance.

### 6.4.2 Sector Linkages

Communication and linkages between the acute care and the home care sector at the time of discharge are crucial for successful integration of the pediatric client back into his/her home. Ongoing consultation and communication is integral for this to occur. Staff in each sector should be sensitized to the challenges of both environments, through cross-training and consultation sessions.

## 6.5 Summary

The findings of this study provide the opportunity for dialogue between the acute care and home care sector on the following key priority areas:

- improving communication between providers, CCACs, hospitals, and other sectors within the health care continuum
- ensuring that new staff have the basic skill set
- providing regular updates for home care nurses
- maximizing technological opportunities for education and consultation
- communicating with Ryerson University regarding the pediatric nursing program (i.e., how it meets the needs from all sectors and what its outreach potential is for the province)
- providing opportunities for staff exchange experiences

As well, these findings provide the sector with needed information for further dialogue with the Ontario Ministry of Health and Long Term Care regarding nursing workforce planning and the salary and wage discrepancies between the sectors.

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