

**University of Alberta**

**Nurse Manager Retention**

**What are the factors that influence their intentions to stay?**

**By**

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## **Dedication**

This work is dedicated to my children, Matthew, Sarah and Iain Sinclair. It is my hope that I have instilled in them a love for life-long learning.

## **Abstract**

Recruiting well-qualified nurses into managerial positions is problematic because of the challenges associated with the role, the nursing shortage and the attraction of other opportunities within nursing. Leadership behavior is known to influence staff nurse retention and ultimately patient care outcomes, which makes it critical that we better understand what factors influence Nurse Managers' decisions to leave or stay in management positions. The results of a systematic literature review suggest that Nurse Manager retention is a multifactorial issue. A primary analysis of data from Nurse Managers was conducted as the second part of this study. Job satisfaction, work-life balance, empowerment and the ability to ensure quality patient care were identified to be influential retention factors. These findings should enable administrators to develop strategies in the areas of leadership development and creation of healthy work environments that will increase job satisfaction and ultimately retention. Further research to develop sound theoretical models of Nurse Manager retention is required.

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## **CHAPTER 1:**

### **INTRODUCTION**

#### **Statement and Importance of the Problem**

The Canadian Institute for Health Information predicts that Canada will have a nursing shortage of 113,000 nurses by 2016 making nurse retention an important issue. The staff nurse literature identifies strong leadership to be an influential factor in staff nurses' intentions to leave or stay in their positions (Boyle, Bott, Hansen, Woods & Taunton, 1999; Tourangeau & Cranley, 2006). Nurse Manager retention is also an international issue that requires additional inquiry (Duffield et al., 2001; Scott, 2002)

Failure to recruit and retain Nurse Managers not only has fiscal ramifications for the healthcare system, it fosters a climate of instability that has implications for patient care. Nursing leadership and the ability to retain staff nurses has been shown to impact the quality of patient care (Anthony et al., 2005; Kleinman, 2004; Laschinger, Almost, Purdy, & Kim, 2004; Mackoff & Triolo, 2008a; Volk & Lucas, 1991; Wong & Cummings, 2007). Strong leadership is required to solve complex problems related to nursing care delivery, provide structure and implement processes that ensure positive outcomes (Smith, Manfredi, Drummond & Moore, 2006). Leadership focused on building relationships is also essential for healthy work environments for health care providers (Cummings et al., 2010)

Research related to staff nurse retention can be found in abundance in the literature however, little research has been done in the area of Nurse Manager

retention. The nursing literature contains strong evidence to support the importance of leadership development (Cummings et al., 2010) which will become increasingly important over the next decade, as the nursing shortage becomes more acute, making it imperative that retention issues are addressed.

### **Research Objectives**

The purpose of the overall research was to gain more insight about what factors influence Nurse Managers' intentions to stay or leave their managerial positions and to determine if factors influencing intention to leave are the same or different than factors influencing intention to stay. In addition, their intentions to leave or stay were examined to determine if intent to stay or leave differed based on demographics.

### **Design and Methods**

This thesis is comprised of two independent studies. The first study is a systematic review of the current available literature to determine what studies have been conducted in the field of Nurse Manager retention. The data for the second study was derived from The SSHRC-funded QWEST study (2007-2010), a non-experimental cross-sectional four -phase study (Cummings, Principal Investigator). The main purpose of the QWEST study was to examine the emotional intelligence (EI) and leadership practices of first-line patient care managers in three contextual healthcare settings (acute care teaching, general community and long-term care facilities). Additional goals of the QWEST study included assessment of the impact of manager leadership practices on workplace empowerment and nurse perceptions of their quality of work life and culture of

patient safety. The second study reports the findings of primary data analysis of an electronic survey sent to front line managers in phase three of the QWEST study in the Edmonton region. My prior literature review results informed the decisions about what factors or variables were studied in Study 2.

### ***Study 1. Systematic Review of the Literature***

I conducted a systematic search of the current peer reviewed available literature published between the years of 1985 and November 2009. I accessed ten databases using the key search terms of patient *care manager\** or *manager\** or *middle manager\** or *administrator\** and *retention* or *intent to stay* or *intent to leave* or *commitment* or *turnover* and *nurses\** to find studies that examined factors related to the retention of nurse managers. To ensure complete capture of the available literature I consulted a University of Alberta librarian to determine appropriate search strategy approaches. I purposely limited the literature search to Nurse Managers, as this is my area of interest and in the province of Alberta, most clinical managers have a nursing background (QWEST 2007-2010). I included both qualitative and quantitative studies, and searched appropriate web sites. I manually accessed and evaluated reference lists of articles and unpublished thesis and dissertations to ensure completeness.

I found 13 studies, eight quantitative and five qualitative studies that met inclusion/exclusion criteria. From this literature, I identified a total of 25 factors that influence Nurse Managers' intention to stay or leave their managerial positions. I found a wide variety of retention terms in the included studies, meaning a particular variable might have been examined by one author from an

intent to stay perspective, while another examined the same variable from an intent to leave perspective. Other terms used included longevity, reasons for staying or leaving and reasons to resign. The lack of consistency in terminology makes it difficult to conclude which variables are related to retention and which are related to turnover.

Through the process of content analysis, I categorized the factors into the three main themes of organizational, role and personal factors. Key organizational factors included organizational values/culture, human/fiscal resources, leadership behavior, communication and support. Personal factors included suitability of work with qualifications and skills, personal values, kinship, job satisfaction, work-life balance and feeling valued. Role factors included work overload, unclear expectations and lack of feedback. Several factors were depicted to be common to two or all spheres such as communication, job satisfaction, empowerment, work-life balance, ability to ensure quality of care and support.

### ***Study 2: Data Analysis of Research Survey***

The analysis reported in Study 2 uses only the manager survey data collected in phase three of the QWEST study. The survey included questions about the following areas: work unit information, unit characteristics, unit staffing and resources, programmatic and structural changes, unit work environment, time spent on managerial tasks, work relationships, work life as a manager, relationship with work, professional development, span of control and demographic information such as age, sex, level of education and years of experience in the profession and as a manager. In addition front line managers

were asked to rate the importance of a series of factors related to their reported intent to leave or stay in their current position for another two years.

The data were analyzed using a variety of analytical steps that included comparison of means, significance testing, and multiple regression model testing. Results showed that empowerment, leadership behavior and job satisfaction were the most significant factors related to Nurse Managers' intentions to stay.

### **Overview of the Thesis**

Beyond this integrating chapter, I have a second chapter that is the first paper of the thesis: a systematic review of the factors related to retention of Nurse Managers and a third chapter that presents the findings of a study that examines factors that are related to Nurse Manager retention through primary analysis of data collected through an electronic survey. The data-collection methods are described followed by the results of the data analysis. The findings of the analysis are then presented. The chapter concludes with the limitations of the study, as well as the implications and recommendations for areas of further research in the area of Nurse Manager retention.

### ***Limitations***

It is possible that the managers included in the literature review were not front line managers, as the reporting structure was not well described in the included studies. I found a dearth of available literature about Nurse Manager retention. Of the 13 studies, eight were quantitative studies of moderate strength and five were qualitative studies.

The QWEST manager survey, circulated to front line managers in the Edmonton region May 2009, occurred at a time when all health regions underwent amalgamation into one provincial health region. As a result, there was major restructuring of management positions resulting in a loss of managerial positions. This may have skewed the results of the survey but also provided a unique opportunity to gain greater insight into factors that are related to Nurse Manager retention during a period of uncertainty in which many Managers were unsure if they would still have a job and were considering options.

A third limitation is my inability to analyze the data from the question in the manager study that asked those indicating intent to stay and those indicating intent to leave to rate the importance of 15 factors as one sample. The questions were written in such a way that the questions asked to those intending to stay could not be assumed to be the direct opposite as the questions presented to those indicating intent to leave. This limited the type of statistical analysis that could be performed. In addition, this left two small sample sizes, limiting the generalizability of the results. In future studies, larger sample sizes would allow for robust analysis of factors that may differentially influence those intending to stay from those intending to leave.

### **Significance of the Study Results for Nursing**

The results of this study should be of interest to administrators. A deeper understanding of the factors that influence Nurse Managers to stay or leave managerial positions would aid in the development of recruitment and retention strategies for Nurse Managers. It is essential that as the baby boomer generation

retires leaving a gap in organizational knowledge as well as clinical and managerial experience, we are able to continue to ensure quality of patient care through successful retention of staff nurses. Retention of effective Nurse Managers is a key component to realizing this goal.



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## **CHAPTER 2**

### **STUDY 1: FACTORS INFLUENCING RETENTION OF NURSE MANAGERS: A SYSTEMATIC REVIEW OF THE LITERATURE**

#### **Background**

A national study, published by the Canadian Nurses Association, predicts Canada will be short almost 60,000 full-time equivalent Registered Nurses (RNs) by 2022 (Canadian Nurses Association, 2009). A cross national comparison study done in 2001 that included 43,329 nurses from the US, Canada, England, Scotland and Germany showed that between 16.6% and 38.9 % of all nurses reported intentions of leaving their positions within the next year (Aiken et al., 2001) . These statistics have implications for healthcare administration. Combined with a major shift toward more clinical opportunities for advanced practice nurses, it is becoming increasingly difficult to attract experienced nurses into administrative positions, particularly to middle management positions (Ruden, 2002). Consequently, managers often hired without appropriate experience or qualifications to handle the increasingly complex responsibilities required of today's managers, are required to cope with the present complex health care environment (Coughlin, 2002). This is important as strong effective Nurse Managers play an important role in staff nurse retention and ultimately the quality of patient care (Anthony et al., 2005; Kleinman, 2004a; Laschinger et al., 2004; Mackoff & Triolo, 2008a; Volk & Lucas, 1991; Wong & Cummings, 2007).

In 2006, more than one fifth of the RN workforce in Canada were aged 55 years or older with over half having graduated from their initial school of nursing more than 20 years ago (Canadian Institute for Health Information, 2006). A

recent Canadian Study that examined the profile of nursing leadership throughout ten provinces revealed that few senior nurse leaders were under 45 years of age with most being between 46 to 55. In addition, only 2.2% of first line managers and 6.3% of middle managers were 25-35 years of age. When manager's years of management experience was examined, 40% of managers had less than five years of experience and were 44 – 55 years of age, which means that nurses under 40 are not attracted to management positions (Laschinger et al., 2008). The advancing age of Nurse Managers and Directors, the knowledge that there are now multiple job opportunities within nursing and the general negative perception of the role of nurse managers emphasizes the need to understand the issues associated with the retention of nurse managers (Laschinger et al., 2008; Ruden, 2002).

Hospital restructuring over the last decade has resulted in a loss of management positions. Between 1994 and 2002, there was a 29% reduction in managerial positions across Canada (Laschinger et al., 2004). The Canadian Institute for Health Information 2006 statistics reported an additional decrease of 2.2% in managerial positions since 2003. In Alberta, further restructuring of managerial positions in 2009 resulted in a loss of 100 managerial positions province wide leading in increased spans of control and workloads (Calgary Herald, 2009).

Retention of nurse managers is not just a problem unique to Canada as revealed by a profile of first line managers done in New South Wales, Australia over a ten-year period from 1989 to 1999 (Duffield et al., 2001). This study revealed that fewer managers intended to stay in nursing management, 82.4 %

compared to 72.7 % in 1999. In 1999, of those managers who intended to leave their managerial positions, 39.3% reported plans to move into a clinical position compared to 29.1 % in 1989 (Duffield et al., 2001). The National Health Service (NHS) in the UK also reports having a high turnover of managers particularly since the introduction of Trusts<sup>1</sup> as providers of health services (Scott, 2002). This has led to instability within these organizations (Scott, 2002). The existing and looming increase in the nurse shortage combined with a decrease in managerial positions due to restructuring has resulted in increased expectations, and the need for well-qualified committed managers. Therefore, there is a critical need to examine factors that influence the retention of Nurse Managers.

Factors related to retention of staff nurses have been well documented in the literature but little has been published about the factors that have a direct or indirect impact on the retention of nurse managers, particularly those in middle management. The purpose of this paper is to describe the findings of a systematic review of studies that examined factors related to the retention of nurse managers in healthcare organizations and to make recommendations for further study.

## **Methods**

### ***Search Strategy, Data Sources and Screening***

In this review, managers were defined as nurses with responsibility for nursing and acute care patient areas in any healthcare facility. Middle managers were defined as having at least one level of management above their level and

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1. Trusts -a self-governing administrative body within the NHS; usually a group of hospitals [http://en.wikipedia.org/wiki/NHS\\_trust](http://en.wikipedia.org/wiki/NHS_trust)

supervise at least one level of management. Front-line managers were defined as having no level of management below them but may have charge nurses, supervisors or team leaders who report directly to them (Laschinger et al., 2008). Electronic databases searched included ABI Inform, Academic Research, Nursing & Allied Health Source, Dissertations & Thesis, CINAHL, ERIC, Health Source, Medline, Health Star, Psych Info and Embase.

The reference lists from all retrieved articles were manually searched to ensure completeness. Websites were accessed for relevant research reports including Canadian Journal of Nursing Leadership [http://secure.cihi.ca/cihiweb/products/workforce\\_trends\\_of\\_rns\\_2006\\_e.pdf](http://secure.cihi.ca/cihiweb/products/workforce_trends_of_rns_2006_e.pdf) , the American Organization of Nurse Executives (AONE) <http://www.aone.org/> and the Canadian Institute of Health Information (CIHI) <http://secure.cihi.ca/cihiweb/splash.html>. A Health Services librarian from the University of Alberta was consulted to determine the most appropriate search strategy for this area of research. Key search terms used included *manager\** or *patient care manager\** or *middle manager\** or *administrator\** and *retention* or *intent to stay* or *intent to leave* or *commitment* or *turnover* and *nurse\** to find studies published between 1985 and November 2009 that examined factors related to the retention of nurse managers. See Table 1 for detailed search strategy.

**Table 1**  
***Literature Search Strategy***

<b>1985 – November, 2009</b>		<b>Search Terms</b>		
ABI InformAcademic Research		Retention		
CINAHL	Administrator*			
Nursing & Allied Health Source		Intent to stay		
EMBASE	Patient care manager*			
ERIC		Intent to leave		
Health Source Nursing		AND	AND	Nurse*
Health Star	Manager*			
Proquest Dissertations and Thesis		Commitment		
Psych INFO	Middle manager*			
Medline		Turnover		

### ***Inclusion Criteria***

Titles, abstracts and studies were included if they met the following inclusion criteria: (1) peer reviewed research; (2) measured factors influencing nurse manager retention; (3) quantitative or qualitative research designs or doctoral dissertations to ensure a wide range of evidence was available for analysis; and (4) the study sample included front line nurse or patient care managers.

### ***Screening***

I reviewed each abstract twice applying the inclusion criteria. Due to the large volume of abstracts and my English only proficiency, this review was restricted to English language articles. Studies were excluded if they did not clearly measure retention or did not measure predictors of retention in the quantitative studies or describe the relationship between factors and manager's decisions to stay or leave in the qualitative studies. The definition of a nurse

manager was not well defined in most studies, so it is possible that some managers in some studies did not meet the definition of middle or front-line managers used in this study. These studies were included as they were generally referred to as middle or front line managers responsible for more than one unit on a 24-hour basis. A second reviewer separately evaluated a sample of 10 articles using the inclusion criteria. Inter-rater reliability was 100%.

### ***Data Extraction***

The data elements I extracted from the quantitative studies included: author, journal, country, date of publication, research purpose and questions, theoretical framework, design, setting, subjects, sampling method, measurement instruments, reliability and validity, analysis, retention measures, predictors, and significant and non-significant findings. Data elements extracted from the qualitative studies included: author, journal, country, date of publication, theoretical framework/justification for the research, subjects, sampling method, method, rigour, analysis and results. The qualitative content was read and re-read several times with the intent of synthesizing common themes across the studies.

### ***Quality Review***

I reviewed each published quantitative study at least twice using a quality-rating tool adapted from an instrument used in previous studies (Cummings & Estabrooks, 2003; Estabrooks, Floyd, Scott-Findlay, O'Leary, & Gushta, 2003) . The adapted a tool allowed me to assess the research design, sampling method, measurement and statistical analysis of each included study. See Appendix A and B for quantitative study quality assessment tool. The tool is comprised of 13 items



with a possible total score of 13 points with all items given a weight of one point each. Scoring categories were as follows; high quality (10-13), moderate (5-9) and low (0-4). I screened and assessed the qualitative studies for suitability using the electronically retrieved Critical Appraisal Skills Programme (CASP) screening tool for qualitative studies (Public Health Resource Unit, 2006). See [http://www.phru.nhs.uk/Doc\\_Links/Qualitative%20Appraisal%20Tool.pdf](http://www.phru.nhs.uk/Doc_Links/Qualitative%20Appraisal%20Tool.pdf) for an example of the CASP assessment tool. I assessed the qualitative studies for appropriateness of research design, sampling, data collection, ethical issues and data analysis.

### ***Synthesis of Results***

I used content analysis to synthesis the results from both the quantitative and qualitative studies. Content analysis refers to a systematic means of categorizing the content or in this case factors or variables into themes (Burns & Grove, 2009). I examined each of the factors for: number of times cited, in what context and how important they were determined to be in influencing Nurse Managers' intent to leave or stay in their current position

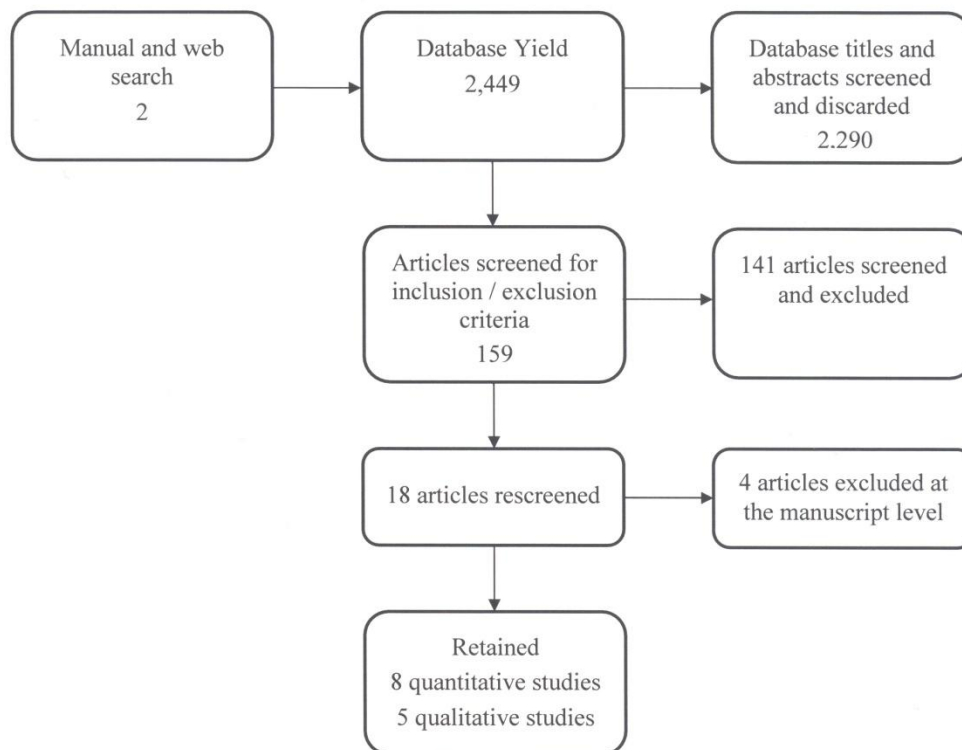
## **Results**

### ***Search Results***

The electronic database, the online Internet search and the manual searches of reference lists yielded a total of 2,449 titles. Of the 2449 titles screened, 159 articles were retrieved and screened with 2290 discarded based on exclusion criteria. Eighteen articles were reread in greater depth for inclusion criteria, of which 13 (eight quantitative and five qualitative) met the required

criteria. See Figure 1 for summary of search results.

**Figure 1 Search and retrieval process**



Six of the studies were conducted in the United States (USA), four in Canada, one in Sweden, one in England, and one in New South Wales, Australia. Most of the practice settings in each study were described as acute care with only one giving a breakdown of academic versus community hospital. The studies were published between 1990 and 2008. See Table 2 for characteristics of the included quantitative studies. See Table 3 for characteristics of the included qualitative studies.

**Table 2*****Characteristics of Included Quantitative Studies***

Author(s) year and Journal	Design / Analysis	Subjects/Sample/setting	Framework	Measurements	Scorings	Reliability	Validity
Cavanaugh (1990) Journal of Advanced Nursing	Cross sectional Survey Stepwise regression	Nurse Managers n= 83 Profit and non-profit hospitals in greater Los Angeles area	Not reported	Price & Mueller assessment of variables	Interval score	Overall $\alpha=0.83$	Factor Loading
Johnstone (2003) Collegian	Cross sectional Survey Stepwise regression	Nurse Managers n= 803 Data retrieved from New South Wales Health Workforce Planning Unit's database	Not reported	Project specific survey	Select statement from 14 Rank statements	Not reported	Not reported
Laschinger et al., (2008) Healthcare Review	National Cross sectional Correlational	Nurse Leaders n= 1,164 Academic and community hospitals in 10 Canadian hospitals	Conceptual model	Self report standardized measures	Separate scores for each variable	$\alpha=0.74-0.93$	Construct
Littell (1995) University of Texas Dissertation	Correlational using factor and regression analysis	Nurse Managers n= 290 Acute care hospital in the United States	Revised Organizational Climate Model	Nurse Job Satisfaction Scale	5 point Likert Scale 26 items	$\alpha=0.89$	Face
Mitchell (2007) Nova Southeastern University Dissertation	Electronic survey Factor analysis	Nurse Leaders n= 423 American Organization of Nurse Executives	Cognitive Consistency Research Model	Allen organizational commitment scale McDonald & Ganz Value Taxonomy	7 point Likert Scale	$\alpha=0.59-0.85$	Construct
Scott (2002) Journal of Management In Medicine	Correlational with qualitative component Not reported	Service Managers n= 33	Not reported	Self report	Not reported	Not reported	Not reported
Skytt et al. (2007) Journal of Nursing Management	Descriptive Retrospective using questionnaires and exit letters	Nurse Leaders n= 32 2 hospitals in a county council in Sweden	Not reported	Study specific questionnaire	Dichotomous Outcome	Not reported	Not reported
Way et al. (2007) Journal of Nursing Administration	Descriptive correlational	Clinical Managers n= 104 from 3 institutional boards in Newfoundland and Labrador	Organizational commitment & intent to stay model	Intent to quit & job search scale	Items rated 1-5	$\alpha=0.75$	Not reported

**Table 3**  
***Characteristics of Included Qualitative Studies***

Author(s) year and Journal	Design	Subjects/Sample/Setting	Framework/Justification	Data Collection	Rigor
AONE (1994) Nursing Management	Focus Groups	Nurse Managers n= 340 New York, Philadelphia,, Illinois, Florida, Unites States	40% of previously surveyed NM who had indicated they would leave their position within 6months would not return to a management position	Focus groups	Not reported
Mackoff & Triolo (2008a) Part 1 Dimensions Journal of Nursing Administration	Interviews	Nurse Managers n= 30 6 hospital settings in United States	Short tenure of NM suggests need of new model of engagement that translates into longevity	Individual interviews guided by NM engagement questionnaire	Questionnaire tested by pilot group of NM in 6 different cities
Mackoff & Triolo (2008b) Part 2 Culture Journal of Nursing Administration					
Parsons & Stonestreet (2003) Journal of Nursing Economics	Interviews	Nurse Managers n= 28 5 hospitals Southwest United States Mixture of large tertiary and outlying facilities	Importance of NM in staff nurse retention  Ecological framework-Health promoting organizations model	Open ended data generating questions	Data reviewed repeatedly for themes Electronic audit trail Peer reviewed Results validated with participants
Provost (2006) Royal Roads Thesis	Interviews Surveys	Service Managers Potential Managers n= 27 4 urban acute care sites of Vancouver Coastal Health, British Columbia, Canada	Urgent need to plan for leadership succession	Action research	Survey questions piloted  Two groups  4 sites
Strelloff (2007) Royal Roads Dissertation	Focus groups Individual Interviews	Patient Care Managers/Assistant Patient Care Managers n= 6 Operating Nurses from acute care facilities in Calgary, Alberta, Canada	High NM vacancy rate in Calgary ORs	Individual interviews  Focus groups	Questions piloted Use of graphic artist to corroborate data Participants validated data Identification of bias

### *Quality Assessment*

In the assessment of the eight quantitative studies, seven were rated moderate or higher (scores  $\geq 5$ ) and were retained. The eighth study was a combined quantitative/qualitative study. It was rated as a low quality quantitative study with a score of three and was retained due to the value of the qualitative material. In total, six of the eight quantitative studies were rated as moderate quality.

The main weaknesses of the quantitative studies were the low response rates (6/8)  $< 60\%$  and non-justified sample size (5/8). Four of the eight studies did not report measuring the dependent variable with a valid instrument and four of the studies did not have internal consistency scales of  $>70\%$ . The main strengths of the quantitative studies were that they were multicentre studies (8/8), were guided by theory (6/8), were prospective (7/8) and used a valid tool to measure independent variables (6/8). See Table 4 for summary of the quality assessment of the quantitative studies.

Of the five qualitative studies, one was a master's level thesis (Provost, 2006) and one was a doctoral Dissertation (Strelloff, 2007). The main weakness of the qualitative studies was the lack of discussion regarding rigor (3/5), two had in depth discussion of rigor and one included a brief discussion on measures and strategies used to ensure rigor. The qualitative studies were all retained as they met the guidelines for quality in each category according to CASP.

**Table 4**  
**Summary of Quality Assessment of the Quantitative Studies (n=8)**

Criteria	Studies	
	Yes	No
<b><i>Design</i></b>		
Prospective studies	7	1
Used Probability sampling	0	8
<b><i>Sample</i></b>		
Appropriate / Justified sample size	3	5
Sample drawn from more than one site	8	0
Anonymity protected	6	6
Response rate > 60%	2	6
<b><i>Measurement</i></b>		
Factor measured reliably	5	3
Factor measured using a valid instrument	6	2
Dependant variable measured using a valid instrument	4	4
Internal consistency of scale > 70%	4	4
Theoretical model/framework	6	2
<b><i>Statistical analysis</i></b>		
Correlations analyzed when multiple factors studied	5	3
Management of outliers managed	1	7

### ***Analytical Findings***

I was able to identify a total of 25 factors influencing Nurse Managers' intent to stay or leave. I was able to synthesize the 25 factors into three overall themes of: organizational (institutional), position (role) and personal (individual) factors. For the purpose of this literature review, I defined organizational factors to be variables that may be perceived to be within the organizations power to change or influence and potentially impact the Nurse Manager's work life. I defined role or position factors to be variables inherent to the Nurse Manager's role. I defined personal or individual factors as variables that are important to the individual Nurse Manager's because of their own personal beliefs, personal life, and life experience. Some factors were conceptualized to be unique to one theme

while others were conceptualized to influence Nurse Managers' intent to stay or leave their current positions in more than one of the themes.

Table 5 provides a summary of the factors, retention term, and significance of the findings reported to influence the Nurse Managers' intention to leave or stay for both the quantitative and qualitative studies. The qualitative studies identified additional factors such as the lack of succession planning, communication issues, lack of empowerment and the ability to provide quality patient care. The results of individual interviews or focus groups that were held with Nurse Managers in the qualitative studies validated the quantitative findings providing a deeper and more comprehensive understanding of Nurse Manager retention issues.

**Table 5**  
***Factors Influencing Nurse Manager (NM) Intent to Stay or Leave***

Theme	Retention Factor	Retention Term	Findings	Source
Organizational	Values/Culture	Intent to stay	Significant Positive perception of culture correlated with greater trust and intent to stay	Way et al., (2007)
		Longevity	Employees beliefs about how much organizations value their contribution and well being are linked to positive emotional commitment and high levels of performance	Mackoff & Triolo (2008a, 2008b)
		Intent to leave	Significant relationship	Mitchell (2007)
		Succession plan that will keep Nurse managers engaged in their workplace	Culture of learning important	Streliaoff (2007)
		Recruitment and retention	Principle dissatisfier	AONE (2004)
	Human/Fiscal resources	Nurse Manager retention	Managers expressed burden of dealing with inadequate resources	Parsons & Stonestreet (2003)
		Succession plan that will keep Nurse managers engaged in their workplace	Lack of resources added to workload and role overload	Streliaoff (2007)
		Nurse Manager retention	Overreaching theme	Parsons & Stonestreet (2003)
	Communication	Succession plan that will keep Nurse managers engaged in their workplace	Team communication strategies pivotal	Streliaoff (2007)
		Nurse Manager retention	Need for effective resource management, orientation, professional development and adequate compensation	Parsons & Stonestreet (2003)
	Effective administration systems	Succession plan that will keep Nurse managers engaged in their workplace	Inadequate compensation and unjust for the amount of responsibility and accountability	Streliaoff (2007)
		Intent to leave	Leadership style of senior management negatively correlated	Laschinger (2008)
	Leadership behavior	Succession plan that will keep Nurse managers engaged in their workplace	Leadership style/behavior pivotal Transformational leadership preferred	Streliaoff (2007)
		Succession plan that will keep Nurse managers engaged in their workplace	Remains an issue, felt inadequate support by all professional and administrative levels	Streliaoff (2007)
	Vertical /horizontal violence			

(table continues)



Theme	Retention Factor	Retention Term	Findings	Source
	Lack of succession planning	Succession plan that will keep Nurse managers engaged in their workplace	Has created a gap between need for qualified candidates and lack of prepared candidates	Strelioff (2007)
	Feedback / Support / Feel valued	Recruitment and retention	Often lacking	AONE (1994)
		Nurse Manager retention	Getting feedback very important	Parsons & Stonestreet (2006)
		Succession plan that will keep Nurse managers engaged in their workplace	Lack of recognition resulted in a sense of being devalued	Strelioff (2007)
			Important to build network of support	
			Mentoring important	
		Recruitment and retention	Compensation related to perceived organizational support	Provost (2006)
			Do not feel the manager role is valued	
		Intent to stay Intent to leave	Positively significant relationship with intent to stay	Scott (2002)
		Reason to resign	Support is close but difficult to get	Skytt et al., (2007)
	Organizational commitment	Intent to leave	Significant positive correlation	Mitchell (2007)
	Empowerment		Greatest predictor of intent to leave	
		Nurse Manager retention	Important to be allowed to use own judgment, not be micromanaged, be given opportunities to handle things on their own	Parsons & Stonestreet (2003)
Role	Trust	Intent to stay	Significant positive correlation	Way et al., (2007)
		Intent to stay	Significant positive correlation	Way et al., (2007)
	Unclear role expectations		Significant positive correlation	Way et al., (2007)
		Intent to stay	Need for competency requirements	Cavanaugh (1990)
		Recruitment and retention	Expectations unclear, more implied than clearly defined	Provost (2006)
		Reason to resign	Authority and mandate not clear	Skytt et al., (2007)
		Succession plan that will keep Nurse managers engaged in their workplace	No congruence among managers regarding competencies	Strelioff (2007)

(table continues)

Theme	Retention Factor	Retention Term	Findings	Source
Support		Recruitment and retention	Often lacking	AONE (1994)
		Reason to resign	Support is close but difficult to get	Skytt et al., (2007)
		Succession plan that will keep Nurse managers engaged in their workplace	Not all participants believed effective mentoring/support exists	Strelloff (2007)
		Nurse Manager retention	Ability of boss to listen and provide guidance	Parsons & Stonestreet (2006)
Empowerment		Recruitment and retention	Having the power to effect change a role satisfier	AONE (1994)
		Longevity	Empowers nursing practice, facilities goal attainment	Mackoff & Triolo (2008a, 2008b)
		Nurse Manager retention	Important to be allowed to use own judgment, not be micromanaged, be given opportunities to handle things on their own	Parsons & Stonestreet (2006)
		Recruitment and retention	Need to feel they make a difference and have autonomy for decision making	Provost (2006)
Work/life imbalance		Nurse Manager retention	Successful personal practices to attain balance i.e. Limit hours worked, exercise, accept cannot do anymore	Parsons & Stonestreet (2006)
		Succession plan that will keep Nurse managers engaged in their workplace	Found to be the most significant factor Expressed desire to improve work-life balance	Strelloff (2007)
Span of control		Intent to leave	Increased span of control positively correlated with intent to leave	Laschinger (2008)
		Recruitment and retention	Too large Crucial element in manager workload	Provost (2006)
Leadership behavior		Intent to leave	Leadership style of senior management negatively correlated	Laschinger (2008)
		Succession plan that will keep Nurse managers engaged in their workplace	Leadership style/behavior important Transformational leadership preferred	Strelloff (2007)
Feedback		Nurse Manager retention	Getting feedback very important	Parsons & Stonestreet (2006)
		Intent to stay Intent to leave	Not statistically significant (small numbers)	Scott (2002)
			Staff development important	Strelloff (2007)
(table continues)				

Theme	Retention Factor	Retention Term	Findings	Source
Personal	Communication	Nurse Manager retention	Overreaching theme	Parsons & Stonestreet (2006)
		Succession plan that will keep Nurse managers engaged in their workplace	Multiple team communication strategies pivotal	Strelioff (2007)
	Ability to ensure quality of patient care	Nurse Manager retention	Managers reported having bottom line for leaving-when could no longer ensure quality of care	Parsons & Stonestreet (2006)
		Longevity	Culture of excellence	Mackoff & Triolo (2008a, 2008b)
	Lack of succession planning	Succession plan that will keep Nurse managers engaged in their workplace	Critical in successfully retaining NM	Strelioff (2007)
		Recruitment and retention	Critical in successfully retaining NM	Provost (2006)
		Intent to stay	Significant positive correlation	Way et al.,
	Feel valued	Recruitment and retention	Recognition from patients, staff, physicians, and upper management	AONE (1994)
		Longevity	Employees beliefs about how much organizations value their contribution and well being are linked to positive emotional commitment and high levels of performance	Mackoff & Triolo (2008a, 2008b)
		Recruitment and retention	Do not feel the manager role is valued	Provost (2006)
		Intent to stay Intent to leave	Positively significant relationship with intent to stay	Scott (2002)
	Kinship/family	Intent to stay	Most important factor predictor for turnover	Cavanaugh (1990)
	Right qualifications and skills for the job	Reasons for staying or leaving	Second most important factor for staying	Johnstone (2003)
		Nurse Manager vitality and longevity	Identified ten signature behaviors that revealed the experiences, capabilities and attributes of long-term individual nurse managers	Mackoff & Triolo (2008a, 2008b)
		Succession plan that will keep Nurse managers engaged in their workplace	A variety of individual attributes including personality, temperament, needs, motives and values, moral purpose required	Strelioff (2007)
	Personal values	Intent to leave	No significant relationship	Mitchell (2007)
				(table continues)

Theme	Retention Factor	Retention Term	Findings	Source
Organizational Role Personal	Job satisfaction	Reasons for staying or leaving	Ranked most important reason for staying	Johnstone (2003)
		Intent to leave	Positively significant relationship with intent to stay	Laschinger (2008)
		Job longevity	No relationship between job satisfaction and longevity	Littell (1995)
		Recruitment and retention	Related to work load, administrative support, compensation, perceived organizational support, ability to affect change and autonomy	Provost (2006)
		Intent to stay	Significant positive correlation	Way et al., (2007)

### ***Organizational Factors***

Ten of the fourteen studies identified 12 organizational factors. The most frequent organizational factor cited to influence the intent to stay, intent to leave, longevity or retention was *organizational culture and values*, specifically pertaining to lifelong learning, respect for employees and the value the organization puts on the strive for excellence (Mackoff & Triolo, 2008a, 2008b); Mitchell, 2007; Parsons & Stonestreet, 2003; Strelloff, 2007; Way et al., 2007).

Other factors included *adequacy of human and financial resources* (American Organization of Nurse Executives, 1994; Parsons & Stonestreet, 2003; Strelloff, 2007), effective *communication*, (Parsons & Stonestreet, 2003; Strelloff, 2007) and *effective administrative systems* (Parsons & Stonestreet, 2003; Skytt, Ljunggren, & Carlsson, 2007; Strelloff, 2007).

Strelloff (2007), found *leadership behavior* that displayed transformational leadership qualities, the presence of *vertical and horizontal violence* and *lack of succession planning* to be factors influencing retention in her study population of operating room Nurse Managers in Calgary, Alberta in her qualitative dissertation. Laschinger et al. (2008) found that when senior leaders were perceived by middle and front line managers to be a transformational leader, they reported lower turnover intentions.

The factors of *feedback* and *support* were found to be significant related to intention to leave or stay in six of the 14 studies. Nurse Managers that felt valued and received what was perceived to be adequate feedback had greater intentions to stay. Lack of recognition was reported to result in a sense of being devalued

and the manager role in general was felt not to be valued. Support through mentorship or building a network of support within the organization was felt by study participants to be essential (American Organization of Nurse Executives, 1994; Parsons & Stonestreet, 2003; Provost, 2006; Scott, 2002; Skytt et al., 2007; Streliaff, 2007).

Mitchell (2007) reported *organizational commitment* had a positive correlation with intent to leave and was the greatest predictor of intent to leave in this study. The ability of organizations to empower managers was positively correlated with intent to stay (Way et al., 2007), with Parsons and Stonestreet (2003) citing the importance of allowing Nurse Managers to use their own judgment, not be micromanaged, and be given opportunities to handle situations on their own. Way et al. found the level of *trust* and *job satisfaction* of Nurse Managers' had for their employer explained 47% of the variance in intent to stay.

### ***Role factors***

Seven of the 13 studies identified eight factors that can be related to the managerial role. The most frequently identified factor related to intention of leaving or staying in a managerial positions was unclear *role expectations* (Cavanagh, 1990; Provost, 2006; Skytt et al., 2007; Streliaff, 2007). *Lack of support* for the Nurse Manager was identified by AONE (1994,) Streliaff, Skytt et al., and Provost and Stonestreet to be related to Nurse Manager's intent to leave their positions.

Parsons and Stonestreet (2003), Provost (2006), Mackoff and Triolo (2008) and AONE (1994) all identified *empowerment* or lack of empowerment to

be related to job longevity, intent to leave or retention. Nurse Managers' felt they needed to have the power to effect change, use their own judgment, and be given opportunities to handle difficult situations on their own.

The lack of enough time to complete tasks specific to the Nurse Manager's role resulting in *work/life imbalance* was a recurrent theme for Strelloff (2007), Parsons and Stonestreet (2006). Study participants identified the need to limit hours worked, accept that they cannot do anymore, and find outside interests were important strategies for improving work-life balance. Laschinger et al. (2008) identified increased *span of control* to be associated with intent to leave while Provost (2006) identified large span of control was a crucial element in manager workload.

Laschinger et al. (2008) found that *leadership behaviors* of senior management that are not transformational are related to Nurse Managers' intent to leave. This supports Strelloff's (2007) qualitative study finding of leadership behavior or style to be important to Nurse Managers with transformational leadership being the preferred style. Adequate and appropriate *feedback*, good *communication* between senior management and the Nurse Managers' and among teams in general were identified as influential role factors (Parsons & Stonestreet, 2003; Scott, 2002; Strelloff, 2007).

Parsons and Stonestreet (2006) and Mackoff and Triolo (2008a, 2008b) found the *ability to ensure quality of care* was an important retention factor, with not being able to ensure quality of care; some respondents reported the inability to ensure quality of care as being their bottom line for leaving. The study

participants in both Strelloff's (2007) and Provost's (2006) qualitative studies felt succession planning was critical in successfully retaining Nurse Managers.

### ***Personal Factors***

Seven studies identified four personal factors that related to Nurse Manager retention. Most frequently cited personal factor was the importance of *feeling valued* by the organization, peers and staff. How much the organization valued their contributions was linked with emotional commitment and high levels of performance (AONE, 1994; Mackoff & Triolo, 2008a, 2008b; Provost, 2006; Scott, 2002). Johnstone's (2003) study found *kinship/family commitments* to be the most important predictor for turnover and Mitchell (2007) did not find a significant relationship between *personal values* and intent to leave.

The respondents in Johnstone's (2003) study felt it was important to have the *right qualifications and skills* for the job. Mackoff and Triolo (2008a, 2008b) identified a set of signature behaviors that if held by Nurse Managers' increased the likelihood of staying in a managerial position. Strelloff (2007) also identified certain traits or distinguishing characteristics and skills that influence the behavior of an individual that make success in a managerial role likely. These included personality, temperament, needs, motives and values, integrity, sense of moral purpose and emotional maturity.

### ***Job Satisfaction***

I felt job satisfaction is likely a result of a combination of organizational, role and personal factors so for reporting purposes will be discussed separately. Four of the fourteen studies identified the over-arching variable of job satisfaction

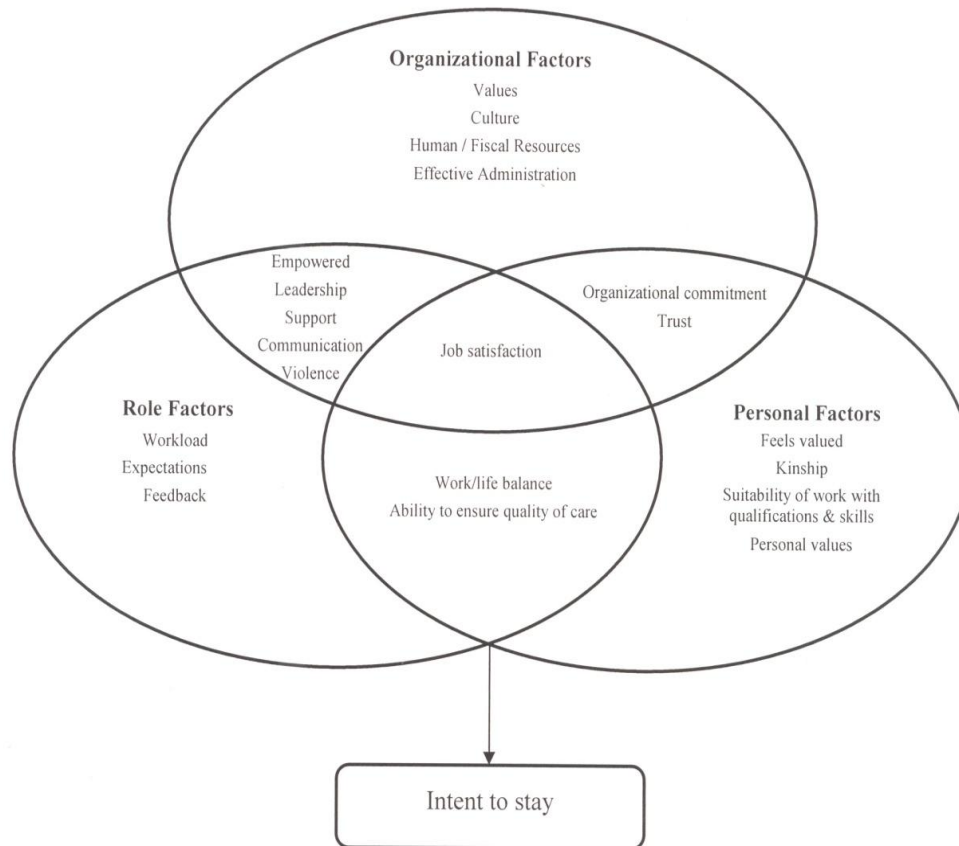


as a significant factor. Job satisfaction was identified by Laschinger et al. (2008), and Way (2007) to be positively correlated with Nurse Managers' intent to stay. This supports Johnstone's (2003) study, which ranked job satisfaction as the most important reason for leaving or staying in their position. Provost's (2006) study reported that Nurse Managers' job satisfaction was related to workload, administrative support, compensation, perceived organizational support, ability to affect change, autonomy, organizational structure and support. However, Littell (1995) study found no significant relationship between longevity and job satisfaction but found that Nurse Managers in their positions for a shorter length of time reported greater satisfaction.

### **Discussion**

From the small number of studies retrieved from the literature search it is evident that compared to the published literature on staff nurse retention, little research has focused on Nurse Manager retention in the past 25 years. Clearly, factors that influence Nurse Managers' intent to leave or stay are complex and multifactorial. To gain a fuller understanding of the issues around Nurse Manager retention it may be beneficial when analyzing themes to consider how they are related to each other rather than considering them to be individual factors. See Figure 2 for a depiction of the relationship between factors.

**Figure 2 Factors influencing Nurse Managers' intentions to leave or stay**



Many of the individual and role factors identified in the literature are actually related to, or dependent on the organization's culture, values, access to human and fiscal resources, leadership style preferences, and support for the Nurse Manager role. Satisfaction with the manager role leading to intentions to stay or leave may also be related to individual factors such as suitability of the individual's qualifications and skills, and the individual's personal values and their congruence with the role. The organizations values/culture and beliefs around the value of leadership roles may determine how much support is provided

by the organization. Mentorship, appropriate training, empowerment, skill development and ensuring opportunities are offered by the organization are necessary to ensure success of the individual and of the role in general.

These relationships in Figure 2 suggest implications for healthcare organizations. The organization's ability to convey to the individual Nurse Manager a sense that he/she is a valued employee with congruence between its actions and its words is largely dependent on the organization's culture, values, and the leadership style of senior administration. The organization's ability to do this may be related to organizational factors such as inadequate financial resource that result in fewer managers, larger span of controls and budgets that do not allow for adequate resources to ensure quality of patient care. Suitability of qualifications and skills was identified in this literature review to be a significant retention factor. Organizations often recruit Nurse Managers from the front line that may be unprepared for many of the role demands such as fiscal responsibilities and human resource issues and therefore feel abandoned and inadequate when dealing with these issues. This emphasizes the need for organizations to be committed to dedicating sufficient human and fiscal resources to ensure adequate training and support.

A good understanding of Nurse Managers' retention issues and the development of retention strategies for Nurse Managers will become increasingly important over the next ten to fifteen years as the baby boomer generation retires. This anticipated mass exit from the workforce will contribute to the nursing shortage and leave a gap in nursing clinical knowledge as well as organizational

and managerial knowledge. This will become a critical issue if we are not successful in attracting Nurse Managers under the age of 40 as Laschinger's 2008 profile of nursing management in Canadian hospitals suggests. Effective, consistent Nurse Manager leadership is required to retain front line nurses and maintain healthy workplace environments that ensure front line nurses are able to deliver quality patient care in an increasingly complex healthcare environment faced with many challenges (Cummings et al., 2010; Kleinman, 2004). Therefore it is imperative that nursing conduct quality studies that focus specifically on the issue of Nurse Manager retention and that organizations develop and implement evidence-based strategies to promote retention and succession planning for Nurse Managers that target nurses less than 40 years of age.

There is some evidence in the literature that organizational interventions can influence the mental health and work effectiveness of staff nurses (Laschinger, & Havens, 1997). In times of transition, organizational behaviors that support frequent opportunities for communication, high visibility and verbalized commitment to quality of patient care help nurse managers accept and facilitate change (Cummings, 2004; Knox, Irving, 1997). Future research should examine the effectiveness of organizational interventions in retaining Nurse Managers.

A systematic review of factors contributing to nursing leadership completed by Cummings, Lee, MacGregor, Davey, Wong, Paul et al. 2008 suggests that leadership qualities can be developed through specific and dedicated educational activities. Strong leadership is essential for healthy work

environments for health care providers and for ensuring quality patient care (Cummings et al., 2008). However, it is evident from the results of this literature review that retention issues need to be addressed in order to translate this knowledge into the practice of leadership development.

A more comprehensive understanding of the factors related to the retention of Nurse Managers should be of interest to administrators responsible for the development of strategies to improve retention. We need to better understand the learning needs of new managers to aid in the development of orientation and mentorship programs and determine the supports and strategies required over time to keep Nurse Managers in managerial positions. This can be accomplished by conducting longitudinal studies that include larger populations in a wide range of practice settings.

Additional quantitative studies that examine the issues from comprehensive and comparative perspectives are needed. Examining how organizational, personal (individual) and position (role) factors are related to each other and determining which are more likely to lead to a decision to leave or stay would add to the body of knowledge in nursing management. A more complete understanding of the issues would enable organizations to determine what supports are needed to help qualified and experienced nurses transitioning from the front lines to managerial positions.

### ***Limitations***

The intent of this literature review was to examine the available research that examined factors related to the retention of Nurse Managers. Detail on the

reporting structure of participants in the included studies was not well described in the literature. and is complicated by the various titles used (patient service manager, nurse manager, middle manager, nurse leader, senior manager, clinical manager, front line manager and patient care manager). As a result, it is possible that the managers included in these studies did not meet the definitions of front-line or middle managers used for the purpose of this study.

### **Conclusion**

In this review, I identified a total of 13 studies, eight quantitative and five qualitative that examined Nurse Manager retention. Although the findings of international studies may be generalizable, it would be beneficial to have more data generated from the Canadian publically funded health care system to help address the current and predicted worsening issues of Nurse Manager retention in Canada.

The results of this literature search show that factors that influence the Nurse Manager's decision to leave or stay in a managerial position are multifactoral, not well understood and have not been studied across various practice settings. I found that these factors could be categorized into three themes: organizational, role (position) and individual (personal) factors. Furthermore, there seems to be a complex relationship among and between these factors that influence Nurse Managers' decision to stay or leave a managerial position. Future studies are needed to further develop the concept of this interrelationship of factors and themes by concurrently analyzing factors identified by Nurse Managers' to be important considerations when determining their intent to stay in

or leave their current position. Additional comprehensive, quantitative studies are required to confirm and expand on the findings of this literature review as has been done in the staff nurse literature (Boyle, Bott, Hansen, Woods & Taunton, 1999; Tourangeau & Cranley, 2006). The knowledge gained from future studies that result in the development of theoretical concepts and theories will add the nursing body of knowledge in the area of Nurse Manager retention.

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## CHAPTER THREE

### STUDY 2: WHY DO NURSE MANAGERS LEAVE OR STAY?

#### *Background*

The Canadian Nurses Association predicts a shortage of 60,000 nurses in Canada by 2022 (Canadian Nurses Association, 2009). In Canada, there are currently few senior nurse leaders under 45, the average age being between 46 and 55 years of age with only 8.5% of first line and middle managers in the 25-35 age groups (Laschinger et al., 2008). The advanced age of Nurse Managers' and Nursing Directors, the knowledge that there are now multiple job opportunities within nursing, and the general negative perception of the role of nurse managers, all contribute to the need to understand the issues associated with the recruitment and retention of nurse managers (Laschinger et al., 2004; Ruden, 2002).

These issues are further exacerbated by the fact that hospital restructuring over the last decade has resulted in a loss of approximately 32% of all management positions (Canadian Institute for Health Information, 2006; Laschinger et al., 2004). In Alberta, further restructuring of managerial positions in 2009 has resulted in a loss of 100 managerial positions province wide, many of them Nurse Managers. This resulted in increased spans of control and workloads for those remaining in Nurse Manager roles around the province (Calgary Herald, 2009).

The literature suggests that retention of Nurse Managers is an international issue. For example a longitudinal Australian study revealed that fewer managers intended to stay in nursing management positions (82.4% in 1989 vs. 72.7% in



1999) and indicated that they planned to move into a clinical position (29.1% in 1989 vs. 39.3% in 1999). (Duffield et al., 2001). The National Health Service (NHS) in the United Kingdom also reports high turnover of managers particularly after the reorganization of health care regions into self-governing administrative bodies known as Trusts (Scott, 2002).

It is well documented in the literature that strong effective Nurse Managers' play an important role in staff nurse retention and ultimately the quality of patient care (Kleinman, 2004; Mackoff & Triolo, 2008a, 2008b). The existing and looming increase in the nursing shortage nationally and internationally combined with a decrease in managerial positions due to restructuring makes the need to examine factors that influence the retention of Nurse Managers critical.

### **Purpose of the Study**

The purpose of this study was to examine the factors that influence Nurse Managers' intentions to stay or leave their current position.

### **Literature Review**

To determine current knowledge about factors influencing Nurse Managers' intentions to stay or leave their current positions, I conducted a systematic literature review, which resulted in 13 studies (eight quantitative and five qualitative). The retained studies either measure retention or predictors of retention in the quantitative studies or described the relationship between factors and manager's decisions to stay or leave in the qualitative studies. Findings of the systematic literature review are discussed in greater depth in Chapter 2.

Nurse Managers were defined as middle managers with responsibilities for clinical care areas or programs in healthcare organizations, reporting to a higher level of management and supervising a managerial level below them or as front-line managers with line responsibility and no level of management below them other than charge nurse, supervisors or team leaders (Laschinger et al., 2008). In general, the description of participants' level of management in the studies was not well defined. Contributing to the confusion around what level of management was being studied were the various role titles, which included patient service manager, nurse manager, middle manager, nurse leader, senior manager, clinical manager, front line manager and patient care manager.

Seven studies described the study setting as acute care, one further described the acute care setting to be academic and three were large capacity hospitals. Two international studies included participants from both the public and private healthcare sectors. Only three of the 13 studies included a description of the practice or program area of the participants.

I used content analysis to synthesize the results across the 13 studies. I identified a total of 25 factors reported to influence Nurse Managers' intentions to stay or leave and was able to categorize these factors into three themes: organizational, role and personal factors. Content analysis refers to a systematic means of categorizing the content or, in this case, the variables or factors found in the 13 studies of this systematic literature review into themes (Burns & Grove, 2009).

I defined *organizational* or *institutional* factors as variables within an organization's power to change and thereby potentially influence the Nurse Manager's work life, including organizational values and culture, human and fiscal resources, effective administration and lack of succession planning. I defined *role* or *position* to be factors inherent to the Nurse Manager role, including work balance or overload, clarity of expectations and feedback. I defined *personal* or *individual* factors as characteristics important to the individual Nurse Manager as a result of their own personal beliefs, personal life, and life experience. These factors include feeling valued, kinship, suitability of work with qualifications and skills and personal values (Brown, 2010).

Factors conceptualized as common to *organizational* and *role* categories include empowerment, leadership style, support and communication. Factors common to *role* and *individual* categories include work life balance and the ability to provide quality patient care. Factors conceptualized as shared among all three categories were work life balance, job satisfaction and ability to provide quality of care (Brown, 2010).

The results of this literature review indicate that Nurse Managers' reasons for leaving or staying are multifactoral and interrelated (Brown, 2010). However, due to the limited amount of current literature available in the area of Nurse Manager retention, and the limited testing of multiple factors across various contexts, practice areas and levels of management, it is important that future research be more comprehensive. Future analysis should include the development and testing of a theoretical model of factors that influence Nurse Managers' intent to stay or

leave their current position where multiple factors are tested simultaneously. Failure to address Nurse Manager retention will have implications for the delivery of quality patient care as it is well documented that strong Nurse Managers directly affect staff nurse job satisfaction and retention (Boyle, Bott, Hansen, Woods & Taunton, 1999). Therefore, strategies to improve recruitment retention of Nurse Managers are important for administrators and senior management.

### ***Theoretical Models of Retention/Intention to Stay***

There are several examples of theoretical models of staff nurse intent to stay or determinants of nurse intention to remain employed in the staff nurse retention literature. Boyle, et al. (1999) developed a Conceptual Model of Intent to Stay that described four sets of predictor variables of intensive care unit staff nurses intention to stay employed. Five variables that directly influence intention to stay were manager position power, manager influence over work coordination, opportunity elsewhere, promotional opportunities and job satisfaction. Variables that indirectly were related to intent to stay included control over nursing practice, situational stress, and manager characteristics of structuring expectations, consideration, power, influence, and leadership style.

Tourangeau and Cranley (2006) used a modified version of Boyle et al.'s (1999) theoretical model in their study that examined determinants of staff nurses' intention to remain employed. Of the six hypothesized categories of predictors only job satisfaction, personal characteristics of nurses, work group cohesion and collaboration, and organizational commitment of nurses were strong predictors of intent to remain employed. However, study results showed strong evidence that

the predictors of nurse burnout and nurse manager ability and support were predictors of job satisfaction and therefore had an indirect effect on nurses' intention to remain employed. The impact of Nurse Managers' characteristics and leadership abilities on staff nurse retention in these two studies support the need to better understand what factors influence Nurse Managers' intention to leave or stay in managerial positions and how to retain the type of nurse managers that demonstrate leadership characteristics required to positively impact staff nurse retention.

Although no conceptual models were specific to Nurse Managers and retention, Laschinger et al. (2008) developed a conceptual framework that included independent variables of structural leadership characteristics, organizational and personal characteristics and multiple dependent variables, among them intent to leave. Several of these multiple outcomes (quality of care, organizational support, empowerment, job satisfaction) are what I have conceptualized as independent variables in this study; therefore, I used the three categories of factors from my systematic review to inform the approach to my study design. I recognize that this study may not fully answer the questions concerning the interrelationship of the factors but will add to our knowledge base in this area of Nurse Manager retention.

### **Research Questions**

Based on the outcomes of my systematic literature review and my own personal experience as a nurse manager in an academic acute care facility, the following research questions guided this study.

1. Are Nurse Managers' intentions to leave or stay different based on demographics of age, gender, years of experience, years of experience as a manager, level of education and work environment?
2. Are factors that influence intent to stay different or similar to factors that influence intent to leave?
3. What are the factors that influence retention of nurse managers?

## **Methods**

### ***Research Design***

The SSHRC-funded QWEST study (2007-2010) is a non-experimental cross-sectional four -phase study (Cummings, PI). The main purpose of the QWEST study was to examine the emotional intelligence (EI) and leadership practices of first-line patient care managers in three contextual healthcare settings (acute care teaching hospitals, general community hospitals and long-term care). Additional goals included assessment of the impact of manager leadership practices on workplace empowerment and nurse perceptions of their quality of work life and culture of patient safety.

Phase one consisted of individual interviews conducted with managers throughout the region. Phase two involved conducting focus groups with staff nurses to gain additional contextual information about their work life and cultures of patient safety. Phase three involved the circulation of an electronic survey to front line managers and phase four included circulation of a paper survey to staff on the units of managers who had responded to the electronic survey. All data was linked by unit and de-identified.

The analysis reported here uses only the manager survey data collected in phase three of the QWEST study. The manager survey included questions about the following areas: work unit information, unit characteristics, unit staffing and resources, programmatic and structural changes, unit work environment, time spent on managerial tasks, work relationships, work life as a manager, relationship with work, professional development, span of control and demographic information such as age, sex, level of education and years of experience in the profession and as a manager. In addition front line managers were asked to rate the importance of a series of factors related to their reported intent to leave or stay in their current position for another two years. See Appendix C for a copy of the QWEST survey.

### ***Ethical Considerations***

The QWEST study was approved by the University of Alberta's Ethics Review Board. A cover letter containing an explanation of the study, risks/benefits was included in the electronic survey to managers. As this is primary analysis of the data, no further ethics approval is required.

The introduction to the web-based survey indicated to participants that participation was voluntary and consent was presumed on completion and return of the survey. The survey contained no identifying information. The de-identified data will be kept for a minimum of seven years in accordance with the University of Alberta research policy. Participants were informed that future analysis of the data might be conducted following acquiring the appropriate ethics approval. Participants were also informed that anonymous survey data would be stored in

the University of Alberta Library for use by other researchers. I, as the researcher, have no access to any identifying information.

### ***Sample***

The survey was distributed to 290 front line managers employed at acute care teaching, general community and long-term care facilities within the former Capital Health Region, and (prior to recent provincial restructuring to Alberta Health Services). This includes Edmonton and the surrounding communities of Leduc, Devon, St Albert and Westlock. The response rate was 33% with 95 managers returning completed web-based surveys.<sup>2</sup> Thirty-six participants reported working in acute care teaching hospitals, 33 in general community hospitals, and 26 in long-term care facilities. Demographic information collected included professional background, age, years of experience, level of education and gender. Additional contextual data were collected such as facility in which employed, specialty area and inpatient versus outpatient environment. See study limitations for detailed explanation.

### ***Validity and Reliability***

Validity and reliability are two important aspects when conducting research. The validity of an instrument determines the extent to which it reflects the construct being examined. Reliability scores tests whether two or more questions are being answered in a consistent way. (Burns & Grove, 2009). The reliability and validity for analysis were based in part on the reliability and

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<sup>2</sup> The expected number of managers for study analysis was 90, with a minimum of 25 in each contextual setting. This would allow use hierarchical linear modeling to examine the contribution of unit and individual level variables to outcomes for nurses by unit.



validity of the QWEST study that consisted of a series of instruments.

*Burnout.* The Maslach Burnout inventory (MBI) was used to collect data to measure burnout, relationship with work and emotional health and well-being. The MBI consists of 22 questions with three subscales: burnout, cynicism, and efficacy. Respondents were asked to rate a series of questions in terms of frequency ranging from never to daily.

The MBI has been reported as valid and reliable tool for measuring burnout in nurse leaders. See Table 6 for a summary of QWEST study and previous study reliability scores (Tourangeau, Lemonde, Luba, Dakers, & Alksnis, 2003; Tourangeau & McGilton, 2004).

*Leadership.* The Resonant Leadership Scale, which focuses on relational leadership behavior, reports a Cronbach's alpha score of 0.957 in the managerial context (Estabrooks, Squires, Cummings, Birdsell, & Norton, 2009). Nurses were asked to rate their manager on a series of statements by using a five point scale that ranged from strongly disagree to strongly agree. See Table 6 for a summary of summary the reliability scores for the MBI and Resonant Leadership Scales. Validity for the Resonant Leadership Scale (RLS) was confirmed by comparison of findings with Leadership Practices Inventory (LPI-Observer) in three different samples: study participants, leaders in managerial position, and staff in non-managerial positions. Secondly, the leadership affects on burnout, work life and job satisfaction were observed by using both LPI and RLS. The findings from both instruments were then compared (Cummings, 2010 unpublished).

*Patient Safety Culture.* In previous studies, the Modified Stanford Instrument (MSI) Patient Safety Culture questionnaire reported low alpha scores and problems with psychometric cross-validation resulting in unstable factor analysis (Ginsburg et al., 2009a; Ginsburg et al., 2009b). Therefore, given the length of the questionnaire (46 items), the QWEST team decided not to use the full MSI scale. Respondents were asked to rate a series of 16 statements using a five point scale ranging from strongly disagree to strongly agree. For the purposes of this analysis, I chose to use three questions that address safety, resources and loss of staff.

*Managerial Role.* The series of questions that examined aspects of the managerial role and programmatic and structural changes were developed by the QWEST team for the purpose of this survey therefore have no previous reliability testing. The questions examined for the purposes of this research study asked if wait times for decisions by senior management, turnover / vacancies in frontline management positions, restructuring of middle management positions, and restructuring of senior management positions had changed. Respondents were asked to rate any changes from a five-point scale ranging from decreased a lot to increased a lot. The QWEST study managerial survey validity was confirmed by having a group of managers pilot the survey.

*Empowerment.* The Global Empowerment Scale-II (Laschinger, Leiter, Day, & Gilin, 2009) measures nurses' perceptions of empowerment. For the purpose of the QWEST survey, only two Global empowerment questions were included rather than the full scale. Therefore, reliability scores are not required.

Validity for this study was confirmed by having a group of managers pilot the survey.

*Intent to Stay.* The question asking about the likelihood of the respondent to stay in their current position for another two years was developed by the QWEST team. If the respondents indicated it was very unlikely or unlikely that they would stay in their current position for another two years, they were categorized into the intent to leave sample. This question was designed for the purpose of this study. Therefore, there are no reliability pilot scores available. Validity was confirmed by having a group of managers pilot the survey.

*Span of Control.* The QWEST study asked respondents to report the number of nursing staff that worked on the largest unit they managed. This data was used to determine span of control for each manager. This question was developed by the QWEST team for the purpose of this study. Therefore, there are no reliability scores available. Validity was confirmed by having a group of managers pilot the survey.

**Table 6**  
***Instrument Reliability***

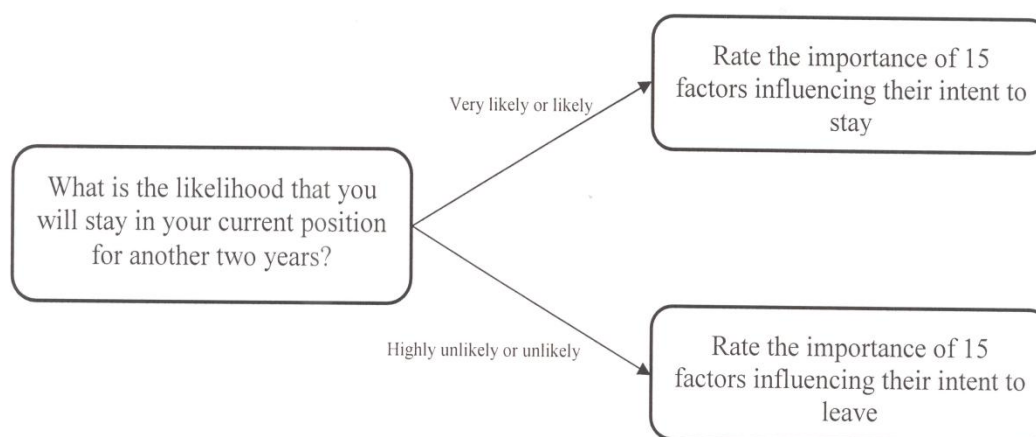
<b>Maslach Burnout Inventory</b>		
<b>Instrument</b>	<b>Cronbach's alpha Previous research</b>	<b>Cronbach's alpha QWEST study</b>
MBI: All Variables	0.77	.658
<b>Subscales</b>		
Emotional exhaustion/burnout	0.867	.792
Cynicism	0.644	.752
Efficacy	0.792	.718
<b>Resonant scale</b>		
Resonant scale: All variables (observation)	0.957	.929

### ***Data Analysis***

Data analysis was done using SPSS version 17 in consultation with the University of Alberta, Faculty of Nursing, *CLEAR* Outcomes Research Program data analyst. The data were analyzed in a sequence of steps.

*Research Question 1:* To answer question one, the demographic characteristics of the two groups (stayers and leavers) were analyzed. A comparison of means on a series of the following variables was performed: age, gender, level of education, span of control, years of experience in the profession, years of experience as a front line manager, years of experience at their present place of employment, type of facility (acute care teaching, general community and long-term care) and how they rated their level of experience as a manager (new – very experienced). The demographic characteristics of the stayers were compared with the leavers to determine any significant differences between these two groups. Significance testing was done using the Chi-square method of statistical analysis.

In the QWEST study, a branching method was applied after the question about the likelihood of nurse managers staying in their current managerial position for another two years. If the respondent was likely or very likely to stay (stayers), then she/he was asked to rate the importance of 15 factors influencing his/her intention to stay. However, if she/he preferred to leave (leavers), then these factors were asked in a different way to rate their intent to leave. See Figure 3, for the visualization of this branching method.

**Figure 3 Branching method**

*Research Question 2:* To answer question two the responses to the fifteen questions were analyzed to determine which factors were more important for the leavers and for the stayers. This was done by developing a scoring system that multiplied the number of responses with the number attached to the response. See Table 7 for an example of the scoring system. Only limited comparison of the stayers and leavers was possible due to the inappropriateness of amalgamating the two groups due to the wording of the questions and the significant differences in the demographic data found between the leavers and stayers in the first step of the analysis. The two groups were not the same in the areas of level of education and type of facility. This left two very small sample sizes. In addition, the questions asked to those indicating intent to leave were worded in a way that it could not be assumed to be asking the same question if flipped; therefore, the analysis would not be valid. For example, the stayers were asked how important *congruence between my leadership style and my supervisor's was in influencing intent to stay*. The leavers were asked how important *incongruence between my leadership style*

and my supervisor's in influencing intent to leave. Therefore, it could not be assumed that the two groups were being asked the same question.

**Table 7**  
**Scoring**

Likert scale	1	2	3	4	5	Total
Stayers	Not important at all	Slightly Important	Important	Moderately Important	Very important	
# of respondents	0	3	5	23	36	67
Points	0	6	15	92	180	293

*Research Question 3:* To answer the third question, a series of other factors focusing on empowerment, resonant leadership, orientation, mentorship, emotions/professional efficacy/cynicism (Maslach Burnout Inventory), patient safety and the ability to provide quality care, resources, span of control and job satisfaction were selected from the remaining questions in the QWEST study. Variables were chosen based on the significant results of the variables that were analyzed in the previous phase of the data analysis. Variables were also chosen based on the findings of my systematic literature review and my own personal experience as a nurse manager. The means for each of the two groups were calculated followed by significance testing using the t-test method of data analysis. Where there were two or more variables in a category the data were also analyzed using the MANOVA method of statistical analysis to explore how the independent variables influence some patterning of response on the dependent variable (Carey, 2010).

To answer study question three in greater depth, the last step of the data analysis involved running eight multiple regression models. As a guideline when using multiple regression, it is recommended to use at least 20 cases per variable (Tabachnick & Fidell, 2007). A sample size of 95 therefore dictates that four and at most five variables could be entered into the regression models.

## **Results**

*Research Question 1: Are Nurse Managers' intentions to leave or stay different based on the demographics of age, gender, years of experience, years of experience as a manager, level of education and work environment?*

### ***Demographics***

Ninety-five (30%) nurse manager surveys were valid returns in the QWEST study. Of the 95 respondents, 92% were female. The mean age of respondents supports what was found in the literature (Laschinger et al., 2008) with 75% of the sample being between the ages of 40 and 59 years of age. There was no significant statistical difference when comparing the means of the stayers with the leavers in each of the following variables: age, years of experience in their profession, number of years of experience at their present place of employment, level of experience as rated by managerial co-workers. Leavers and stayers were statistically significantly different when comparing means of those working in teaching and general community hospitals, with 82% of those working in general community hospitals indicating intent to stay in their current position for another two years compared to 56% of those working in acute care teaching facilities ( $p = .040$ ).

Of the total sample, 52% were diploma-prepared versus 39% of the sample who were bachelors, prepared. Thirty-two percent of diploma prepared respondents and 54% of bachelor-prepared respondents indicated intent to leave. While this was not statistically significant, these results indicate that the higher the level of education the more likely the intent to leave. This may be explained in part by the number of opportunities available for those holding degrees. See Table 8 for a summary of sample demographics.

**Table 8**  
***Demographics Characteristics of the Study Sample***

Demographic	Respondents indicating intent to leave (n=28)	Respondents indicating intent to stay (n=67)	Significance Test
<i>Gender</i>			
Male	4 (14%)	4 (6%)	
Female	24 (86%)	63(94%)	
<i>Age</i>			
25-29	3 (11%)	1 (1%)	Chi-square =10.566a Degrees of freedom =8 p = .228
30-34	2 (7%)	2 (3%)	
35-39	3 (11%)	5 (7%)	
40-44	8 (29%)	12 (18%)	
45-49	1 (4%)	13 (19%)	
50-54	4 (14%)	15 (22%)	
55-59	5 (18%)	13 (19%)	
60-64	2 (7%)	5 (7%)	
65-70	0 (0%)	1(1%)	
<i>Education</i>			
Diploma	9 (32%)	40 (61%)	Chi-square =6.664a Degrees of freedom =8 p = .083
Bachelors Degree	15 (54%)	22 (33%)	
Masters	2 (7%)	2 (3%)	
Other	2 (7%)	2 (3%)	
<i>Experience</i>			
Mean years of experience in profession	21.93	25.24	Mann-Whitney U p = .166
(table continues)			



Demographic	Respondents indicating intent to leave (n=28)	Respondents indicating intent to stay (n=67)	Significance Test
Mean years as a front line manager	7.89	9.58	Mann-Whitney U p = .286
Mean years of experience as a manager in current facility	5.50	5.85	Mann-Whitney U p = .466
			(table continues)
Mean years of employment at current facility	11.18	12.85	Mann-Whitney U p = .527
<i>Managerial Experience</i>			
New manager	5 (19%)	9 (14%)	Chi-square =1.873a Degrees of freedom = 8 p = .083
Some experience	6 (22%)	16 (25%)	
Experienced manager	9 (33%)	18 (28%)	
Very experienced	5 (19%)	10 (16%)	
Most experienced manager	2 (7%)	11 (17%)	
<i>Position Title</i>			
Patient Care Manager	6 (29%)	15 (71%)	Chi -Square=1.87 Degrees of freedom= 8 p=.083
Nurse Manager	0 (0%)	3 (100%)	
Coordinator	1	1	
Client Care Manager	1	1	
Unit Manager	17 (44%)	22 (56%)	
Frontline Manager	0	1	
Other	2 (8%) 2 missing	23 (92%)	
<i>Type of facility</i>			
Acute	16 (44%)	20 (56%)	Chi-square = 6.418 <sup>a</sup> Degrees of freedom = 2 p = 0.040*
General	6 (18%)	27 (82%)	
Long Term Care	6 (23%)	20 (77%)	

\* Represent significance level at 5%

### *Research Question 1 Conclusion*

Based on the results of the demographic data analysis, nurse managers' intent to leave may be influenced by work environment. Forty-four percent of the respondents working in acute care teaching hospital settings indicated intent to leave compared to 18% of those working in general community hospitals and

23% of those working in long-term care facilities. These results were significant only between the acute care teaching hospital and the general community hospital setting. Age, gender, level of education, years of experience or position title in this study did not influence the respondent's decision to remain in their current position for another two years.

*Research Question 2: Are factors that influence intent to stay different or similar to factors that influence intent to leave?*

### ***Analysis of 15 Factors***

To answer research question two, data analysis was done for the question that asked the likelihood that the respondent would stay in their current position for another two years and their responses to a set of 15 factors they were asked to rate from very important=5 to not important at all=1. The factors were ranked according to importance based on the weighted score that was derived from the number of responses to each individual question multiplied by the number attached to each of the possible responses (1-5) as previously depicted in Table 7.

Most of the responses for stayers were reported as important to very important as opposed to the responses of leavers, which were not as polarized and were spread more evenly across all possible responses. The highest scored response for stayers was 305 indicating most respondents felt that this particular factor was moderately important to very important. In contrast, the highest score of any factor for leavers was 112 indicating that most of their responses were rated as not important to important with the majority lying in the moderately important range. The scores for the stayers and leavers cannot be compared as they are based on the number of respondents and therefore have no comparative

meaning. See Table 9 for a summary of weighted points for stayers and leavers.

**Table 9**  
***Summary of Weighted Points for Stayers and Leavers***

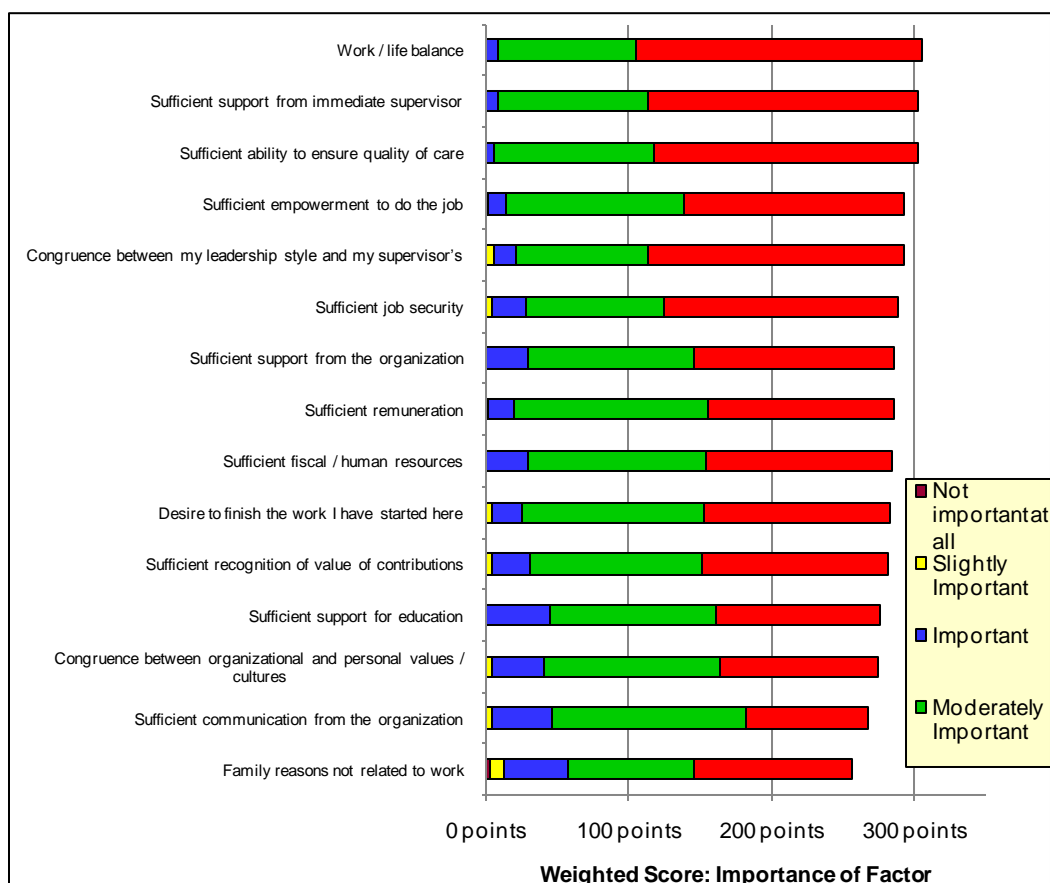
	Points on a Likert Scale					Total
	1	2	3	4	5	
<b>Stayers</b>	Not important at all	Slightly Important	Important	Moderately Important	Very important	
Congruence between my leadership style and my supervisor's		6	15	92	180	293
Work / life balance			9	96	200	305
Family reasons not related to work	3	10	45	88	110	256
Congruence between organizational and personal values / cultures		4	36	124	110	274
Desire to finish the work I have started here		4	21	128	130	283
Sufficient communication from the organization		4	42	136	85	267
Sufficient fiscal / human resources			30	124	130	284
Sufficient ability to ensure quality of care			6	112	185	303
Sufficient remuneration		2	18	136	130	286
Sufficient empowerment to do the job		2	12	124	155	293
Sufficient recognition of value of contributions		4	27	120	130	281
Sufficient job security		4	24	96	165	289
Sufficient support from immediate supervisor			9	104	190	303
Sufficient support from the organization			30	116	140	286
Sufficient support for education			45	116	115	276
<b>Leavers</b>						
Incongruence between my leadership style and my supervisor's	5	10	18	28	25	86
Work overload or work / life balance	2	2	15	28	65	112
Family reasons not related to work	11	8	9	20	25	73
Incongruence between organizational and personal values / cultures	7	6	12	24	40	89
Desire to extend career in different direction	5	8	15	36	25	89

(table continues)

Insufficient communication from the organization	4	8	15	44	20	91
Insufficient fiscal / human resources	2	10	12	24	55	103
Insufficient ability to ensure quality of care	2	2	9	48	50	111
Insufficient remuneration	3	10	24	36	15	88
Insufficient empowerment to do the job	5	4	12	36	40	97
Insufficient recognition of value of contributions	6	4	9	40	35	94
Insufficient job security	8	12	24	16	10	70
Insufficient support from immediate supervisor	6	4	30	32	10	82
Insufficient support from the organization	5	6	12	56	10	89
Insufficient support for education.	5	2	21	40	25	93

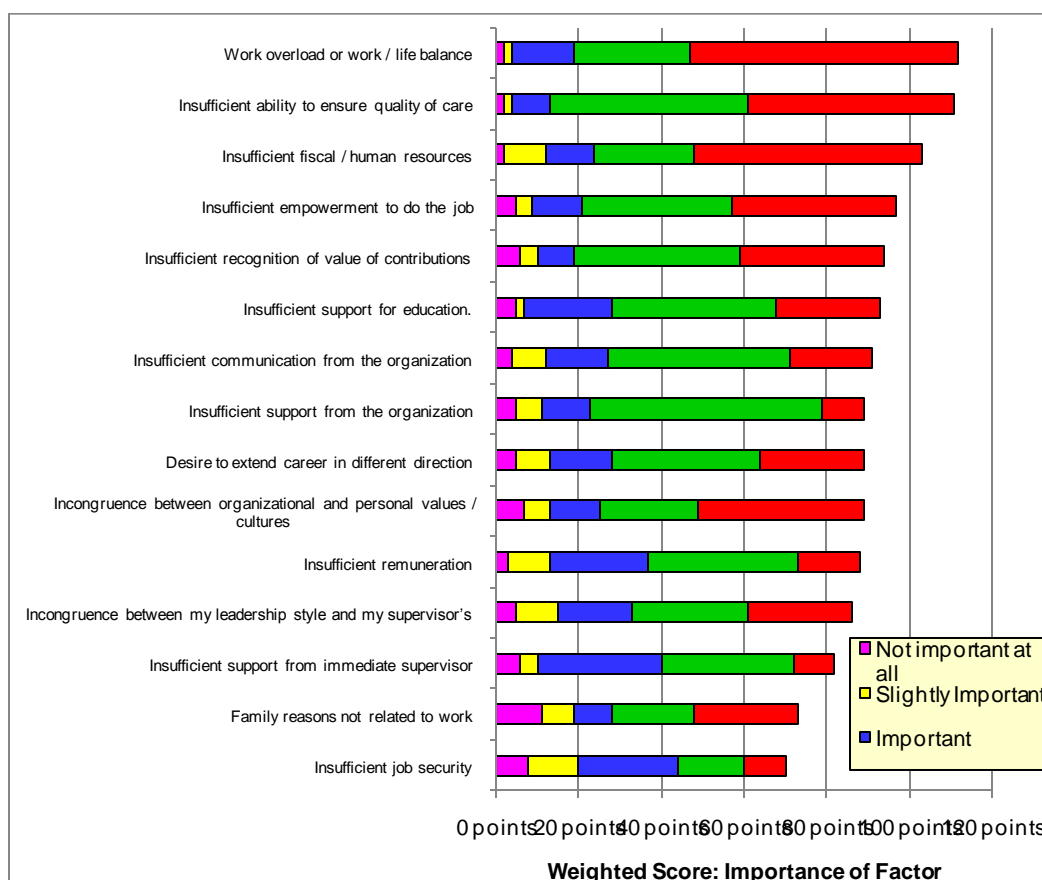
The most important factor for stayers was work-life balance followed by sufficient support from their immediate supervisor and sufficient ability to ensure quality of care. Stayers also felt sufficient empowerment to do the job, congruence between their leadership style and their supervisor's and job security were important. See Figure 4 for the results of stayers.

*Figure 4 QWEST Study: Factors Influencing Intention to Stay: Stayers*



The four most important factors for the leavers, indicated by the highest weighted score were work overload/life balance, insufficient human/fiscal resources, insufficient ability to ensure quality of patient care and insufficient empowerment to do the job with the ability to ensure quality of patient care and insufficient empowerment to do the job being almost equally important. Of least importance to this group was job security, incongruence of my leadership style with my supervisors and family reason. See Figure 5 for the results of the leavers. The statistical results for leavers must be viewed with caution because of the small sample size  $n=27$ .

Figure 5 *QWEST Study: Factors Influencing Intention to Leave: Leavers*



### *Research Question 2 Conclusion*

As previously discussed, it cannot be assumed that the questions asked of stayers and leavers were the direct opposite. However, based on weighted scores we can determine the most important factor for each group and how important they were. From this data, it can be surmised that some congruence between leavers and stayers around concepts of work-life balance, quality of patient care and empowerment exists. Clearly, stayers had strong feelings about which factors were important enough for them to consider staying in their current position for another two years. Leavers did not appear to have strong opinions as evidenced by

the pattern of their responses, which were scattered over all possible responses with the majority lying in the mid range as opposed to the stayers whose responses largely lay in the moderately important to very important range. However, it is impossible from the data to make any conclusions as to why. As a result, question two can only be partially answered. Due to limited ability to compare leavers and stayers, the most we can say based on the weighted responses is that both groups feel that work-life balance, empowerment and quality of patient care are important issues.

*Research Question 3: What are the factors that influence retention of Nurse Managers?*

Additional questions from the QWEST survey were chosen to examine work empowerment, leadership, orientation and mentorship, relationships with work (burnout, professional efficacy and cynicism), patient safety resources, programmatic changes, span of control and job satisfaction. These questions were chosen based on the findings of my literature review, the results of research question two and my personal experience as Nurse Manager.

Respondents were asked if their current work environment empowered them to accomplish work in an effective manner. Comparison of means was higher for stayers suggesting this group felt more empowered compared to leavers (3.42 vs. 2.75). This was statistically significant ( $p=0.006$ ). Respondents were asked overall if they felt their workplace was an empowering environment. Comparison of means suggests stayers felt their work environment to be more empowering than leavers (3.70 vs. 3.14) did. This was statistically significant ( $p=0.023$ ).

Using a Resonant Leadership Scale, respondents were asked to rate a series of questions about their supervisor's leadership practices. Comparison of means suggested that stayers felt their supervisor displayed more characteristics of a resonant leader than leavers (4.06 vs. 3.49). This was statistically significant ( $p= 0.000$ )

When asked to rate their agreement about adequacy of orientation and mentorship from senior management, the means indicated stayers felt more strongly that orientation and mentorship were adequate but was only statistically significant for adequacy of orientation ( $p= 0.039$ )

Relationship with work was explored using the burnout subscale of the Maslach scale. Those reporting intent to leave indicated they felt cynical and felt emotions related to burnout, fatigue and strain more frequently than the stayers. This was statistically significant 0.001. Those that indicated intent to stay reported feeling as if they were doing a good job, accomplished many worthwhile things and felt exhilarated at work more frequently than the leavers. This was statistically significant ( $p= 0.006, 0.025$  and  $.001$ ) respectively.

Patient safety questions included asking respondents if they felt they worked in an environment where patient safety was a priority, if the ability to provide quality patient care was negatively affected by loss of experienced personnel and if they were provided with adequate resources to provide safe patient care. Those indicating intent to stay agreed more strongly that they worked in an environment in which patient safety was a priority and were provided with adequate resources. This however was not statistically significant ( $p= 0.288$ ,



0.986) respectively. Leavers felt more strongly that the loss of experienced staff negatively affected their ability to provide high quality of care. This again was not statistically significant ( $p = 0.588$ ).

The respondents were asked to comment on adequacy of eight types of resources. Comparison of means between leavers and stayers were similar with means ranging from 2.54 to 3.11. This was not statistically significant ranging from ( $p = .134$ ) for budget to ( $p = .750$ ) for professional practice support.

Respondents were asked how much they liked their job and how satisfied they were with their job. Comparison of means indicated that stayers as might be expected reported feeling more satisfied and liked their job more than leavers. However the means for how much the leavers liked their job were quite high suggesting although they were not very satisfied with their job, they did not necessarily dislike their job. This was significantly statistically significant for both questions ( $p = 0.000$ ).

Leavers reported feeling there had been an increase in wait time for decisions from senior management, higher turnover in frontline managers, more restructuring of middle and of senior management. The only significant item was the restructuring of middle management positions at ( $p .048$ ) and was not significant when MANOVA testing was done. The variable restructuring of middle management was retained and entered into the multiple regression models because of the restructuring this province has recently undergone and is therefore very applicable for this study.

When examining span of control, the means were quite similar for leavers and stayers (35.66 vs. 38.79). This was not statistically significant. See Table 10 for a summary of means and significance.

**Table 10**  
***Other Independent Variables with Significance***

Independent Variable	Leavers n=28 Mean (SD )	Stayers n=67 Mean (SD )	Significance testing T Test	MANOVA
Empowerment				
My work environment empowers me to accomplish my work in an effective manner	2.75 (1.07)	3.42 (.907)	.006**	.006**
Overall I consider my workplace to be an empowering environment	3.14 (1.14)	3.70 (.985)	.023**	
Leadership				
Resonant Scale	3.49 (.726)	4.06 (.646)	.000**	
Was orientation adequate?	2.25 (1.17)	2.85 (1.28)	.039**	
I received mentorship from senior management	3.07 (1.18)	3.43 ( 1.23)	.169	
Relationship with work				
Emotional exhaustion	3.57 (1.38)	2.73 (1.18)	.006**	.003**
Professional efficacy	5.08 (1.09)	5.64 (1.08)	.025*	
Cynicism	3.58 (1.50)	2.52 (1.19)	.001**	
Patient Safety				
Safety is high priority	4.14 (.756)	4.34 (.592)	.288	.577
Loss of experienced staff has negatively affected ability to provide high quality patient care	2.82 (1.27)	2.70 (.985)	.588	
I have adequate resources to provide safe patient care	3.14 (1.29)	3.21 (1.00)	.986	
Resources				
Space	2.54 (.922)	2.68 (.812)	.423	.637
Budget	2.64 (.678)	2.85 (.712)	.134	
Equipment	2.79 (.630)	3.00 (.661)	.150	
Clinical staff	2.96 (.576)	3.05 (.623)	.473	
Clerical Staff	3.11 (.685)	3.00 (.877)	.701	
Support staff	2.73 (.778)	2.82 (.846)	.599	

Independent Variable	Leavers n=28 Mean (SD )	Stayers n=67 Mean (SD )	Significance testing T Test	MANOVA
Ongoing education support	2.64 (.678)	2.80 (.749)	.262	
(table continues)				
Professional practice support	2.61 (.737)	2.67 (.818)	.750	
Programmatic changes				
Wait time for decisions from senior management	3.40 (.746)	3.31 (.812)	.750	.420
Turnover/vacancies in front line management positions	3.64 (.907)	3.35 (.814)	.103	
Restructuring of middle management	3.56 (.870)	3.29 (.506)	.048*	
Restructuring of senior management	3.88 (1.03)	3.70 (.832)	.273	
Span of Control				
Number of Full time and part time staff	35.66 (27.94)	38.79 (29.08)	.714	
Job satisfaction				
How satisfied are you with your job?	2.89 (1.10)	3.93 (.942)	.000**	.000**
How much do you like your job?	3.25 (1.175)	4.15 (.973)	.000**	

Dependent variable: Likelihood of staying in current position for another two years \*\* and \* represent significance level at 1% and 5% , respectively

### ***Regression Models***

Variables included in the multiple regression models were chosen from variables found to be significant in earlier stages of this statistical analysis. All had been identified in my literature review as factors influencing retention and resonated with my personal experience as a manager. See Table 11 for regression model summary

**Table 11**  
***Multiple Regression on Dependent Variable of Likelihood of Staying***

Independent Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Empowerment	-					-	-	
Resonant Leadership	-		.377*		.526*		-	
Emotional exhaustion		-	-				-	
Professional efficacy		-	-				-	
Cynicism		-	-				-	
Orientation				-	-	-		
Restructuring of middle management positions	-.397*			-.528*		-.493*		
Job satisfaction	.525**	.481**					.445**	
How much you like your job				.629**		.479**		
Empowering environment				-	-			
Highest level of education								-.262*
Age group								-
Years of experience in your profession								-
How many years experience as a manager								-
Number of predictors	4	4	4	4	3	4	6	4
R	.531	.520	.455	.497	.369	.476	.533	.104
Adjusted R squared	24%	.24%	17%	20%	11%	18%	24%	6%
F	6.372	8.337	5.869	5.32	4.770	4.762	5.810	2.56
Significance	.000	.000	.000	.001	.004	.002	.000	.043

Dependent variable: Likelihood of staying in current position for another two years

- Denotes factor was included in model \*\* and \* represent significance level at 1% and 5%, respectively

The first regression model found that job satisfaction significantly predicted intent to stay and that there was a significant negative relationship between restructuring of middle management and intent to stay when entered in the regression model with empowerment to accomplish work and resonant leadership. This model was statistically significant ( $p=.000$ ) and explained 24% of the variance.

Model 2 again showed that job satisfaction significantly predicted intent to stay when entered in the model with cynicism, professional efficacy and exhaustion. This model was statistically significant ( $p=.000$ ) and explained 24% of the variance of likelihood of staying in current position for another two years.

Model 3 found that leadership style of the respondent's immediate supervisor (Resonant Leadership Scale) significantly predicted intent to stay when entered with emotional exhaustion, professional efficacy & cynicism. This model was significant ( $p=.000$ ) and explained 17% of the variance.

Model 4 also showed a significant relationship between job satisfaction and intent to stay and a negative relationship between restructuring of middle management and intent to stay when entered with orientation and empowerment. This explained 20% of the variance.

Model 5 showed that leadership style (Resonant Leadership Scale) significantly predicted intent to stay when entered into the model with orientation and empowering environment. This model was significant ( $p=.004$ ) and explained 11% of the variance.

In model 6, how much you like your job significantly predicted intent to stay and showed a significant negative relationship between restructuring of middle management and intent to stay. This model was statistically significant ( $p=.002$ ) and explained 18% of the variance.

When job satisfaction was entered into a regression model with empowerment, leadership style (Resonant Leadership Scale), cynicism, professional efficacy and emotional exhaustion again was shown to significantly predict intent to stay. This model explained 24% of the variance and was statistically significant ( $p=.000$ ).

The last regression model supported earlier findings of the demographic analysis. When entered with age group, number of years of experience and number of managerial experience, level of education had a significant negative relationship with intent to stay. The higher the level of education the more likely the respondent was to express intent to leave. This was statistically significant ( $p=.046$ ) but explained only six % of the variance.

### *Research Question 3 Conclusion*

The results of this study indicate that the key factors influencing nurse manager intent to leave or stay are job satisfaction, leadership practices of senior leaders, the ability to ensure quality of patient care, empowerment, and work-life balance.

The findings of this statistical analysis clearly show that job satisfaction and how much you like your job are the biggest predictors of intent to stay

explaining 24% of the variance. Although empowerment was not a significant factor in predicting intent to stay when entered into the regression models stayers reported feeling more empowered and that their workplace was a more empowering environment than leavers did. The concept of empowerment was also important for both stayers and leavers based on weighted scores when asked to rate a series of 15 factors.

Although not statistically significant, stayers reported feeling more strongly than leavers that they worked in an environment in which they could ensure quality of patient care. However, the concept of quality of patient care was clearly important for leavers and stayers based on weighted scores when asked to rate a series of 15 factors.

Work-life balance was explored as one of 15 factors and was found to be the most important concept for both leavers and stayers. This is supported elsewhere in the study when looking at the questions that explore Relationship with Work using the Maslach Burnout Inventory. In this study, leavers reported feeling more cynical and experienced emotional exhaustion more frequently than stayers. However, this did not turn out to be statistically significant when entered into the regression models with job satisfaction or leadership behaviors tested with the Resonant Leadership Scale.

When asked about the leadership practices of their immediate supervisor, stayers reported feeling more strongly that their supervisors displayed characteristics of a resonant leader. The importance of this leadership behavior was supported when entered into two regression models, first with cynicism,

emotional exhaustion and professionalism. In this model, resonant leadership was significant and explained 17% of the variance in intent to stay. In the second model, resonant leadership was entered with orientation and empowering environment and was found to be significant and explained 11% of the variance in intent to stay. See Figure 8 for depiction of Nurse Manager retention model.

**Figure 6 Nurse Manager Retention Model**



Restructuring of middle management was entered into two regression models because of its relevance to the present healthcare environment in the Edmonton region. Restructuring of middle management was negatively associated with job satisfaction and how much you like your job. These models explained 24 and 20% of the variance of intent to stay respectively.



## **Discussion**

The results of this study provide valuable insight about which factors are important for Nurse Managers' when they are considering leaving or staying in their current position. However, the factors identified in this study only explain at most 24% of the variance of intent to stay. This implies that there may be additional factors yet to be studied.

These results support the findings of my literature review in which job satisfaction, empowerment, work-life balance, leadership practices of senior management and the ability to ensure quality of care were identified as factors influencing Nurse Managers' intent to stay or leave. However, these results give us less insight than we had hoped about the relationships among factors in the three categories (organizational, role and position factors) discussed in the results of my literature review. The sample sizes of leavers and stayers did not allow for robust analysis of the differences between each category.

The results of this study have implications for health care organizations and senior administration particularly in the area of leadership practices. Health care environments are becoming increasingly complex and require leaders who can manage multidisciplinary teams and have the type of leadership skills that will allow them to successfully maintain relationships. Relationships not only with their own staff but also with multiple levels management and other departments. This requires leaders who display characteristics of transformational leadership in which the leader works to inspire, uses a collaborative approach and involves employees to achieve goals and helps to enable staff to reach their full

potential through intellectual stimulation. A number of studies have reported strong associations between transformational leadership style and organizational health such as increased job satisfaction (Nielsen, Yarker, Randall, & Munir, 2009). Leadership skills can be developed through specific educational activities, by modeling or practicing leadership competencies (Laschinger et al., 2008). This has implications for organizations in terms of leadership development, support for the role of the Nurse Manager and commitment of resources for the development of initiatives.

Commitment of resources, although helpful, is only one piece of the solution. A shift in organizational culture is also required. A trusting culture that fosters empowerment at all levels of management by providing opportunities, values and purposely seeks senior leaders with transformational leadership qualities who truly make quality of patient care a priority, are visible and supportive of Nurse Manager work are required. The factors of job satisfaction, work-life balance can also be influenced by a change in organizational culture.

Organizations need to recognize that a healthy work environment in which employees are healthy and happy contributes to quality of patient care. To achieve this organizations need to show congruency between day-to-day expectations and the organizations values. This study clearly indicates that Nurse Managers' value work-life balance. Work-life balance can only be attained if the organization's culture supports reasonable expectations in terms of workload from the senior management level down to front-line managers and is not punitive or disapproving of managers who choose work-life balance. Reasonable workload

expectations, empowerment and assuring that managers have the ability to ensure quality of patient care will contribute to job satisfaction and therefore retention.

These findings support the findings of previous studies. In the staff nurse literature, job satisfaction has been associated with a variety of relational focused leadership styles such as transformational relationship (Cummings et al., 2010). In the Nurse Manager literature, transformational leadership behaviors were also shown to impact job satisfaction and quality of care (Laschinger et al., 2008).

The results of this study show that there is a need for larger studies that include Nurse Managers from a variety of practice settings. Those in this study who reported intentions to stay appeared to have strong opinions about what was important for them. Those intending on leaving on the other hand did not appear to have strong opinions. It is not possible to know the reason for this, other than speculating that the questions posed to leavers were not written in a way that addressed the root of their decisions or, once leavers had made a decision the reasons why were no longer important. Further studies designed to determine if there is a difference between factors that influence Nurse Managers' intention to leave versus factors that influence decisions to stay in a managerial position, are required.

The need for leadership development has implications for those responsible for curriculum of nursing programs. The current political environment in Alberta supports strict fiscal responsibility. To achieve this, new programs such as Alberta Health Services Workforce Transformation Project (Alberta Health Services, 2010) will work toward creating environments that encourage staff to

work to the full scope of their profession. This will increase the likelihood that Registered Nurses will be expected to assume leadership roles earlier in their career, especially over the next decade as the baby boomer generation reaches retirement age. Therefore, future curriculum development should include an increased focus on leadership skill development with opportunities for students to practice these skills in the clinical setting.

The relationship between leadership behaviour, job satisfaction and organizational health supports the premise that Nurse Manager retention is a multifactoral issue. It also implies that future studies would be of value to explore other relationships such as the relationship between factors that can be aligned with organizational, role and personal factors.

### ***Limitations***

Limitations to this study include a response rate of 32%. Response rates to electronic surveys have decreased over the last decade. A response rate of 37% was found to be the average response in a study that looked at the response rates of 31 electronic surveys. This would suggest that the QWEST study's response rate was within normal parameters (Sheehan, 2001).

The response rate of this study may have been impacted in part by the disruption of the Nurse Managers' work life resulting from Alberta Health Services recent restructuring of health regions from nine regions to one. In addition, the delivery of the QWEST study coincided with the timing of the announcement of managerial layoffs throughout the province resulting in the loss of 100 managers and the demotion of many Nurse Managers to a different

classification without clear communication about the implications of these decisions leaving many in a state of uncertainty. The remaining Nurse Managers saw an increase in the number of areas or units they were responsible for, adding to their already burdensome workload. These factors may be a threat to both the internal and external validity of the study findings and therefore may not be generalizable. However, this timing is also unique and yields valuable new knowledge about Nurse Managers' intentions to remain employed during a time of change.

Additional limitations include the small sample size of leavers and the limited ability to use this data due to the structure of the branching question in which we could not ensure that leavers and stayers were asked the same questions.

### **Conclusion**

Results of this study show that job satisfaction, empowerment, ability to ensure quality of care, work-life balance and leadership practices are important factors for Nurse Managers when considering whether to leave or stay in their current position for another two years.

This is the first time that organizational, role and individual factors influencing Nurse Manager retention have been identified to the best of my knowledge. I identified them through a systematic review of the literature and then was able to empirically examine them further in this study. In spite of the limitations I identified we know that organizational, role and personal factors influence Nurse Managers' intent to stay or leave and we know there are

relationships among factors. Future studies to explore retention factors and the relationship between leadership styles, empowerment, work-life balance, the ability to ensure quality of care and job satisfaction that influence intent to stay or leave in larger populations, in greater depth and in a wider variety of practice settings are required for further development of a Nurse Manager retention theoretical model.

Retention of Nurse Managers will continue to be problematic unless organizations adopt a culture that is supportive of Nurse Managers. Support must include adequate orientation, ongoing mentorship and adequate human and fiscal resources to ensure quality of care. Organizations must recruit senior leaders that display transformational leadership behaviors and find ways to convey to Nurse Managers that their work is valuable and appreciated and find ways empower them so they have the ability to do work that is meaningful both professionally and personally. Organizations must ensure there is congruence between values professed by the organization to be important and the actions of management staff at all levels. Values such as work-life balance and respect must be evident from the top down by ensuring reasonable workload expectations and living a culture of respect. Organizations must be committed to change and building healthy workplace environments if the challenges of retaining Nurse Managers are to be overcome.

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## Appendix A: Quality Assessment Tool

Factors of Retention of Nurse Managers:		
A systematic review		
Quality Assessment and Validity Tool for Correlational Studies		
Study: _____	First Author _____	
Publication Information: Date _____	Journal _____	
Factors of Retention of Nurse Managers:		
A systematic review		
Quality Assessment and Validity Tool for Correlational studies		
Design:	Yes	No
Was the design prospective?	1	0
Was probability sampling used?	1	0
Sample:		
Was the sample size justified?	1	0
Was sample size drawn from more than one site?	1	0
Was anonymity protected?	1	0
Response rate more than 60 %?	1	0
Measurement:		
Determinants		
1. Was the factor measured reliably?	1	0
2 Was the factor measured using a valid instrument?	1	0
Influence on the measure of retention:	1	0
Was the dependent variable measured using a valid instrument?		
If a scale was used for measuring the dependent variable, was internal consistency $\geq .70$ ?	1	0
Was a theoretical model/ framework used for guidance?	1	0
Statistical Analysis:		
If multiple factors were studied, are correlations analyzed?	1	0
Were outliers managed?	1	0
Overall Study Validity Rating ( circle one )	Total: _____	
(key: 0-4 = Lo, 5-9 = MED, 10-13 = HI)	LO MED HI	

Adapted from (Cummings & Estabrook, 2003; Estabrook, Floyd, Scott-Findlay, O'Leary, & Gushta, 2003)

## Appendix B: Screening Tool for Inclusion/Exclusion Criteria

Factors of Retention of Nurse Managers Screening Tool		
Study: _____ First Author _____ Publication Information: Date _____ Journal _____		
Inclusion/ exclusion criteria: Does the sample consist of Patient care managers/middle managers as defined by having one level of management above and below the position?  Does the study measure Retention Factors influencing retention  Is the relationship between retention and Patient care managers identified?  Is there evidence of direction? Text only? Is there a P value? Is there a statistic identified? What statistic? _____ Is there an indication of magnitude?	Yes	No
Final decision: include in the study:  Comments		

Adapted from (Cummings & Estabrook, 2003; Estabrook, Floyd, Scott-Findlay, O'Leary, & Gushta, 2003)



## Appendix C QWEST Study Questionnaire

# QWEST Survey of Front Line Managers

## Research Team

PhD	Greta Cummings RN PhD	Jude Spiers RN
	Principal Investigator	Co-Investigator
Nursing	Faculty of Nursing	Faculty of
Alberta	University of Alberta	University of
	Tara MacGregor BA	Susan Lynch
	Project Coordinator	Research
	Program Manager	
	Faculty of Nursing	Faculty of
	Nursing	

University of Alberta  
Alberta

University of



Social Sciences and Humanities  
Research Council of Canada

Conseil de recherches en  
sciences humaines du Canada

Canada

**QWEST Manager Survey 2009**

**© Greta Cummings, Principal Investigator**

**University of Alberta**

Participation in this study is voluntary. Your consent is given when you return the survey. The survey itself contains no identifying information. However, the return envelope included in this package has a code number on it so that reminders can be mailed to participants who have not returned the survey. We will try as much as possible to avoid surveys and reminders crossing in the mail, but this does happen sometimes.

The data from the survey (with no identifying information from any of the participants) will be kept for a minimum of seven years in accordance with the University of Alberta research policy. After the study is completed, other analysis of the survey data may be conducted. If required, ethical approval will be obtained to do these analyses. The anonymous survey data will eventually be stored in the University of Alberta data library where it will be available to other researchers.

The study team at the Faculty of Nursing, University of Alberta would like to thank you for your participation in this study. If you have questions or concerns about this survey questionnaire please call the Principal Investigator, Dr Greta Cummings at (780) 492-8703.

**February 2009**

1. Is your position out of scope?

☐ Yes

☐ No, it is unionized (in a bargaining unit).  
(insert a link here that will take them directly to:  
tara.macgregor@ualberta.ca)

**The following survey asks questions about the nursing staff in your unit, the environment in your unit, the work you do within this facility, and about you.**

## **I. WORK UNIT INFORMATION**

### **Programs and Services in your area of responsibility**

1. What is your position title?
 

<input type="checkbox"/> Patient Care Manager	<input type="checkbox"/> Nurse Manager	<input type="checkbox"/> Coordinator
<input type="checkbox"/> Client Care Manager	<input type="checkbox"/> Unit Manager	<input type="checkbox"/> Front-line Manager
<input type="checkbox"/> Other: (Please specify) _____		
  
2. What is your professional background?
 

<input type="checkbox"/> RN	<input type="checkbox"/> Respiratory Therapist
<input type="checkbox"/> LPN	<input type="checkbox"/> Business Manager
<input type="checkbox"/> Social Worker	<input type="checkbox"/> Recreational Therapist
<input type="checkbox"/> Dietician	<input type="checkbox"/> Rehab Therapist (PT/OT)
<input type="checkbox"/> Other (Please specify): _____	
  
3. What facility do you work in?
 

<input type="checkbox"/> Capital Care	<input type="checkbox"/> Leduc Community Hospital	<input type="checkbox"/> Sturgeon Hospital
<input type="checkbox"/> Devon General Hospital	<input type="checkbox"/> Misericordia Hospital	<input type="checkbox"/> University of Alberta Hospital
<input type="checkbox"/> Good Samaritan Society	<input type="checkbox"/> Royal Alexandra Hospital	<input type="checkbox"/> Westview Community Hospital
<input type="checkbox"/> Grey Nuns Hospital	<input type="checkbox"/> Stollery Hospital	<input type="checkbox"/> Multiple (please specify): _____
  
4. Do you manage more than one unit? ☐ Yes ☐ No  
 If no – *Please use this unit for the rest of the survey*  
  
 If yes, how many distinct units/departments/services/programs do you manage? \_\_\_\_\_  
 Which one of these units has the most staff? \_\_\_\_\_  
*Please use this unit for the rest of the survey*

**USING ONLY THE UNIT IDENTIFIED IN QUESTION #4, PLEASE ANSWER THE FOLLOWING QUESTIONS**



## II. UNIT CHARACTERISTICS

1. What are the patient care specialties on this unit? (Check all that apply)

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Medical        | <input type="checkbox"/> Medical/Surgical | <input type="checkbox"/> Cardiology                  |
| <input type="checkbox"/> Surgical       | <input type="checkbox"/> Long-Term Care   | <input type="checkbox"/> Acute Geriatrics            |
| <input type="checkbox"/> Intensive Care | <input type="checkbox"/> Obstetrics       | <input type="checkbox"/> Ambulatory/Clinics/Day Ward |
| <input type="checkbox"/> OR/PARR        | <input type="checkbox"/> Pediatrics       | <input type="checkbox"/> Emergency                   |
| <input type="checkbox"/> Psychiatry     | <input type="checkbox"/> Rehabilitation   | <input type="checkbox"/> Oncology/Palliative         |
- ☐ Other (Please specify): \_\_\_\_\_

2. If this unit is an inpatient/resident unit, please indicate the number of beds

- |                               |                                |                                |                                |                               |
|-------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------------|
| <input type="checkbox"/> None | <input type="checkbox"/> 11-20 | <input type="checkbox"/> 31-40 | <input type="checkbox"/> 51-60 | <input type="checkbox"/> 71 + |
| <input type="checkbox"/> 1-10 | <input type="checkbox"/> 21-30 | <input type="checkbox"/> 41-50 | <input type="checkbox"/> 61-70 | <input type="checkbox"/> NA   |

3. If this unit is not an inpatient/resident unit, please specify the type of the service provided

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Clinics         | <input type="checkbox"/> OR Theatres          | <input type="checkbox"/> Day Care Program |
| <input type="checkbox"/> Ambulatory Care | <input type="checkbox"/> Emergency Department |   |
- ☐ Other (please specify) \_\_\_\_\_

**USING ONLY THE UNIT IDENTIFIED IN SECTION 1, QUESTION #4,  
PLEASE ANSWER THE FOLLOWING QUESTIONS**

## III. UNIT NURSING STAFFING & RESOURCES

1. Please indicate the number of **NURSING** staff in each category on this unit

Roles	NA	Fulltime Nursing Staff		Part-time Nursing Staff		Casual Nursing Staff
	✓	# of FT staff	# of funded FT positions	# of PT staff	# of funded PT positions	# of casual staff
Registered Nurses						
Licensed Practical Nurses						
Healthcare Aides						
Nursing students who are paid						
Other: please specify						

## 2. Shift coverage

	None	Some shifts (25%)	Half (50%)	Most shifts (75%)	Every shift (100%)	NA
a. On average in the <b>past 3 months</b> , what percentage of shifts were worked by casual staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. On average in the <b>past 3 months</b> , what percentage of shifts does this unit work short?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. On average in the <b>past 3 months</b> , how often were you able to fill casual shifts with the requested level of staff? (i.e. RN for RN, LPN for LPN)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. What is the predominant **nursing care delivery model** used on this unit?

- |  |   |
|--|---|
| <input type="checkbox"/> Team Nursing    | <input type="checkbox"/> Functional nursing (task assignment) |
| <input type="checkbox"/> Primary Nursing | <input type="checkbox"/> Total Patient Care                   |
| <input type="checkbox"/> Case Management | <input type="checkbox"/> Room Assignment Protocol             |

- ☐ Partners in Care
 ☐ New Patient Care Model
- ☐ Autonomous collaborative model
 ☐ Other (please specify)

#### 4. Scope of Practice

	Strongly Disagree				Strongly Agree		NA
a. The RN staff practice to the full scope of <b>CARNA Registered Nurse</b> competencies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. The LPN staff practice to the full scope of <b>CLPNA Licensed Practical Nurse</b> competencies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. The nursing aide/ attendant staff practice to the full scope of their job description.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Full scope of Practice Scale*

5. Please indicate whether your **unit has sufficient** amounts of the following resources to provide the **current level of service**.

	None	Some	Most	All	NA
a. Space	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Budget	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Clinical Staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Clerical Staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Support staff (e.g. housekeeping)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Ongoing education support (e.g. orientation, inservices, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Professional practice support (e.g. standards of practice, practice policy, etc)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

#### IV. PROGRAMMATIC AND STRUCTURAL CHANGES

1. During the past year indicate if any of the following have changed on your **unit**.

**Decreased**

**Increased**

	a lot	a little	Same	a little	a lot	NA
a. Number of attending physicians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Staff absenteeism	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Number of changes on your unit initiated by staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Number of changes on your unit that you initiated	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Number of new initiatives/programs in your department	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Number of initiatives/programs in your organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Stability of permanent FT/PT staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Number of professional support positions (e.g. educator, CNS)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Average number of patients assigned to each staff member	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Substitution of full-time positions with part-time or temporary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Substitution of part-time or temporary positions with full-time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Hiring of unlicensed assistive personnel e.g. personal care attendants/nursing aides to provide direct patient care, previously provided by RNs, LPNs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Number of patient beds/visits	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Wait time to transfer patients off your unit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Temporary stretchers/beds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Wait time for decisions by senior management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Patient workload	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. Patient acuity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. Patients/families' ability to manage their care following discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. Number of internationally educated nurses/aides working on this unit	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u. Turnover/vacancies in frontline management positions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v. Restructuring of middle management positions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
w. Restructuring of senior management positions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
x. Model of nursing care delivery	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Cummings et al., 2009)

2. Please identify whether you anticipate the current provincial healthcare restructuring will **influence your role**, by indicating your level of agreement with the following statements:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Potential change in my immediate supervisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. The new provincial structure has changed <u>what</u> I do each day	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. I am clear about the mission of the new provincial health services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I am confident that I will have a meaningful role in the new provincial health services organization.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. The new provincial health services organization engages me in the implementation of its vision.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## VI. YOUR UNIT'S WORK ENVIRONMENT

1. Continuing to think of your largest unit, please focus on **your** leadership behaviours at work.

As a manager, I...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Look for feedback to ideas and initiatives even when it is difficult to hear.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Act on values even if it is at a personal cost.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Focus on successes and potential rather than failures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Support teamwork to achieve goals and outcomes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Calmly handle stressful situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Actively listen, acknowledge, and then respond to requests and concerns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Actively mentor and coach individual and team performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Effectively resolve conflicts that arise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Engage others in working toward a shared vision.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Allow others freedom to make important decisions in their work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2. Patient Safety.** Please indicate your level of agreement with the following statements.

	Strongly Disagree					Strongly Agree				
a. Patient safety decisions are made at the proper level by the most qualified people.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Good communication flow exists up the chain of command regarding patient safety issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Senior management provides a climate that promotes patient safety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. My organization effectively balances the need for patient safety and the need for productivity.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. I work in an environment where patient safety is a high priority.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. My supervisor says a good word when he/she sees a job done according to established patient safety procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. My supervisor seriously considers staff suggestions for improving patient safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Loss of experienced personnel has negatively affected my ability to provide high quality patient care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. I have enough time to complete patient care tasks safely.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. On this unit in the last year, I have witnessed unsafe practice resulting from trying to save time.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. I am provided with adequate resources (personnel, budget, and equipment) to provide safe patient care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Reporting a patient safety problem will result in negative repercussions for the person reporting it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Individuals involved in major events have a quick and easy way to capture/report what happened.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Individuals involved in major events contribute to the understanding and analysis of the event and the generation of possible solutions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. The patient and family are invited to be <i>directly</i> involved in the entire process of understanding what happened following a major event and generating solutions for reducing the re-occurrence of similar events	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Things that are learned from major events are communicated to staff on our unit using <i>more than</i> one method (e.g. communication book, in-services, unit rounds, e-mails) and/or at <i>several</i> times so all staff hear about it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**3.** Please indicate your level of agreement with the following statements related to your unit.

	<b>Strongly Agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>Strongly Disagree</b>
Adequate support services allow nurses to spend time with patients	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Physicians and nurses have good relationships	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nursing controls its own practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is enough time and opportunity to discuss patient care problems with other nurses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There are enough nurses on staff to provide quality patient care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Every shift has the right mix of nursing staff to provide quality patient care.				
Nurses have the freedom to make important patient care and work decisions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nurses are not placed in a position of having to do things that are against their nursing judgment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
There is a lot of teamwork between doctors and nurses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Patient care assignments foster continuity of care.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The current organizational structure provides adequate support.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compared to a year ago, the overall level of nurse satisfaction has increased.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Compared to a year ago, the quality of patient care in your unit has increased.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## **VI. MANAGER ROLE - SPENDING YOUR TIME**

1. Please indicate the relative amount of time you spend on the following in a typical week.

	No Time	Not enough Time	Appropriate time	Too much Time	Excessive Time
a. Meeting with individual nurses who report to you to discuss work related matters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Meeting with groups of staff who report to you to discuss work related matters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Meeting with peers/managers to discuss work related matters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. On-site committees & initiatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Off-site committees & initiatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Clinical coordination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Meeting with patients/families	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Walkabouts/rounds	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Emails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Office/Paperwork	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k. Your own professional development	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. Budget & financial matters	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Recruiting & hiring of staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n. Conducting performance appraisals	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o. Helping out on the floor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p. Managing staff performance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
q. Managing daily staffing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r. Managing attendance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
s. Cross covering for other managers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t. Implementing/monitoring patient safety initiatives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u. Personally investigating evidence for clinical or management decision making	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v. Building a knowledge friendly work environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(Cummings et al, 2009)

## VII. WORK RELATIONSHIPS



	Strongly Disagree				Strongly Agree
Overall, my current work environment empowers me to accomplish my work in an effective manner	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Conditions of Work Effectiveness Questionnaire-II (CWEQ-II) (Laschinger 2000)*

2. In answering the following, focus on the leadership behaviour of the person **you primarily report to** at work.

The supervisor/director that I report to...	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a. Looks for feedback to ideas and initiatives even when it is difficult to hear.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Acts on values even if it is at a personal cost.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Focuses on successes and potential rather than failures.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Supports teamwork to achieve goals and outcomes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Calmly handles stressful situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Actively listens, acknowledges, and then acts on requests and concerns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Actively mentors and coaches individual and team performance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Effectively resolves conflicts that arise.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. Engages me in working toward a shared vision.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Allows me freedom to make important decisions in my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Resonant Leadership Scale (Cummins, 2006)*

k. When I became a manager, my orientation was adequate.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l. I receive mentorship from my senior colleagues in this manager role.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m. Overall, I consider my workplace to be an empowering environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## VIII. YOUR WORKLIFE AS A MANAGER

### 1. Satisfaction with Work

	<b>Definitely not take the job</b>				<b>Definitely take the job</b>
a. If you had to decide all over again whether to take the job you now have, what would you decide?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Not recommend at all</b>				<b>Recommend Strongly</b>
b. If a friend asked if he/she should apply for a job like yours with your employer, what would you recommend?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Very far from ideal</b>				<b>Very close to ideal</b>
c. How does this job compare with your ideal job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Not at all like I wanted</b>				<b>Just like what I wanted</b>
d. How does your job measure up to the sort of job you wanted when you took it?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Not at all satisfied</b>				<b>Completely satisfied</b>
e. All things considered, how satisfied are you with your current job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<b>Not at all</b>				<b>A great deal</b>
f. In general, how much do you like your job?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*Global Job Satisfaction (Quinn & Shephard, 1972)*

2 What is the likelihood you will stay in your current position for another two years?

Highly unlikely				Very Likely
1	2	3	4	

3. How important are the following factors influencing your intention to stay in your current job

**Very  
important**

**Not  
important**

	<b>at all</b>				
Congruence between my leadership style and my supervisor's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work/life balance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family reasons not related to work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Congruence between organizational and personal values/culture	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Desire to finish the work I have started here	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Sufficient:

communication from organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
fiscal/human resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ability to ensure quality of care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
financial remuneration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
empowerment to do the job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
recognition of value of contributions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
support from immediate supervisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
support from organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
support for education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Other (please

specify): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

4. How important are the following factors influencing your intention of leaving your current job

**Very  
important**

**Not  
important  
at all**

Incongruence between my leadership style and my supervisor's	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Work overload or work/life imbalance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

communication from organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
fiscal/human resources	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ability to ensure quality of care	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
financial remuneration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
empowerment to do the job	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
recognition of value of contributions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Job security	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
support from immediate supervisor	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
support from organization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
support for education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## IX. MY RELATIONSHIP WITH MY WORK

[illegible]

	Never	a few times a year or less	Once a month or less	a few times a month	once a week	a few times a Week	Daily
c. I just want to do my job and not be bothered.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Working all day is really a strain for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. I have become more cynical about whether my work contributes anything.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. I feel exhilarated when I accomplish something at work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. I have become less enthusiastic about my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. I feel burned out from my work.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. I have accomplished many worthwhile things in this job.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MBI-GS (Maslach, Jackson, & Leiter, 1996).

## X. YOUR PROFESSIONAL DEVELOPMENT

1. Which of the following types of in-service education, training, college or degree courses that you have attended in the past year **to increase your knowledge or ability** as a leader/manager? Check all that apply

<input type="checkbox"/> Facility based <b>management</b> courses	<input type="checkbox"/> Facility based <b>leadership</b> courses	<input type="checkbox"/> Regional courses
<input type="checkbox"/> Certificate programs	<input type="checkbox"/> Diploma programs	<input type="checkbox"/> Dedicated workshops
<input type="checkbox"/> Conferences	<input type="checkbox"/> Self-directed study	<input type="checkbox"/> Leadership Institute
<input type="checkbox"/> Baccalaureate courses	<input type="checkbox"/> Master's courses	<input type="checkbox"/> Doctoral courses
<input type="checkbox"/> Other (please specify) _____		<input type="checkbox"/> NA

3. What topics constituted that education? (check all that apply)

<input type="checkbox"/> Managing performance	<input type="checkbox"/> Decision-making	<input type="checkbox"/> Quality improvement
---	--	--

- |  |   |  |
|--|---|--|
| <input type="checkbox"/> Conflict management         | <input type="checkbox"/> Absence management             | <input type="checkbox"/> Teambuilding        |
| <input type="checkbox"/> Patient safety              | <input type="checkbox"/> Standards (e.g. accreditation) | <input type="checkbox"/> Finance & budgeting |
| <input type="checkbox"/> Information systems         | <input type="checkbox"/> HR management                  | <input type="checkbox"/> Coaching/Mentorship |
| <input type="checkbox"/> Other (please specify)_____ |   |  |

4. What topics are missing from current education developments programs for front line managers?

a.

\_\_\_\_\_

\_\_\_\_\_

b.

\_\_\_\_\_

\_\_\_\_\_

c.

\_\_\_\_\_

\_\_\_\_\_

## XI. DEMOGRAPHIC INFORMATION

1. What is your highest level of education?

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Diploma/Certificate | <input type="checkbox"/> Bachelors Degree | <input type="checkbox"/> Masters Degree |
| <input type="checkbox"/> PhD                 | <input type="checkbox"/> Other: _____     |   |

2. How many years experience do you have in your profession?

\_\_\_\_\_

3. How many years experience have you had as a frontline manager?

\_\_\_\_\_

4. How many years experience have you had as a manager at this facility? \_\_\_\_\_

5. How many years of employment have you had in this facility?  
\_\_\_\_\_

6. Among managers in your facility are you generally considered to be a...

<b>New manager</b>		<b>Experienced Manager</b>		<b>Most experienced Manager</b>
<input type="checkbox"/>		<input type="checkbox"/>		<input type="checkbox"/>

7. Please indicate your age group by checking one of the following:

<input type="checkbox"/> 20 - 24 years	<input type="checkbox"/> 45 - 49 years
<input type="checkbox"/> 25 - 29 years	<input type="checkbox"/> 50 - 54 years
<input type="checkbox"/> 30 - 34 years	<input type="checkbox"/> 55 - 59 years
<input type="checkbox"/> 35 - 39 years	<input type="checkbox"/> 60 - 64 years
<input type="checkbox"/> 40 - 44 years	<input type="checkbox"/> 65 - 70 years

8. What is your gender?

☐ Male ☐ Female

Thank-you for completing this survey.

*The QWEST Research Team*

*Dr. Greta Cummings 780.492.8703*

