

IMPLICATIONS OF ACUTE CARE RESTRUCTURING  
FOR MANAGERIAL PERSONNEL

CENTRE FOR NEWFOUNDLAND STUDIES

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0-612-73587-7

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Implications of Acute Care Restructuring for Managerial Personnel

by

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A thesis submitted to the  
School of Graduate Studies  
in partial fulfilment of the  
requirement for the degree of  
Master of Nursing

School of Nursing  
Memorial University of Newfoundland

November 26, 2001

St. John's

Newfoundland

## **Abstract**

A descriptive correlation design was used to investigate acute care managers' attitudes 4 to 5 years following extensive restructuring of the health care system in the province of Newfoundland and Labrador. The relationships among personal characteristics, perceived impact of health care reforms, restructuring initiatives, intervening attitudes, and behavioral intentions were also examined. The modified Conceptual Model of Behavioral Intentions (CMBI), based on the integrated causal model of nurse turnover behaviors (Price & Mueller, 1986) and consequences of psychological contract violations (Turnley & Feldman, 1998, 1999), provided the framework for this study.

The sample was comprised of 197 acute care managers (i.e., senior to first-line) employed in three regions with differing degrees of restructuring. Respondents ranged in age from 24 to 58 years ( $M = 44.28$ ,  $SD \pm 6.87$ ). The majority of respondents were female (64%), had 20 or more years of work experience (60.2%), were in their current position for 5 years or less (61.5%), had a baccalaureate or higher level of education (56.9%), had non-nursing professional backgrounds (55.3%), and worked in the St. John's region (75.6%). A substantial number were primarily responsible for clinical services (47.2%). Data were collected between April and June, 2000 with the Employee Attitude Survey.

Study findings indicated that managers were generally more positive than

negative about the overall impact of health care reforms. Respondents were most positive about the importance of reforms and the adequacy of safety measures, and most negative about the emotional climate of the workplace and the quality of care. Respondents believed that there was movement toward meeting the objectives of regionalization of health services and program management. Respondents were divided on whether or not employers had violated psychological contracts, were more satisfied than dissatisfied with their jobs, were slightly committed to their organizations, and were uncertain about whether or not they would stay with current employers.

Most of the reform impact and restructuring initiative variables were significantly and positively related to intervening attitudes (i.e., psychological contract violations, job satisfaction, organizational commitment) and behavioral intentions (i.e., intent to stay). As well, intervening attitudes depicted moderate to strong, positive correlations with each other and with behavioral intentions. The personal characteristics most likely to influence intervening attitudes and behavioral intentions included managerial position, current position tenure, primary area of responsibility, gender, and region of employment. Study findings provided partial support for the CMBI. During regression analysis, the reform impact variables exerted the greatest influence on contract violations, with diminishing effects on each successive variable. Emotional climate emerged as the most important predictor. As well, each intervening attitude was found to be

most predictive of the attitude or behavioural intention variable that immediately followed it. Specifically, psychological contract violations accounted for 39.1% of the variance in job satisfaction; job satisfaction accounted for 64.5% of the variance in commitment; and organizational commitment accounted for 36.5% of the variance in intent to stay.

Although the current study's results support some of the findings from previous research, they have limited generalizability beyond the study sites. The results of this study suggest that future research efforts should focus on evaluating the long-term impact of health care reforms on acute care managers' work-related attitudes and behavioral intentions. There is an obvious need for more research to investigate the effects of similar and different job-related and work environment factors.

## **Acknowledgments**

I am sincerely grateful for the support and contribution of a number of individuals who through various means facilitated the completion of this thesis.

To my thesis supervisor, Dr. Christine Way, for her academic guidance and patience, and for enhancing my knowledge and understanding of the research process.

To my committee members, Dr. Sandra LeFort and Debbie Gregory, for their guidance, understanding, and constructive feedback.

To the administration of the Health Care Corporation of St. John's, Avalon Board, and Central West Board, for agreeing to participate in this research.

To the Department of Health & Community Services, Government of Newfoundland and Labrador, the Health Care Corporation of St. John's, and the Canadian Health Services Research Foundation for financing this project.

To the managers who participated in this study, for their interest and time.

To my friends and colleagues, for their support and laughter.

To my family and extended family, for their continuous encouragement and support. Although my Mom is not here to share in this milestone, a source of inspiration for me has been the strength and courage she demonstrated throughout her life, and especially during her illness.



To my husband, Jim, for motivating and assisting me every step of the way, and to our children, Heather and Christopher, for their patience and understanding. The completion of this thesis would not have been possible without their support and love.

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## **CHAPTER 1**

### **Introduction**

For most industrialized countries, hospital health care consumes the largest amount of national health dollars. In an effort to control these escalating costs, acute care hospitals in the United States, Western Europe, and Canada have implemented widespread restructuring and reengineering initiatives (McKee, Aiken, Rafferty, & Sochalski, 1998; Sochalski, Aiken, & Fagin, 1997). Health care reforms have placed pressure on organizations and care providers to achieve positive client outcomes, while being cost-effective and efficient (Hansen, 1995).

The most popular strategy of the 1990s in Canada was regionalization, or the transference of responsibility and accountability for the planning and allocation of health care resources from provincial government departments to regional health care boards (Decter, 1997; Jackson, 1995; Vail, 1995). Concomitant with governments' decentralization strategy was the centralization of power and authority in regional board structures (i.e., consolidation of local-based community and institutional boards, as well as diverse affiliations among hospitals). With this approach to health care delivery, local circumstances and population health needs are integral components of decisions (Decter; Vail). Early research findings suggest that the authority of regional boards varies across provincial jurisdictions, and has not achieved projected benefits,



especially cost reductions and improved services (Lomas, Woods, & Veenstra, 1997; Markham & Lomas, 1995).

Besides regionalization, Canadian hospitals have been subjected to other types of reforms (i.e., downsizing, reengineering, and restructuring). As a result of the radical redesign initiatives in health care, there has been a reduction in middle management and supervisory positions. As well, nurse managers' roles and responsibilities have been significantly affected by multi-level organizational changes (Acorn & Crawford, 1996; Gelinas & Manthey, 1997; Leatt, Baker, Halverson, & Aird, 1997). Research studies investigating the impact of system changes on managers, especially nurse managers, are limited (McGillis Hall & Donner, 1997). It is imperative that organizations understand what impact reform initiatives are having on managers who are in key positions to influence the success of institutional transitions (Chase, 1994; Knox & Irving, 1997; McGillis Hall & Donner).

The current study was a component of a longitudinal study designed by Parfrey and colleagues to examine the impact of health care reforms on acute care institutions in the province of Newfoundland and Labrador. The larger project's mandate is to monitor this impact in several areas (i.e., efficiency, costs, acute care bed utilization, quality of care, employee attitudes, and patient satisfaction). The current study focused on how managers perceived the impact of reforms, as well as the objectives of regionalization and program-based

management (i.e., 5 and 4 years post implementation, respectively). A second study focus was to assess their work-related attitudes (i.e., general job satisfaction, psychological contract violations, organizational commitment) and behavioral intentions (i.e., intent to stay).

### **Background and Rationale**

While the nature of health care reforms may vary, the core elements involve a redefinition of the role of acute care hospitals and restructuring of how services are delivered (Anderson, 1997). The research and theoretical literature note that reform initiatives have led to a reduction in management positions, and major changes in managerial roles and responsibilities. As well, there is a growing research base indicating that managers' work-related attitudes have been positively and negatively affected by system changes.

In a review of relevant literature and existing databases on the Canadian nursing workforce, Baumgart (1997) reported that from 1980 to 1995 acute care hospitals evidenced a dramatic decline (approximately 10,000) in the number of registered nurses (RNs) working in management positions. A significant proportion of middle and lower management positions (i.e., supervisors/coordinators) were eliminated during the peak period of health care reforms - 1990 to 1995. This decline continued to a lesser degree until 1999 (Canadian Institute of Health Information [CIHI], 2000; Statistics Canada, 1995, 1996, 1997,

1998).

During the period of major health care restructuring in Newfoundland and Labrador, the Province paralleled the Canadian scene for the period 1995 to 1997 with regard to significant declines in nursing management personnel, especially supervisors/coordinators and assistant/associate directors (CIHI, 2000; Statistics Canada, 1995, 1996, 1997, 1998). However, this trend was reversed for the assistant/associate director positions from 1997 to 1998, when significant increases were noted (CIHI, 2000; Statistics Canada, 1997, 1998).

It is well-documented that downsizing and system redesign have created new roles for hospital managers, and expanded their responsibilities (Acorn & Crawford, 1996; Gelinas & Manthey, 1997; Ingersoll, Cook, Fogel, Applegate & Frank, 1999; Redman & Jones, 1998). It is also recognized that these managers face the challenges of delivering cost effective quality client services, and experience the same emotions (e.g., stress, uncertainty, job insecurity, loss, etc.) as other staff (McConnell, 1998; Prescott, 1993). An additional concern is that managers are not fully prepared for changing roles and responsibilities. As Leatt et al. (1997) noted, organizational theory and the research literature do not provide managers with sufficient information to identify strategies, or a framework for predicting and evaluating the strengths and weaknesses of selected health care reform strategies.

There is an expanding research base that addresses acute care

managers' perceptions of the impact of health care reforms. Most studies have found that managers tend to perceive system changes in a negative light (Baumann et al., 1996; Davis, 1998/1999; Effken & Stetler, 1997; Ingersoll et al., 1999; Redman & Jones, 1998; Seago, 1999; Way, 1995). However, a couple of studies found that managers were much more positive about the impact of system changes than staff (Effken & Stetler, 1997; Way, 1995; Woodward et al., 2000).

Few research studies have examined the impact of health care reforms on acute care managers' work-related attitudes. While there is some support for the negative impact of reforms on psychological contract violations in the business sector (Turnley & Feldman, 1998, 1999), inconsistent findings have been reported for their impact on job satisfaction (e.g., Acorn, Ratner, & Crawford, 1997; Effken & Stetler, 1997; Luthans & Sommer, 1999; Poulin, 1995; Seago, 1999; Woodward et al., 2000). As well, reforms have been shown to negatively impact, albeit to a lesser degree, managers' commitment levels (Lee & Henderson, 1996; Luthans & Sommer; Turnley & Feldman) and behavioral intentions (Turnley & Feldman).

Managers play a crucial role in implementing organizational change, and are in pivotal positions to facilitate positive outcomes. Given the limited research on factors affecting managers' work-related attitudes, further inquiry is definitely warranted.

### **Problem Statement**

Regionalization of health care services was the first level of reforms in the Province of Newfoundland and Labrador. Between April, 1994 and January, 1996, changes in the governance of health services occurred at the regional levels with the formation of regional health boards (Davis & Tilley, 1996). The fourteen boards consisted of six institutional boards (i.e., combining hospitals, long-term care facilities, and rehabilitation centres), four community boards (i.e., combining home care, public health, drug dependency services, community mental health, health protection, and health promotion), and two combined boards (i.e., integration of community and institutional services). Within the St. John's region, two boards remained separate from the institutional and community boards - the Newfoundland and Labrador Cancer Treatment and Research Foundation and the St. John's Nursing Home Board (Davis, 1998/1999).

Three of the six institutional boards agreed to collaborate in all phases of a provincial project designed to assess the impact of regionalization of acute care services on efficiency, quality of care, and employee attitudes. The consenting boards included the Health Care Corporation of St. John's (HCCSJ), Avalon Health Care Institutions Board (Avalon Board), and Central West Health Board (Central West Board). Within the three provincial jurisdictions, community health boards remained separate entities, institutional administrative services were

consolidated, and management positions were reduced by 40 to 50 percent.

The HCCSJ is the largest of the boards, serving a population of about 200,000, and is the major tertiary care centre for the entire province (Davis & Tilley, 1996). Significantly, the St. John's region has experienced the most pervasive health care reforms (i.e., institutions have been subjected to downsizing, restructuring, reengineering, mergers, and closures). Unlike the other regions, which have a traditional department structure in place, clinical integration was also part of the HCCSJ's restructuring initiatives (i.e., transition from departmental-based to program-based services).

While most of the downsizing strategies have already been implemented, staff and management are still adjusting to some of the more significant and dramatic changes (e.g., reductions in senior and middle management, institutional closures, increased autonomy and responsibility, etc.). As in the rest of Canada, the impact of health care reforms on the roles, responsibilities, and attitudes of hospital managers has been given much less attention than those of front-line workers, especially the nursing staff. The present study was designed to address some of these concerns (i.e., managers' perceptions of reform impact, work-related attitudes, and behavioral intentions) within the proposed modified Conceptual Model of Behavioral Intentions (CMBI).

The CMBI is based on the integrated causal model of nurse turnover behaviors (Price & Mueller, 1986) and the consequences of psychological

contract violations (Turnley & Feldman, 1998, 1999). The CMBl identifies several factors which influence behavioral intentions (i.e., intent to stay). These factors include determinants (i.e., impact of health care reforms, or job-related and work environment factors), covariates (i.e., intervening attitudinal states which include psychological contract violation, job satisfaction, and organizational commitment), and correlates (i.e., select personal characteristics). While the covariates serve as intermediate outcomes, they exert a direct and indirect effect on behavioral intentions, similar to the determinants. The proposed relationships among study variables are outlined in the research questions.

### **Purpose and Research Questions**

The purpose of the current study was to investigate managers' perceptions of the impact of reforms and work-related variables following the restructuring of acute care services under three regional boards (i.e., HCCSJ, Avalon Board, and Central West Board) and the introduction of program-based management and a shared governance model in tertiary care centres under the HCCSJ. A second purpose was to identify the best predictors of intermediate outcomes and behavioral intentions.

The current study was designed to address the following research questions:

1. How do acute care managers perceive the impact of health care reforms (i.e., importance of reforms, emotional climate, practice-related issues, quality of care, safety issues, and standards of care) and restructuring initiatives (i.e., regionalization of health services and program-based management)?
2. What are acute care managers' levels of psychological contract violation, general job satisfaction, organizational commitment, and behavioral intentions (i.e., intent to stay)?
3. Are there significant relationships among impact of health care reform variables, restructuring initiatives, intermediate outcomes (i.e., psychological contract violation, job satisfaction, and organizational commitment), and intent to stay?
4. Are perceived impact of health care reforms and restructuring initiatives a function of select personal characteristics (i.e., age, gender, region of employment, managerial position, current position tenure, education level, professional background, primary area of responsibility, and years of work experience)?
5. Are intermediate outcomes and intent to stay a function of select personal characteristics?
6. What factors investigated in the current study are the best predictors of intermediate outcomes and intent to stay?



## **CHAPTER 2**

### **Literature Review**

An understanding of the impact of health care reforms on managers working in tertiary care settings requires insight into the factors that influence work-related attitudes and behavioral intentions. The literature review is divided into three major sections. In the first section, a discussion of research findings on health care reforms and their implications for tertiary care managers is presented. In the second section, the research findings on the key predictors of intermediate outcomes (i.e., job satisfaction, psychological contract violation, and organizational commitment) and behavioral intentions (i.e., intent to stay or leave) are summarized. In the final section, an overview of the conceptual framework for this study is presented.

#### **Health Care Reforms: Implications for Acute Care Managers**

Massive health care reforms are being implemented in every province and territory (Jackson, 1995; Lomas et al., 1997). The six guiding principles are health promotion, cost control, accountability, regionalization, consumer centered, and community-based services (Jackson). With human resources responsible for most costs, a major challenge for institutions is to reduce personnel costs without compromising quality patient care, or negatively affecting employee attitudes (Leatt et al., 1997; Luthans & Sommer, 1999).

Leatt et al. (1997) identified leadership during the change process as a crucial organizational characteristic that can act as a facilitator or barrier to successful implementation of cost-cutting strategies. The resulting new roles and responsibilities require that managers possess knowledge and skills in change theory, organizational redesign, patient-care delivery models, and team-process techniques (Knox & Irving, 1997; Leatt et al.). While most of the studies reviewed focused on the impact of health care reforms on patients and front-line staff, their consequences for acute care managers are becoming of increasing interest to researchers and organizations. The following discussion is divided according to the three major areas of reforms - regionalizational/multi-hospital arrangements, downsizing, and reengineering.

### **Regionalization/Multi-Hospital Arrangements**

Regionalization of health care services is a common strategy used by most Canadian provinces to curtail costs, and promote the delivery of quality services in an efficient and a comprehensive manner. This downsizing strategy is dominated by institutional and community board mergers, as well as affiliations among multiple hospitals in a defined geographic region (Decter, 1997; Shamian & Lightstone, 1997). Decentralization is also characteristic of this strategy, with decision-making authority devolved to the local level from provincial governments (Lomas et al., 1997).

An extensive review of relevant literature identified few research studies that were designed to evaluate the effects of regionalization and/or multi-institutional mergers. Reviews by Markham and Lomas (1995) and Lomas et al. (1997) suggest that the disadvantages of these initiatives may outweigh the advantages in the early years of reform. Similar views were reported by Davis (1998/1999) for the province of Newfoundland and Labrador.

Markham and Lomas (1995) conducted a review of relevant literature for Canada and the United States to identify the types of regional-based multi-hospital arrangements, their governance structures, and their advantages and disadvantages. It was determined that the degree of autonomy retained by individual institutions was the key differentiating factor. The various types of system arrangements lay on a continuum from high (i.e., formal affiliation, shared services, consortia or strategic alliances) to low (i.e., contract management, leasing, umbrella corporation, and mergers/consolidations) institutional autonomy. Significantly, there was limited empirical evidence found to support projected benefits (i.e., economic/financial savings, improved service quality, more efficient human resource management, and increased coordination and complexity of service offerings), especially in the Canadian context. The authors concluded that the early years of multi-institutional arrangements may be marked by increased costs to facilitate equalization or harmonization of service offerings, and decreased quality due to reduced access (i.e., trimming service duplication)

and increased bureaucracy. As well, the authors identified the potential negative impact on staff and physicians (e.g., increased uncertainty and stress, job loss, lack of role clarity, etc.), and organizational/managerial instability (e.g., reduced individual hospital autonomy, erosion of hospital loyalties, increased disruptions in referrals and clinical practice plans, etc.).

Lomas et al. (1997) conducted a review of the devolution of decision-making authority for health care to local boards in each Canadian province. The authors found that all of the provinces, except Ontario, were at different stages of devolution. One caveat was that local boards could not raise funds for service financing, or determine core services. With scope of services the key differentiating structural characteristic, a narrower scope was reflective of greater attention to improving efficiency and integration/coordination, while a broader scope was indicative of greater attention to population health. With respect to process, the degree of devolved power across provincial jurisdictions lay on a continuum from low to high decision-making (i.e., deconcentration, decentralization, and devolution, respectively). The authors concluded that most provincial boards fall within the deconcentration or decentralization classification, and are forced to deal with the competing demands of government, provider groups, and the population served.

Davis (1998/1999), a Chief Executive Officer (CEO) of the HCCSJ, reported on her experiences with regionalization and multi-institutional mergers

and consolidations in Newfoundland and Labrador. The author noted that the provincial government's mandate to curb rising costs was the driving force behind the formation of regional boards (i.e., reduced number of boards from 40 to 14). As a result of the mergers, individual boards were able to: (a) assume greater responsibility for the health of the region served, (b) place a greater focus on health determinants, (c) have greater consumer involvement in decision-making, (d) direct efforts toward greater public accountability, (e) use ethical values to guide decision-making, (f) place greater emphasis on evidence-based practice, (g) use resources in a cost-effective manner, (h) involve staff and physicians in decision-making, (i) forge linkages with external bodies, the public, and providers, and (j) exert greater influence on healthy public policy. On the negative side, individual boards were faced with increased anxiety and uncertainty among the staff and physicians, as well as increased dissatisfaction from feeling overworked, underpaid, undervalued, and excluded from decisions affecting them. Additional negative forces included decreased public confidence resulting from increased media attention on shortcomings, the increased stress of limited financial resources, and increased conflict between evidenced-based practice and consumer expectations.

Three studies were conducted in Newfoundland and Labrador during the early stages of regionalization and hospital mergers. The Association of Registered Nurses of Newfoundland and Labrador (ARNNL) commissioned two

surveys (Way, 1994, 1995), one qualitative and the other quantitative, to investigate nurses' perceptions of the impact of health care reforms. A third study was conducted by Pyne (1998) with the nursing staff of three acute care hospitals consolidated under the HCCSJ approximately one year post-merger (i.e., Fall of 1996). Program-based management and a nursing professional practice model had also been implemented six months prior to data collection. Study findings suggested that reforms were having a negative impact on nurses' attitudes.

The first ARNNL study (Way, 1994) used a qualitative survey approach to examine nurses' ( $N = 347$ ) perceptions of the impact of health care reforms in Newfoundland and Labrador. The ARNNL Health Systems Changes Questionnaire consisted of open-ended questions which assessed reform impact along several dimensions (i.e., overall attitudes, changes in the work environment, impact of changes on patient care and nursing practice, and potential for positive changes or opportunities). The qualitative analysis revealed that the majority of nurses were very negative about system changes (i.e., staff reductions, increased workload, care-giving demands, and greater role responsibilities), and the impact of downsizing on the quality of care, professional practice, and job satisfaction.

In a survey of a stratified random sample of staff nurses and nurse managers ( $N = 333$ ) from different regions of the province, Way (1995) obtained

baseline data on perceptions about health care reforms. The dominant constructs and defining descriptors that emerged from the Way (1994) qualitative analysis were used as the basis for development of the Impact of Health Care Reform Scale (IHCRS). The IHCRS assessed impact in six content domains (i.e., importance of reforms, emotional climate, practice-related issues, quality of care, safety issues, and standards of care). Study findings indicated that most respondents were neither totally negative nor positive about the overall impact of health care reforms. With regard to specific areas of reform impact, the majority of respondents viewed quality of care, the emotional climate, and standards of care most negatively. Comparatively, the importance of reforms, practice-related issues, and safety issues were viewed most positively by respondents. Personal characteristics were also found to influence perceptions of the importance of reforms (i.e., more positive views by nurse managers, older, and higher educated nurses). There was also a significant effect for practice-related issues, quality of care, and the emotional climate (i.e., more positive views by nurse managers, older, more experienced, and higher educated nurses). Finally, nurse managers, older, and more experienced nurses held more positive views of safety measures and standards of care than staff, younger, and less experienced nurses.

Using a descriptive, correlational design, Pyne (1998) examined perceptions of the impact of health care reforms and job satisfaction levels in a sample of staff nurses ( $N = 298$ ). Data were collected with the IHCRS and the

McCloskey/Mueller Satisfaction Scale (MMSS) on three units (i.e., critical care, medical, and surgical areas). The MMSS assessed job satisfaction in eight content domains (i.e., extrinsic rewards, scheduling, work/family balance, co-workers, interaction opportunities, professional opportunities, praise/recognition, and control/responsibility). The findings indicated that nurses were more negative than positive about the impact of health care reforms, and slightly dissatisfied with their jobs. Significantly, the majority of nurses were most positive about the importance of reforms, safety issues, and practice-related issues. Conversely, quality of care, the emotional climate, and standards of care were viewed most negatively by respondents. The mean scores for the overall impact of reforms and for all of the reform impact variables were significantly below the normative values obtained by Way (1995). With regard to satisfaction levels, the majority of respondents were most satisfied with coworkers and interaction opportunities, and least satisfied with control/responsibility and extrinsic rewards.

In summary, the early results on the first level of health care reforms suggested that all levels of employees identified both positive and negative areas of impact. There was a general consensus that reforms were needed in the health care system. However, negative repercussions were perceived for quality of patient care and several work environment and job-related factors (e.g., autonomy, job demands, uncertainty, stress levels, job satisfaction, etc.).



### **Downsizing**

Downsizing is one of the most frequently used strategies by health care organizations. This approach may consist of any one or a combination of the following: across-the-board cuts, early retirement programs, contracting out services, increasing the proportion of temporary to permanent employees, organizational structural redesign (i.e., functional horizontal to vertically-integrated delivery systems), and layering or removing a horizontal layer (Leatt et al., 1997). The following review highlights the impact of downsizing strategies on managers' roles and responsibilities, and their reactions to some of these changes.

**Changed roles and responsibilities.** One comprehensive study of the careers, work experiences, and attitudes of all levels of managers working in the Canadian health care system during the early stages of downsizing was identified from the literature (Lemieux-Charles, Murray, Aird, & Barnsley, 1994). This study provides a useful reference point from which to compare managers' perceptions of changes, and the resulting impact on subsequent roles and responsibilities.

Lemieux-Charles, Murray, et al. (1994) conducted a national survey of Canadian managers (CEOs, senior management, and middle management) to identify the influence of gender and select situational factors on career attainment, aspirations, and expectations. Data were collected from 3,010 managers by using a researcher-developed instrument, which assessed a

number of diverse factors (e.g., position, compensation, organization, satisfaction, career aspirations, and attitudes, etc.). Standardized instruments were also used to examine job satisfaction, job involvement, career satisfaction, and career prospects. The findings indicated that the majority of those surveyed worked in the institutional sector and began their careers at the middle management level, with more men than women in all cohorts starting their health care careers at the CEO level. As well, most respondents expected to attain a CEO or senior management position. Women more so than their male counterparts were in middle management positions, regardless of the cohort entry date into the health care field (i.e., 1950 - 1973; 1974 - 1983, and 1984 - 1993), and had lower career aspirations (i.e., less desire to become a CEO). Furthermore, women in CEO and senior management positions were more likely to have lower earnings, not to be living with a partner, and not to have children than their male counterparts. Finally, most respondents' expectations paralleled their aspirations and expected to be in a health care management position within the next five years.

The diverse downsizing strategies implemented by institutions have had significant repercussions for managers, especially with the loss of management positions and changed roles and responsibilities. The magnitude of the reduction in middle management nursing positions within the Canadian context has been well documented (Baumgart, 1997; CIHI, 2000; Statistics Canada, 1995, 1996,

1997, 1998). The research literature is rather limited on managers' perceptions of their roles and responsibilities during the transitional period of health care reforms.

Two studies were identified from the literature that focussed on the scope of downsizing strategies and reductions in management positions (Aiken, Clarke, & Sloane, 2000; Baumann et al., 1996). The Baumann et al. study also presented administrators' and nurses' perceptions of some of the consequences of downsizing.

Baumann et al. (1996) examined the innovative downsizing strategies used by 20 acute care hospitals in Ontario. Hospitals' operating plans were reviewed, unstructured interviews conducted with administrators ( $n = 42$ ), and focus groups ( $n = 20$ ) held with RNs and registered practical nurses (RPNs). While operating plans and interviews with administrators (i.e., CEOs and Vice Presidents of Nursing) revealed no consistent downsizing strategies, all hospitals demonstrated a definite move to rearrange organizational structures and eliminate middle management positions. Interviews conducted with administrators revealed that most dialogued with other hospitals, were contracting-out services, had moved to decrease inpatient and increase outpatient services, implemented a committee-based structure to guide the downsizing process, relied on a centralized decision-making strategy with limited input from staff, and were moving from a functional to a decentralized program

management system. The nursing groups (i.e., RNs and RPNs) identified several important issues: diminished attention to the caring aspects of their jobs; increased desire for management to involve them in decision-making and to be placed on committees; and viewed transfers to other units, reduction in work hours, early retirement packages, and permanent to casual status as job losses. Interestingly, administrators also identified the need for increased communication with, and involvement of, staff members prior to and during the change process.

Using multiple data sources across different time periods, Aiken et al. (2000) examined major restructuring/reengineering initiatives in hospitals in the United States between 1986 and 1998. The results of a survey of 640 CEOs indicated that most organizational restructuring efforts between 1991 and 1996 were directed toward changing work designs and processes (i.e., reducing and cross training personnel, altering the skill mix by reducing the proportion of registered nurses, reassigning support services to nursing units, and redistributing patients across units). By far, the largest cut in positions was directed toward management levels.

With the drastic cuts in middle management positions, one questions whether or not managers who expressed a desire to attain a CEO or senior management position in the Lemieux-Charles, Murray, et al. (1994) study will attain this career goal. More importantly, what impact are reforms having on the roles and responsibilities of managers who remain in the health care system?

One Canadian study (Acorn & Crawford, 1996) and one American study (Gelinas & Manthey, 1997) were identified from the literature that focused on the changing roles and responsibilities of nurses employed as first-line and mid-level managers, and/or executives during the early stages of downsizing in acute care settings.

Acorn and Crawford (1996) reported on the job characteristics of first-line nurse managers ( $N = 200$ ) working in 41 acute care hospitals with more than 100 beds in British Columbia in the aftermath of fiscal restraints. A researcher-developed instrument was used to collect data on personal characteristics. The findings indicated that most respondents had five or more years of supervisory experience, held the position title of head nurse or nurse manager, and were currently members of the nurses' union. As well, slightly less than half had been in their current positions for more than five years, and had baccalaureate or higher educational preparation. With regard to roles and responsibilities, most managers reported being responsible for one unit or service area averaging 40 or less beds, supervising less than 50 staff members, managing an annual budget of more than \$1 million, and having one hierarchical level between them and the chief nursing administrator.

Gelinas and Manthey (1997) used a survey to examine how nursing leadership roles have been affected by organizational redesign. The sample ( $N = 1,866$ ) was comprised of nursing leaders (i.e., mid-level nurse managers and

nurse executives) from the Voluntary Hospitals of America (VHA) and the American Organization of Nurse Executives. Study results revealed that 45% of the respondents worked in multi-institutional systems, with 80% identifying an individual organization approach to their redesign project. Among the most frequently identified core features of system redesign were: integration/coordination across departmental lines (63%), development of critical paths (61%), use of multi-skilled workers (61%), management restructuring (61%), and patient-focused care (50%). The majority of respondents (80%) reported role changes (i.e., title changes) and expansion of responsibilities (i.e., identifying the need for redesign projects and being the primary decision-maker for redesign efforts; non-nursing departments reporting to them, such as social services, respiratory therapy, and pharmacy; and changes in reporting relationships). The authors concluded that VHA hospitals have implemented pervasive redesign initiatives, and nurse managers have assumed the bulk of the responsibility for implementing and monitoring changes.

In summary, there has been very little research designed to explore the impact of downsizing and restructuring on the roles and responsibilities of acute care managers working in the health care system. This is somewhat surprising given the significant reductions in management positions, and the resulting changed roles and increased responsibilities of those who survived the layoffs and early retirements. The potential negative impact of these strategies on the

work-related attitudes of managers working in acute care institutions is discussed in the following section.

**Work-related attitudes.** Conflicting findings are reported in the literature on the impact of downsizing on the work-related attitudes of acute care managers. Although most managers seem to be satisfied with their jobs overall (Acorn et al, 1997; Lemieux-Charles, Aird, & Barnsley, 1994), there is some evidence for dissatisfaction with pay, promotion opportunities, conflicting demands, and job security (Lemieux-Charles, Aird, et al.).

Lemieux-Charles, Aird, et al. (1994) reported on the attitudes of Canadian managers responding to a national survey early in the downsizing period. The authors found that most managers were very satisfied with their jobs overall, with those longest in the health care field reporting greater satisfaction. The job components that managers were most likely to express dissatisfaction with included pay, opportunity for advancement, freedom from conflicting demands, and job security. Comparatively, all of the female respondents perceived less fairness in salary levels than their male colleagues. Significantly, both male and female respondents who entered the system later (i.e., 1984 to 1993 cohort) perceived that they were being treated less fairly in the areas of promotion and recognition, than their colleagues who entered the system earlier. Despite identified areas of dissatisfaction, the majority of respondents reported receiving support and encouragement in their jobs, and indicated the presence of policies

addressing equality (e.g., job sharing, flexible hours, etc.).

There is conflicting evidence on the effects of decentralization on managers. Some authors have found that nurse managers working in decentralized environments report higher levels of job satisfaction, greater organizational commitment, and autonomy than their counterparts working in more centralized environments (Acorn et al., 1997; Ringerman, 1990). In contrast, Wells (1990) found that the job satisfaction of nurse managers was not a function of the degree of centralization.

Wells (1990) used a descriptive, non-experimental survey to investigate the influence of organizational structure on the job satisfaction levels of first-line nurse managers ( $N = 95$ ) working in eight acute care facilities in the metropolitan area of Houston, Texas. A Demographic Data Profile and the Staff Satisfaction Scale were used during data collection. Nurse managers' participation in unit budget preparation was the sole indicator for the presence of a decentralized structure. The findings indicated that more managers in decentralized organizations (77.2%) were proficient or semi-proficient in budget preparation than their counterparts in centralized organizations (29.4%). Significantly, job satisfaction did not vary between the two types of organizations. A significant study limitation was the restrictive operational definition used to assess the degree of decentralization.

Using a non-experimental, observational design and a sample of nurse



managers ( $N = 292$ ) from 161 acute care hospitals in Miami, Ringerman (1990) examined the influence of decentralization on job satisfaction, organizational commitment, and professional practice climate. The Index of Centralization (IC) (Hage & Aiken, 1967) assessed decentralization in terms of degree of participation in decision-making (i.e., allocation of resources and determining organizational policies) and hierarchy of authority (i.e., decision-making about task performance without consulting immediate supervisors). Professional practice climate, organizational commitment, and job satisfaction were measured with the Miller-Polentini Professional Practice Climate Tool, the Organizational Commitment Questionnaire (OCQ), and the Munsen-Heda Job Satisfaction Questionnaire, respectively. The findings demonstrated that managers who reported high levels of participation in decision-making were more likely to make decisions independent of input from immediate supervisors. In addition, managers working in highly decentralized organizations reported greater job satisfaction and more positive professional practice climates (e.g., autonomous, thoughtful, creative work environments, etc.), and were more committed to their organizations.

Acorn et al. (1997) examined the interrelationships among decentralization, job satisfaction, autonomy, and organizational commitment in the same sample of first-line nurse managers participating in the 1996 study. The following standardized instruments were used during data collection: the IC,

Job Characteristic Inventory (i.e., autonomy subscale), OCQ, and MMSS. Study findings indicated that most nurse managers were very satisfied with their jobs, worked in extremely decentralized hospitals, and reported high levels of autonomy and organizational commitment. As well, managers who rated their organizations as very or extremely decentralized had higher levels of job satisfaction, autonomy, and organizational commitment than their counterparts working in somewhat decentralized systems.

Other studies have focused on the impact of downsizing and restructuring on a more diverse group of acute care managers (i.e., across managerial levels with nursing and non-nursing backgrounds), and/or compared managers' perceptions with those of front-line workers. There is some support for a decline in managers' commitment levels (Lee & Henderson, 1996; Luthans & Sommer, 1999), as well as an increase in job stress (Lee & Henderson; Woodward et al., 2000). Two longitudinal studies conducted before and after downsizing/restructuring found that the job satisfaction of both managers and staff significantly decreased over time (Luthans & Sommer; Woodward et al.). Woodward et al. also reported on the negative repercussions of downsizing/restructuring for such job-related factors as role clarity, coworker and supervisory support, job influence, and job security, among others.

Using a survey design, Lee and Henderson (1996) investigated occupational stress and organizational commitment in a sample of nurse

administrators ( $N = 78$ ) from 134 hospitals in a southeastern state of the United States. The Maslach Burnout Inventory assessed occupational stress along three dimensions (i.e., emotional exhaustion, depersonalization, and personal accomplishment), and the OCQ measured levels of commitment to current employers. A demographic form was used to collect data on key personal characteristics (e.g., gender, age, marital status, educational preparation, management experience, etc.) and organizational factors (e.g., peer meetings, coworker support, organizational complexity, etc.). The findings indicated that most administrators, regardless of managerial level (i.e., chief nursing officers, assistant chief nurses, divisional/departmental heads, and nurse administrative staff) were not experiencing feelings of depersonalization, had low levels of emotional exhaustion, felt a high sense of personal accomplishment, and were moderately committed to their organizations. With regard to the phases of burnout (i.e., low, moderate, and severe), slightly less than one-half of the administrators were experiencing occupational stress at severe levels. Other noteworthy findings included the significant association of decreased colleague support with low feelings of personal accomplishment, greater emotional exhaustion, and organizational commitment. Finally, low organizational support was significantly correlated with higher levels of emotional exhaustion and burnout intensity.

Luthans and Sommer (1999) used a pretest-posttest quasi-experimental

control group design to examine the effects of downsizing on all health care managers and front-line staff ( $N = 848$ ) over a three-year period (i.e., 1993, 1994, and 1995). The sample was derived from employees associated with units at different stages of redesign in a 250-bed medical rehabilitation hospital in a Midwest state of the U.S. Downsizing initiatives included reengineering employee workloads, restructuring hours from full-time to part-time status, and elimination of positions. Standardized instruments used during data collection included: the OCQ, job satisfaction subscale of the Job Diagnostic Survey (JDS), Supervisor Support Scale, and Workgroup Trust. Information was also collected on key personal characteristics (i.e., age, gender, marital status, and job tenure). The repeated measures ANCOVA findings revealed that the organizational commitment, job satisfaction, and work group trust of both front-line staff and managers significantly declined over time. While none of the groups experienced significant declines in supervisor support, managers were observed to have significantly higher levels of support than other staff. Significantly, managers did not differ from other staff on job satisfaction levels. However, managers were found to have higher levels of organizational commitment and workgroup trust than other staff at all time periods.

Using a longitudinal design, Woodward et al. (2000) monitored changes in select job and personal characteristics, job satisfaction, and stress of employees ( $N = 380$ ) working in a large teaching hospital in Ontario during and following

major restructuring from 1995 to 1997 (i.e., reengineering services, removal of middle management, and administrative mergers). Randomized sampling techniques were used to select front-line staff, as well as personnel from different managerial/supervisory levels. Several standardized scales were used to assess select aspects of the work environment (i.e., job interference, decision latitude, role clarity, job demands, job influence, coworker support, supervisory support, teamwork, job security, job satisfaction, and family interference). Information was also collected on several personal characteristics (e.g., age, sex, weekly hours spent on job activities, etc.) and select personal resources (i.e., active coping style, readiness for organizational change, and job self-efficacy). The findings indicated that all levels of workers (i.e., designated and non-designated supervisors, and staff) reported a significant increase in job insecurity, job demands, job interference with home life, and job stress. As well, there was evidence of a significant decrease in role clarity, supervisor support, teamwork, coworker support, and job satisfaction for all workers. With regard to group differences following restructuring, non-designated supervisors and staff had significantly higher job insecurity, and lower job influence and decision latitude than supervisors. Furthermore, the staff reported working less hours than both non-designated and designated supervisors.

In summary, particularly important for successful downsizing is deployment of a planned strategic approach that will minimize the negative

impact on all levels of employees. While decentralization seeks to increase decision-making and responsibility, it can also increase job demands, job stress, role conflict, and role ambiguity, as well as other job-related factors. The inconsistent findings noted on the effects decentralization and other downsizing initiatives (i.e., positive versus negative impact on employees) could be a function of the scope and pace of organizational change. Regardless of the reasons for observed differences, the empirical evidence suggests that achieving a meaningful balance between work demands and diversity, as well as having autonomous decision-making, are integral to acute care managers' job satisfaction, organizational commitment, and overall well-being.

### **Reengineering Processes**

Historically, hospital services have been managed under functional designs (i.e., discipline-specific departments, such as nursing, social work, and housekeeping), with each department treated as a separate entity or division (i.e., small semi-autonomous units organized around traditional medical specialties) (Morris, Monaghan, & Alton, 1994). Driven by the need to improve ineffective and inefficient processes, reengineering (i.e., a top-down, bottom-up reform strategy) involves a reexamination of all work processes, and the movement away from managing functions to managing processes. Generally, middle manager positions are eliminated and replaced with self-managed teams

(i.e., multidisciplinary and cross-functional teams) responsible for providing patient-centered care (Leatt et al., 1997). Under patient-centered approaches, the focus is on patient needs. Staff roles are redefined to improve continuity of care, ensure greater efficiency, streamline operations, and increase patient satisfaction. Cross-training of staff (i.e., expanding roles and scope of practice) is another technique frequently used to redistribute staff to high need areas (Leatt, et al.).

Two studies were identified from the literature which investigated the impact of moving from a functional design system to a patient-centered system on different outcomes (i.e., provider, patient, and organizational). While both studies found that system changes had minimal to no effect on outcomes, Effken and Stetler (1997) reported a reduction in operating costs, while Seago (1999) reported increased costs.

Effken and Stetler (1997) used a formative-evaluation design to examine the impact of a patient-centered redesign program (i.e., altering organizational systems, collaborative practice, and information systems) on intermediate outcomes (i.e., staff/customer satisfaction, continuity, and critical role components), and overall outcomes (i.e., quality and cost) in an acute care hospital. Multiple data sources (i.e., managers, staff, patients, and physicians) and methods (i.e., interviews, surveys, standardized tools, and researcher-developed items) were used during data collection (i.e., prior to and at 2-year

intervals post-implementation). Study findings suggested that both staff and managers felt the organizational culture had become more patient-centered, more reflective of decentralized decision-making, and provided more opportunities for creative thinking. Furthermore, management personnel reported increased involvement in decision-making, and reduced barriers to job performance, with nursing directors more positive than nurse managers. In addition, there was evidence that operational systems had become more efficient (e.g., billing, admitting, materials delivery, etc.), patient-related assignments more consistent and coordinated, and staff more satisfied. Although there was evidence of movement towards quality outcomes (e.g., more positive ratings of hospital services by patients, improvements in select clinical outcomes, etc.), most innovations and intermediate outcomes (i.e., staff/patient satisfaction, continuity of care, and critical role components) were not found to exert a significant impact on quality and cost outcomes. The only exceptions were the positive impacts of organizational system redesign and critical pathways on costs. The authors did acknowledge the limitations of study instruments and the generalizability of findings, as well as the importance of ongoing evaluation of change in progress.

In a two-year longitudinal, prospective study prior to and following implementation of a patient-focused care delivery system in a large U.S. university teaching hospital, Seago (1999) examined provider, patient, and



organizational outcomes. The Job Content Questionnaire was used to measure a number of work-related factors (i.e., decision latitude, psychological and physical work demands, job security, opportunities for creativity, social support, coworker and supervisor support, relations with clients, recognition, and job dissatisfaction). Organizational climate and collaborative culture were assessed with the Organizational Climate Questionnaire and the Hospital Culture Scale, respectively. Several health status scales were used to assess the overall health, health changes, alcohol intake, and overall pain of providers. The findings indicated that registered nurses, support staff, and managers perceived few changes on most major job content variables. Specifically, registered nurses experienced a significant increase in perceived consideration by supervisors, as well as job dissatisfaction. Support staff experienced a significant increase in job dissatisfaction and a decrease in skill discretion (i.e., control over which skills to use for which tasks). As well, managers and physicians perceived a significant decrease in the collaborative culture. The findings also revealed that none of the provider groups (i.e., registered nurses, patient care assistants, patient support assistants, managers, and physicians) experienced a decrease in health status. Other noteworthy findings included an increase in costs and hours per patient day, but no significant changes in skill mix and patient satisfaction. The author concluded that the new nursing care delivery system had minimal to no effect on provider, patient, and/or organizational outcomes.

A few additional studies focused on the supports required by acute care managers during and following system redesign initiatives. Three qualitative studies, conducted in U.S. hospitals, were identified which examined the scope of managerial responsibilities, as well as the impact of system changes on workload demands, the need for new knowledge and skills, and support from senior management/ supervisors and coworkers (Ingersoll et al., 1999; Knox & Irving, 1997; Redman & Jones, 1998). One recent Canadian study focused on nurses' perceptions of factors that promote positive work environments (McGirr & Bakker, 2000).

Using a descriptive design, Knox and Irving (1997) investigated nurse managers' ( $N = 15$ ) perceptions of important behaviors by senior executives during implementation of a patient care delivery model in a large facility in the southeastern United States. A researcher-developed instrument assessed the priority attached to executive supportive and facilitation behaviors (i.e., rating of select behaviors identified from the literature, on a scale ranging from 1 to 10). Clarification of responses and additional input were obtained through follow-up interviews with nurse managers. The top four executive behaviors ranked as being most important for quality of work-life were: frequent communication of plans and progress (i.e., necessary to be informed and perceived as being legitimate participants in the change process); high visibility of health care executives on work units (i.e., conveys concern for staff, provides opportunities

for questions and input, and facilitates feelings of involvement in change process); and verbalized commitment within the organization for quality patient care; and for staff welfare during the transitional period. The authors concluded that the support provided by health care executives to the managers of patient care units is a significant determinant of successful organizational changes.

In a qualitative study of first-level nurse managers ( $n = 22$ ) and non-nurse department managers ( $n = 4$ ), Redman and Jones (1998) investigated the impact of a patient-centered delivery system in two community hospitals in the U.S. Semi-structured and structured questionnaires were used to elicit data on several factors (i.e., change in full-time equivalents, advantages and disadvantages of the new system, problems with implementation, staff reactions to the changes, alterations in managers' roles and responsibilities, and impact of the new system on patient and organizational outcomes). The findings indicated that nurse managers experienced an increase in the number and diversity of full-time staff members (i.e., decreases in RNs and increases in assistive personnel) reporting to them. Elimination of unit-based head/charge nurse positions without additional financial resources also led to increased scope of responsibilities. The nurse managers also found that less time was available to be present on the units to monitor the quality of service delivery. In fact, their greatest challenges were having to deal with the diversity and complexity of staffing issues (i.e., varied educational and experiential/sociocultural backgrounds of non-

professional staff, higher turnover rates, and increased time spent in recruiting and training new staff), and coordinating and communicating with other managers due to the cross-sharing of assistive personnel. As a result of the new demands and responsibilities, most nurse managers had extra demands imposed upon them by administration (i.e., to provide timely and insightful feedback upon the impact of system changes), and felt isolated from their peers who were also struggling to deal with system changes. Furthermore, no structural supports were in place to facilitate their transition to new roles, or provide them with the necessary managerial skills. With regard to the non-nurse managers from other departments (i.e., environmental services, respiratory therapy, and food and nutrition services), concerns were expressed about the severe reduction of staff in their departments, especially skilled personnel. In addition, concerns were voiced about the possibility of transitional issues (e.g., communication difficulties, ability to carry out new responsibilities with the same level of quality standards, etc.) for staff forced to transfer, as well as the ability of nurse managers to monitor the quality of services provided by them. Finally, non-nurse managers were resentful of the greater perceived power that nursing had in the organization.

Using a qualitative study design, Ingersoll et al. (1999) examined mid-level nurse managers' ( $N = 9$ ) perceptions of the impact of a patient-focused delivery system in two tertiary care hospitals in the U.S. Face-to-face interviews were

conducted at nine and twelve months post-implementation on the impact of the change on roles and responsibilities. As well, the managers were queried about challenges and recommendations to others considering similar changes. The findings indicated that the managers had experienced several additions to their role responsibilities (i.e., skills for measuring and managing outcomes, better understanding of financial matters, high-level team-building skills, and ability to manage during rapid change). In addition to the increased demands, they felt isolated from both superiors and subordinates, experienced decreased self-esteem, felt overwhelmed with being the target of staff anger and frustrations, and believed they were ill-equipped to provide the leadership needed to buffer the impact of changes on provider groups and patients. The authors concluded that even experienced and well-educated management personnel require additional preparation and support to help them facilitate change.

Using a survey design, McGirr and Bakker (2000) investigated possible indicators of positive work environments as perceived by the staff ( $n = 75$ ), managers ( $n = 12$ ), and directors of nursing ( $n = 4$ ) of 14 community hospitals undergoing restructuring and downsizing in Ontario. Respondents were asked to describe their contributions to the work environment (i.e., activities/behaviors describing how participants enhanced staff relations or promoted effective functioning of the work setting). Following content analysis, 15 categories of statements were collapsed into three thematic categories (i.e., people, practice,

and place). The thematic content of these categories were as follows: (a) people (i.e., enhances communication, builds effective interpersonal relationships, promotes staff morale, and presents an unique perspective); (b) practice (i.e., quality of professional practice, commitment to the job, personal/professional development, and staff development); and (c) place (i.e., promotes an environment to support change, active in change process, implements new organizational approaches, implements effective organization of work unit, participates in the effective organization of the work unit, and represents unit on committees). With regard to management personnel, most participants directed their efforts toward initiating change, increasing staff morale, and promoting staff development programs and professional practice. Directors of nursing reported actions and behaviors that focused on enhancing communication, and promoting quality of professional practice and change. The authors identified several limitations of this study, including a small sample size and the low response to questions dealing with contributions made to building positive work environments.

In summary, the multidisciplinary team strategy with its focus on patient-centered care, obviously involves more than the establishment of a team. The small but consistent body of research findings demonstrated that all managers require strong support mechanisms to help them cope with changed roles and responsibilities, and to be effective leaders during the change process. As Gelinas and Manthey (1997) and Leatt et al. (1997) noted, the removal of

structural and cultural barriers that hinder effective teamwork requires that managers understand how to lead across cultural, functional, and departmental boundaries.

### **Summary**

What was most revealing about study findings was the absence of a consistent approach to structural redesign, despite the common focus on introducing decentralized patient-centered care models. Of equal importance to managers who remained in the system were the unique challenges of perpetual change, and notable increases in responsibilities. Some of the new responsibilities included communicating the change to staff members, implementing organizational change across units, creating new operational processes, and supporting staff during the change process (Knox & Irving, 1997; Leatt et al., 1997). Many of these responsibilities require new core competencies and knowledge levels (e.g., financial management, teamwork and team building, etc.) (Knox & Irving; Leatt et al.).

While the research findings are inconclusive on how managers are adjusting to all of these changes, there are indications of erosion of support structures, higher levels of job stress and demands, greater job dissatisfaction, and less organizational commitment, among others. There is an obvious need for further inquiry into the short- and long-term impacts of health care reforms on

all levels of management. As well, research efforts should pay greater attention to what managers need to feel supported by their organizations, in order to successfully meet their job responsibilities.

### **Factors Influencing Provider Outcomes**

A number of models have been developed which vary in complexity, as well as the type and importance of factors influencing nurse turnover behavior (e.g., Alexander, Lichtenstein, Oh, & Ullman, 1998; Irvine & Evans, 1995; Lucas, Atwood, & Hagaman, 1993; Mobley, Griffeth, Hand, & Meglino, 1979; Mueller & Price, 1990; Parasuraman, 1989; Price and Mueller, 1981, 1986). The typical model is multidimensional, and reflects a causal, linear process. Most causal models consist of explanatory factors or determinants (e.g., job-related characteristics, work environment, economic, psychological, etc.), intervening attitudes (e.g., psychological contract violations, job/work satisfaction, organizational/professional commitment, etc.), intervening behaviors (e.g., intent to stay, intent to leave, etc.), and correlates or personal characteristics (i.e., demographic and work-related variables).

Most research studies have used a modified version of a particular causal model of turnover, and treated intervening attitudes and/or behaviors as intermediate outcomes. The following literature review is organized according to select intervening attitudes and behaviors that represent different levels of



outcome in the current study (i.e., psychological contract violations, job satisfaction, organizational commitment, and intent to stay).

### **Psychological Contract Violations**

In organizational research and theory, psychological contracts refer to the unwritten expectations that operate between employees and employers. Rousseau (1990) defined the promissory and reciprocal components of psychological contracts as "an individual's beliefs regarding reciprocal obligations" (p. 390). Violations of perceived obligations can alter an employee's beliefs about the nature of reciprocal arrangements (Robinson, Kraatz, & Rousseau, 1994). Psychological contract violations occur when employees perceive that the employer has failed to fulfill what was promised (Robinson et al., 1994; Robinson & Rousseau, 1994).

Rousseau (1990) described the contractual continuum as ranging between transactional and relational obligations. Transactional contracts are short-term with a primary focus on economics or monetary rewards (i.e., employees exchanging hard work for pay). Anchoring the opposite end of the continuum are relational contracts, which are open-ended agreements that focus on establishing and maintaining a relationship. Relational contracts involve both monetary and non-monetary exchanges (i.e., employees exchanging hard work and loyalty for job security).

There is limited empirical research on the psychological contract violations experienced by employees as they cope with downsizing, reorganization, mergers, and acquisitions (Turnley & Feldman, 1998, 1999). The following review presents an overview of key factors responsible for psychological contract violations, possible consequences of such violations, and the importance of situational factors in moderating the impact of contract violations on employees' behaviors.

**Contextual/personal factors and contract violations.** Using a longitudinal design, Robinson and Rousseau (1994) investigated the nature and frequency of psychological contract violations (PCVs) in a sample of graduate management alumni ( $N = 209$ ) immediately following recruitment, and after two years employment. A single item, consisting of a 5-point scale, was used to assess how well employers had fulfilled promised obligations overall. The test-retest reliability indicated moderate stability ( $\alpha = 0.78$ ). An open-ended survey question also asked those respondents who indicated that a violation had occurred, to describe the experience. Most respondents (58.9%) believed that their employers had failed to fulfill contract obligations on at least one occasion. The qualitative findings suggested that violations occurred most often in relation to human resource management. Content analysis of respondents' descriptions of violation experiences revealed ten distinct categories (i.e., compensation, training/development, promotion, nature of job, job security, feedback, change

management, responsibility, representation of employees, and other). The most frequent violations occurred in training/development, compensation, and promotion. Significantly, respondents who tried to remedy perceived violations were more likely to report higher levels of contract fulfilment than those who failed to take such action. Study limitations included the use of single-item measures, which did not explicitly incorporate the idea of reciprocity inherent in the authors' definition of psychological contracts. Additionally, the restrictive nature of the sample (i.e., MBA graduates) limits the generalizability of the findings to other professional groups.

In an exploratory longitudinal study, Robinson et al. (1994) investigated changes in perceived employee/employer obligations in a sample of alumni from an MBA degree program three-weeks prior to graduation ( $n = 224$ ), and after two-years of employment ( $n = 215$ ). A researcher-developed instrument, based on interview data from personnel and human resources managers, assessed managers' perceptions of employer obligations (i.e., advancement, high pay, merit pay, training, job security, development, and support) and employee obligations (i.e., overtime, loyalty, volunteering for non-required roles, advance notice of termination, willing to accept transfers, refusing to support competitors, protection of proprietary information, and minimum of a 2-year stay). Contract violations were measured by a single item (i.e., how well employers fulfilled obligations). Test-retest analysis confirmed the strong reliability of all study

instruments. Factor analysis confirmed the construct validity of the instrument measuring perceived obligations (i.e., presence of two distinct types of employee and employer obligations - transactional and relational). The findings indicated that most employees' perceived obligations to employers significantly decreased over time, with the exception of proprietary protection and extra-role behavior. In contrast, employees' perceptions of most employer obligations (i.e., advancement, high pay, merit pay, training, and job security) significantly increased over time. Perceived contract violations by employers were found to exert a strong negative impact on employee transactional and relational obligations, but failed to significantly impact employer transactional and relational obligations.

Turnley and Feldman (1998) examined how managers and executive-level personnel ( $N = 541$ ) working in three settings (i.e., bank, state agency, and alumni from a graduate business school) experienced PCVs. An additional study purpose was to determine how significant organizational restructuring (i.e., layoffs, reorganization, and mergers/acquisitions) influenced perceived violations. A researcher-developed scale, based on the literature, was used to measure PCVs (i.e., overall violations and discrepancies in rewards and commitments). The internal consistency for the scale was quite high (i.e.,  $\alpha = 0.86$ ). Sixteen components of transactional and relational obligations, as identified by Rousseau (1990), were rated on a scale ranging from -2 (received much more than

promised) to +2 (received much less than promised) to determine the degree of violation. One-item scales rated dichotomously (low or high) were used to assess moderating variables (i.e., procedural justice or fairness of organizational decision-making policies, likelihood of future violations, and quality of work relations with supervisors and colleagues). Open-ended questions assessed the nature of contract violations. The findings revealed that one-quarter of the managers experienced PCVs. The qualitative comments indicated that respondents varied on what constituted fulfilment/violations. When the situation was perceived to be outside the organization's control, respondents did not report PCVs. Conversely, when actions taken by the organization were perceived as deliberate and unnecessary, respondents were more likely to report violations. In addition, managers working in organizations with extensive restructuring were significantly more likely to report violations in the areas of job security, input into decision-making, opportunities for advancement, and amount of responsibility and power compared with their counterparts in more stable firms. Finally, managers who perceived a high degree of procedural justice, low likelihood of future violations, and good working relationships with supervisors and coworkers, were significantly less likely to report contract violations.

In a subsequent study, Turnley and Feldman (1999) reexamined the relationship between PCVs, moderator variables, and consequences, by adding a fourth group of expatriates and managers in international business ( $n = 263$ ) to

the original sample ( $n = 541$ ). The consequences and PCV variables were measured with the same scales reported by Turnley and Feldman (1998). Moderator variables were restricted to availability of alternative employment, external justification for psychological contract violations, and perceptions of procedural justice. The findings indicated that managers in firms which had experienced major restructuring reported more severe violations than their counterparts in more stable firms. The more important aspects of perceived violations included job security, compensation (i.e., promised and actual pay raises, salaries, and bonuses), and opportunities for advancement.

In summary, study findings suggested that psychological contracts are an integral component of the work environment. Employee perceptions of contract violations were influenced by key situational variables (i.e., actions taken within or outside the organization's control, degree of procedural justice, likelihood of future violations, and strength of working relations with coworkers and supervisors). Of particular importance was the greater frequency and severity of perceived violations reported by employees working for organizations that had undergone major restructuring.

**Consequences of contract violations.** In the aftermath of major organizational restructuring, some theorists and researchers have focused on the consequences of PCVs for employee trust, satisfaction, intent to stay, and actual turnover (Robinson & Rousseau, 1994; Morrison & Robinson, 1997). Two

studies by Turnley and Feldman (1998, 1999) examined the impact of PCVs on exit, loyalty, voiced objections, and neglect behaviors. The role played by key situational variables in moderating the influence of contract violations on consequences was also investigated by Robinson and Rousseau, and Turnley and Feldman.

Using a sub-sample of graduate management alumni ( $n = 96$ ), who remained with original employers and responded to surveys at both time periods (i.e., during recruitment and two years later), Robinson and Rousseau (1994) examined the impact of PCVs on employee attitudes and behaviors. Researcher-developed scales assessed careerism orientation, trust in employers, job and organizational satisfaction, perceptions of employers' fulfillment of obligations, intentions to remain with the organization, and turnover behavior. Factor analysis confirmed the unidimensionality of each scale, and good internal consistencies were generated for the careerism, trust, and satisfaction scales. The findings indicated that greater perceived contract violations were strongly associated with lower levels of trust, decreased job and organizational satisfaction, and less intent to remain with the organization at two-years follow-up. As well, greater perceived violations were moderately associated with actual turnover. During regression analysis, perceived contract violations emerged as a significant predictor of intent to remain, accounting for 16% of the explained variance. As well, contract violations were significant

predictors of actual turnover. While careerism moderated the relationships between contract violations and trust, it failed to reach significance levels for intentions and job satisfaction.

Turnley and Feldman (1998) also examined the consequences of PCVs, and the role of situational moderators in buffering their impact. Several scales, with high internal consistency, were used to assess the outcome variables of exit voiced objections (i.e., complaints to correct perceived injustices), loyalty, and neglect behaviors (e.g., lateness, conducting personal business at work, etc.). The findings indicated that higher levels of PCVs were significantly associated with lower loyalty and higher exit, voice, and neglect behaviors. Furthermore, managers working in restructured firms were significantly more likely to consider quitting, to engage in job search behaviors, and to be less loyal than their counterparts in more stable firms. As well, managers who perceived a high degree of procedural justice (i.e., fairness of layoff procedures and pay raises/promotions), low likelihood of future violations, and good working relationships with supervisors and coworkers, were significantly more likely to remain loyal to their organizations, and significantly less likely to intend to quit or engage in job searching, and to engage in voice behaviors. Only managers who perceived a low likelihood of future violations and good working relationships with coworkers were significantly less likely to engage in neglect behaviors. The cross-sectional design of this study limits the generalizability of these findings.



Turnley and Feldman (1999) reexamined the relationship among PCVs, moderator variables, and consequences. When PCVs were high, managers were more likely to have considered leaving the organization, to have engaged in voicing their objections to upper management, and to have neglected in-role job performance. Also, higher PCVs were significantly associated with reduced loyalty to the organization. All the situational variables moderated the relationship between PCVs and exit behaviors. Specifically, managers were more likely to engage in job search activities when contract violations were high, attractive job alternatives were available, insufficient justification existed for the organization's actions, and procedural justice was low. Counter to model projections, none of the situational variables moderated the relationship between PCVs and voice, loyalty, or neglect, despite exerting a significant main effect on the outcome behaviors. As well, the demographic covariates (i.e., gender, age, and organizational tenure) were not significantly related to PCVs.

In summary, study findings reinforced the theoretical assumptions that employee perceptions of contract violations by employers negatively impact work-related attitudes, behavioral intentions, and actual turnover behavior. Despite inconsistent findings across studies, select situational variables (i.e., procedural justice, working relations, and likelihood of future violations) moderated the negative impact of contract violations on behavioral intentions. Importantly, managers in restructured firms reported higher PCVs, more negative

attitudes, and greater intentions of leaving, than those in stable firms.

### **Job Satisfaction**

Job satisfaction is a complex phenomenon that reflects one component of employees' work attitudes. Cumbey and Alexander (1998) defined job satisfaction as an affective state that depends on the interaction of employees, their personal characteristics, values, and expectations within the work environment and the organization.

Early research studies primarily focused on identifying important factors that influence the job satisfaction of staff nurses. Two meta-analytic studies were identified from the literature that integrated previous study findings (Blegen, 1993; Irvine & Evans, 1995). Both of these studies highlighted variables from relevant factor groupings (i.e., job-related factors, work-environment factors, and personal attributes or characteristics), which depicted the strongest and most consistent relationships with job satisfaction.

In a meta-analysis of 48 studies of geographically dispersed nurses ( $N = 15,048$ ) working in diverse, but mostly hospital-based settings, Blegen (1993) investigated the separate and interactive effects of factors affecting job satisfaction. The analysis was restricted to studies that sampled registered nurses providing direct care, used quantitative analysis, reported an overall job satisfaction score, and reported bivariate correlations between job satisfaction

and other independently measured factors. The 13 variables linked to job satisfaction were classified as job-related and work environment factors, and personal attributes or personality characteristics. The job-related and work environment factors were found to depict the strongest and most consistent relationships with job satisfaction. The findings indicated that greater job satisfaction was strongly associated with less stress and greater organizational commitment. Greater job satisfaction was moderately correlated with greater communication with supervisors and peers, greater autonomy and recognition/feedback, and less routinization. Finally, greater perceived fairness of salaries and benefits depicted low to moderate correlations with greater job satisfaction. While less external locus of control evidenced a low to moderate relationship with greater job satisfaction, the remaining personal variables (i.e., older, more years of experience, and less education) depicted small correlations with job satisfaction. The author emphasized that study findings highlight the need for managers to implement strategies aimed at reducing job stress (e.g., enhancing job autonomy, communication, and recognition).

Using Mueller and Price's (1990) integrated causal model as an overriding framework, Irvine and Evans (1995) conducted a meta-analytic study to investigate the correlates of job satisfaction. The authors used inclusion criteria similar to Blegen (1993); however, they did use nurse managers in some study samples. Economic factors (i.e., pay and employment opportunities),

sociological/structural factors (i.e., work environment and job characteristics), and personal characteristics (i.e., age, years of experience, and organizational tenure) were expected to exert a direct influence on job satisfaction. The findings revealed that most of the job characteristic and work environment variables depicted moderate to strong correlations with job satisfaction, whereas economic and psychological factors were in the low range. Specifically, greater job satisfaction was associated with less routinization, greater autonomy and feedback, and less role conflict, role ambiguity, and work overload. With regard to the work environment variables, greater job satisfaction was associated with more effective supervisory relations and supervisor leadership, less stress, greater advancement opportunity, and greater participation. While higher pay was moderately associated with greater job satisfaction, greater employment opportunity depicted a small correlation with less job satisfaction. The personal characteristics depicted low, positive correlations with job satisfaction. Finally, greater job satisfaction was strongly associated with less intentions of leaving and a greater intent to stay.

Only a few research studies were identified that investigated factors influencing the job satisfaction of health care managers. There is no reason to believe that the determinants of job satisfaction for managers differ from those of staff nurses. A study by Stengrevics, Kirby, and Ollis (1991) investigated sources of satisfaction and dissatisfaction for nurse managers. As well, studies

by Cavanagh and Coffin (1992), Poulin (1995), Brown et al. (1999), and Luthans and Sommer (1999) found support for the influence of select job/work factors and personal characteristics on the job satisfaction of supervisory and non-supervisory employees.

Stengrevics et al. (1991) reported on the results of a survey conducted by the Massachusetts Council of Nurse Managers on the job satisfaction of nurse managers ( $N = 252$ ). A researcher-developed questionnaire was used to collect data on salaries and benefits, sources of support, budgeting, power and control, and retention. The findings revealed that the majority of managers were most satisfied with peer and staff support, followed by immediate supervisor and physician/administration support, respectively. However, most respondents reported being dissatisfied with other aspects of support (i.e., education reimbursement, role orientation, education support for staff, and the support provided by other hospital departments). Additional sources of dissatisfaction related to managerial power and control. Specifically, managers were dissatisfied with the amount of control over, and knowledge of, the budgetary process, expanded roles and managerial responsibilities, and staffing issues that impeded role performance. As well, most respondents reported feeling the negative impact of stress. Finally, most managers were dissatisfied with personal and staff salaries, with salary a key indicator of intentions to leave current positions. The authors acknowledged that study findings were limited by

the sample size and operational measures used during data collection.

Using Price and Mueller's (1981) model of nursing turnover, Cavanagh and Coffin (1992) examined the impact of select factors on job satisfaction in a sample of registered nurses ( $N = 221$ ), one-third of whom were managers, working in hospitals in the United States. Data were collected with a demographic form, and scales developed by Price and Mueller to assess key determinants (i.e., pay, routine, autonomy, job opportunities, kinship responsibilities, community participation, instrumental communication, education and training, and promotion), as well as intent to stay and job satisfaction. Study scales were reported to have good internal consistency. The findings revealed that greater kinship responsibilities, promotion opportunities, participation in decision-making, and job routine depicted moderate to strong correlations with greater job satisfaction. Conversely, greater availability of alternative jobs, and higher pay and education, had moderate to strong correlations with lower levels of job satisfaction. During path analysis, participation in decision-making, routine, promotion opportunities, kinship responsibilities, and availability of alternative jobs emerged as the most important predictors of job satisfaction, respectively.

Using a random survey of social work supervisors ( $n = 173$ ) and administrators ( $n = 145$ ) from diverse settings, Poulin (1995) investigated the predictive effects of organizational, job-task, and personal factors on job

satisfaction. Job satisfaction was measured with the Brayfield and Rothe (1951) Satisfaction scale. Researcher-developed scales assessed organizational (i.e., adequacy of resources, staff interaction, supervisory and coworker support, and salary/benefits), job-task (i.e., job autonomy, stress/pressure, and time spent on paperwork and in team meetings), and personal (i.e., age, gender, health status, self-esteem, marital status, and organizational tenure) factors. Study results revealed that both administrators and supervisors were satisfied with their jobs, with administrators significantly more satisfied than supervisors. For both management groups, all of the organizational factors depicted significant, positive relationships with job satisfaction. With regard to job-task and personal factors, increased job autonomy, better health, and higher self-esteem were significantly associated with higher levels of job satisfaction in both groups. For supervisors, increased time spent on paper work was associated with lower levels of job satisfaction, whereas greater age, being married, and being male were significantly associated with higher levels of job satisfaction. For administrators only, increased time with the organization was significantly associated with lower levels of job satisfaction. During regression analysis, greater resource adequacy, salary/benefits, job autonomy, self-esteem, and being married were significant predictors of higher job satisfaction in the supervisory group. With regard to the administrator group, more positive staff and management interactions, greater satisfaction with salaries/benefits, higher

levels of self-esteem, and less time with the organization were significant predictors of greater job satisfaction. Poulin concluded that administrators can be more supportive of supervisors by creating positive work environments, increasing their job autonomy and salaries/benefits, and increasing professional development opportunities and organizational resources (i.e., support and professional staff, and client services).

Brown et al. (1999) investigated the influence of key job and personal characteristics on the job satisfaction and stress of hospital workers ( $N = 654$ ), prior to reengineering initiatives at a large teaching hospital in Ontario. The same instruments reported by Woodward et al. (2000) were used in the Brown et al. study. The findings revealed that all levels of workers (i.e., designated and non-designated supervisors, and staff) were quite satisfied with their jobs, and experienced a moderate amount of stress. Increasing levels of job stress were also significantly associated with lower levels of job satisfaction. Significantly, greater coworker support was the best predictor of greater job satisfaction (i.e., accounting for 15% to 23% of the explained variance) for all groups. Increased decision latitude, increased role clarity, and greater supervisor support were additional predictors of greater job satisfaction for staff. Comparatively, lower job demands and increased decision latitude were also predictive of greater satisfaction for non-designated supervisors. Finally, younger age and less job influence were predictive of greater job satisfaction for supervisors.



Luthans and Sommer (1999) also investigated the effects of select personal characteristics (i.e., age, gender, marital status, and job tenure) on the job satisfaction of health care managers and front-line employees ( $N = 848$ ) working in a medical rehabilitation hospital following major downsizing initiatives. The results indicated that older and longer-tenured managers and employees were more satisfied with their jobs than younger and shorter-tenured managers and employees. Greater job satisfaction also depicted moderate to strong correlations with other work attitude variables (i.e., greater organizational commitment, supervisor support, and work group trust).

Despite all of the reform initiatives in the health care system, and the resulting impact on managers' roles and responsibilities, only a few studies have examined the predictive power of select factors on acute care managers' job satisfaction. A couple of studies examined the impact of decentralization (i.e., indicators such as increased discretionary decision-making power, increased autonomy, or greater control over roles and responsibilities) on first-line nurse managers' job satisfaction (Acorn et al., 1997; Ringerman, 1990). One additional longitudinal study focused on the impact of job-related characteristics, work-environment factors, and personal characteristics on health care managers' job satisfaction following downsizing and restructuring (Woodward et al., 2000).

Ringerman (1990) examined factors influencing the job satisfaction of nurse managers ( $N = 292$ ) working in acute care hospitals. Moderate, positive

relationships existed between job satisfaction and the two dimensions of decentralization, commitment, and professional practice climate. Only gender (i.e., females versus males), nursing care delivery system (i.e., primary nursing versus team nursing and total patient care), and current position tenure (i.e., more years) were found to affect job satisfaction. Several personal characteristics (i.e., age, marital status, education, rural/urban setting, ethnicity, and number of children) were not found to affect satisfaction. During regression analysis, decentralization, organizational commitment, and professional practice climate emerged as significant predictors of greater job satisfaction, accounting for 22%, 12%, and 3% of the explained variance, respectively. That is, greater satisfaction was associated with very or extremely decentralized organizational environments, high levels of organizational commitment, and positive professional practice climates.

In a survey of first-line managers ( $N = 200$ ) working in acute care hospitals, Acorn et al. (1997) investigated the predictive ability of select factors for job satisfaction. During path analysis, the degree of organizational decentralization and individual autonomy had a direct impact on job satisfaction. That is, managers who rated their organizational environments as being very or extremely decentralized and reported greater autonomy, also had higher levels of job satisfaction than their counterparts in somewhat decentralized systems with less autonomy. Overall, decentralization and autonomy accounted for 32% of

the explained variance in job satisfaction. The authors concluded that the positive effects of decentralization support the usefulness of professional practice models, which emphasize decentralized decision-making.

Woodward et al. (2000) investigated the predictive ability of select job and personal characteristics on the job satisfaction of front-line and supervisory (i.e., designated and non-designated) employees ( $N = 380$ ) in an acute care setting. Levels of job satisfaction two years prior to reengineering initiatives accounted for most of the explained variance (17.1%) in front-line workers' current job satisfaction levels. Several job-related and work-environment factors (i.e., prior levels of supervisory support, increasing supervisory support, prior levels of role clarity, increasing role clarity, prior levels of family interference, less formal education, increasing teamwork, and job influence) contributed an additional 25.3% to the regression equation. Comparatively, prior levels of job satisfaction, increasing teamwork, and decision latitude over time surfaced as significant predictors of greater job satisfaction for non-designated supervisors (38.8% of the explained variance). Finally, prior levels of job satisfaction and increasing teamwork were predictive of greater job satisfaction for supervisors (35.7% of the explained variance).

In summary, given the multidimensional nature of job satisfaction, numerous instruments have been developed to address different and similar aspects of this theoretical construct. This reality creates difficulties in making

meaningful cross-study comparisons. Nevertheless, study findings on factors influencing the job satisfaction of managers were comparable to those reported by Blegen (1993) and Irvine and Evans (1995). As Blegen noted, given the diverse factors exerting separate and interactive effects on job satisfaction, greater efforts should be focused on using multivariate analysis procedures to tease out the most important explanatory factors.

### **Organizational Commitment and Behavioral Intentions**

Organizational commitment is defined as “the strength of an individual’s identification with, and involvement in, a particular organization” (McNeese-Smith, 1997, p. 48). Broader and more complex than job satisfaction, it reflects a deep sense of loyalty that an employee may have for the entire organization, not just devotion to a specific job (Corser, 1998). Mowday, Steers, and Porter (1979) highlighted three principal components of commitment that describe the strength of an employee’s link to an organization: (a) a strong belief in the organization, (b) a willingness to expend energy to serve the organization, and (c) a strong desire to stay with the organization.

Organizational commitment was initially viewed as a unidimensional construct consisting of attitudinal and behavioral components (Mowday, Porter, & Steers, 1982; Price & Mueller, 1981; Weisman, Alexander, & Chase, 1981). As such, intent to leave or stay was defined as a behavioral indicator of an

employee's commitment or loyalty to the organization. Concurrent and later causal models of turnover depicted attitudinal commitment and behavioral intentions as conceptually distinct intervening variables in the turnover process (Curry, Wakefield, Price, Mueller, & McCloskey, 1985; Mobley, 1982; Mobley et al., 1979; Mueller & Price, 1990; Price & Mueller, 1986). Although organizational commitment has been defined and measured in disparate and similar ways, one common theme prevails, that is, organizational commitment is a bond or linkage of the employee to the organization (Mathieu & Zajac, 1990).

For the most part, research efforts have been focused on examining the effect of predisposing factors or determinants (i.e., job-related and work-environment factors), employee attitudes (e.g., job, professional, and organizational satisfaction, motivation, etc.), and personal characteristics or attributes (e.g., age, organizational tenure, education, etc.) on organizational commitment and intent to stay/leave. The following discussion presents a summary of meta-analytic studies in the area and research conducted with managers. The presentation of findings is divided according to the commitment and intent to stay/leave constructs.

**Commitment.** Empirical support for the strong effect of determinants on commitment was reported by several authors, with personal characteristics exerting a much lesser effect (e.g., Mathieu & Zajac, 1990; Mowday et al., 1982; Mueller & Price, 1990; Parasuraman, 1989; Price & Mueller, 1986). One meta-

analytic study was identified from the literature, which investigated the impact of antecedents (i.e., determinants and personal characteristics) on commitment (Mathieu & Zajac).

In a meta-analysis of 174 independent samples derived from research studies ( $N = 124$ ), Mathieu and Zajac (1990) examined the antecedents of organizational commitment. The analysis was restricted to studies reporting correlational data and measuring/analyzing commitment at the individual level of analysis. The antecedent variables associated with commitment included job and organizational characteristics, group/leader relations, role states (i.e., role ambiguity, conflict, and overload), and personal characteristics. The results revealed moderate to high positive correlations between most job characteristics (i.e., skill variety, job challenge, and job scope, respectively) and commitment. The only exception was task autonomy, which depicted a small, positive correlation. In general, the group-leader relations variables exhibited low to moderate, positive correlations with commitment, with the exception of leader communication, which depicted a high, positive correlation. Organizational size was not found to influence commitment, while centralization only evidenced a very small, negative correlation. All of the role state variables demonstrated moderate, negative correlations with commitment. Finally, several personal characteristics (i.e., position and organizational tenure, marital status, ability, salary, and job level) depicted small, positive correlations with commitment, with

the exception of gender and education (i.e., males and those higher educated were less committed). As well, age, Protestant work ethic, and perceived personal competency demonstrated moderate to high positive correlations, respectively, with commitment.

Other relevant affective responses have also been linked to organizational commitment. Recent research by Turnley and Feldman (1998, 1999) found support for the negative impact of psychological contract violation on managers' commitment to their organizations. The important role played by job satisfaction in employees' commitment levels is well documented in the research literature (e.g., Blegen, 1993; Mathieu & Zajac, 1990; Mowday et al., 1982; Mueller & Price, 1990; Parasuraman, 1989; Price & Mueller, 1986).

Mathieu and Zajac (1990) found that most covariates exhibited moderate (i.e., union commitment) to high (i.e., occupational commitment, job involvement, motivation, and job satisfaction, respectively) positive correlations with organizational commitment. The only exception was stress, which depicted a moderate, negative correlation.

Research studies testing the validity of causal models explaining turnover behavior have also examined the effect of commitment on behavior intentions and turnover. The strong relationship between organizational commitment and intent to leave or intent to stay is well established in the literature (e.g., Mathieu & Zajac, 1990; Meyer & Allen, 1997; Mueller & Price, 1990; Parasuraman, 1989;

Price & Mueller, 1986). However, inconsistent findings have been reported on the relationship between commitment and actual turnover (e.g., Mueller & Price; Parasuraman; Price & Mueller).

Mathieu and Zajac (1990) also examined some of the consequences of organizational commitment. Consequence variables demonstrated either a low positive (i.e., job performance and attendance) or low to moderate negative (i.e., job alternatives, lateness, and turnover, respectively) relationships with commitment. Intention to search and intention to leave were found to have high, negative correlations with commitment.

The research literature is rather sparse on factors influencing the organizational commitment of managers, especially those working in the health care field. A couple of studies investigated the effects of decentralized structures on nurse managers' level of commitment to their organizations (Acorn et al., 1997; Ringerman, 1990). These studies also examined the influence of select personal characteristics, as well as job satisfaction and professional practice climate, on commitment.

Ringerman (1990) examined the predictive impact of decentralization (i.e., participation in decision-making and hierarchy of authority), job satisfaction, and professional practice climate (i.e., work autonomy) on organizational commitment. Low to moderate, positive relationships existed between commitment and the two dimensions of decentralization, job satisfaction, and



professional practice climate. Although most personal characteristics (i.e., age, marital status, education, rural/urban setting, ethnicity, number of children, and gender) were not found to affect commitment, current position tenure depicted a low to moderate, positive correlation. During regression analysis, job satisfaction and the professional practice climate emerged as significant predictors of commitment, accounting for 25% and 7% of the explained variance, respectively. Decentralization was not a significant predictor of organizational commitment.

Acorn et al. (1997) investigated the impact of select factors on organizational commitment. Managers who rated their organizations as being very or extremely decentralized, had higher levels of commitment than their counterparts in somewhat decentralized systems. Greater job satisfaction was also strongly associated with higher commitment. However, the authors failed to find support for the influence of autonomy and personal characteristics (i.e., gender, age, marital status, health status, education, and years of management experience) on commitment. During path analysis, decentralization and job satisfaction were found to exert a direct effect on commitment, and decentralization an indirect effect through autonomy and job satisfaction. Overall, job satisfaction and decentralization accounted for 44% of the explained variance in organizational commitment.

Other studies focused on the effects of select personal and job-related characteristics on commitment. Lee and Henderson (1996) explored levels of

occupational stress (burnout) and organizational commitment in a sample of nurse administrators ( $N = 78$ ). The findings indicated that commitment did not vary by managerial level (i.e., chief nursing officers, assistant chief nurses, divisional/departmental heads, and nurse administrative staff). Importantly, high levels of organizational commitment were significantly associated with greater feelings of personal accomplishment, greater colleague support, and lower levels of depersonalization, emotional exhaustion, and overall burnout.

Luthans and Sommer (1999) also investigated the effects of select personal characteristics (i.e., age, gender, marital status, job tenure) on the organizational commitment of managers and front-line employees. The results indicated that older and longer-tenured employees were more committed to their organizations, than younger and shorter-tenured employees. As well, being female and married were associated with higher organizational commitment. There were also moderate to strong, positive correlations between organizational commitment and other work attitude variables (i.e., job satisfaction, supervisor support, and work group trust).

In summary, the research findings from studies conducted with managers, although rather limited, confirm the stronger effect of job-related and work environment factors than personal characteristics on organizational commitment. In addition, support was found for the strong association between commitment and other work-related attitudes (i.e., job satisfaction and psychological contract

violations).

**Intent to stay/leave.** Research studies investigating the effect of determinants and personal characteristics on intent to stay or leave are less extensive. Curry et al. (1985), Mueller and Price (1990), and Price and Mueller (1981, 1986) found support for the effects of select job characteristics (e.g., job alternatives, pay, promotional opportunity, etc.) and personal characteristics (e.g., training and education, kinship responsibilities, etc.) on intent to stay. In contrast, Parasuraman (1989) failed to find a direct effect for any antecedent variables on intent to leave, but did document an indirect effect through job satisfaction and commitment.

There is much stronger empirical support for the influence of attitudinal variables on intent to stay/leave. Empirical data derived from testing causal models of turnover supported the strong direct effect of job satisfaction on intent to leave/stay (Alexander et al., 1998; Curry et al., 1985; Irvine & Evans, 1995; Mueller & Price, 1990; Parasuraman, 1989; Price & Mueller, 1981, 1986; Weisman et al., 1981). The meta-analysis conducted by Irvine and Evans (1995) supported the strong relationship of job satisfaction to intent to leave and intent to stay.

Causal models of turnover present organizational commitment as a more important variable influencing behavioral intentions than job satisfaction. There is some empirical support for this assumption (Curry et al., 1985; Mueller & Price,

1990; Parasuraman, 1989; Price & Mueller, 1986). However, Parasuraman reported equal direct effects for job satisfaction and organizational commitment on intent to leave. The meta-analysis findings by Mathieu and Zajac (1990) supported the strong negative impact of organizational commitment on intent to leave.

As noted in a previous section, intent to leave has also been identified as a consequence of psychological contract violations. Robinson and Rousseau (1994) found support for the strong association between perceived violations and lower intentions of remaining with current employers. Comparatively, Turnley and Feldman (1998, 1999) demonstrated that contract violations increased managers' intention to quit and tendency to engage in job searching behaviors. Support was also found for the buffering effects of select situational variables (e.g., availability of job alternatives, justification for organization's actions, procedural justice, etc.).

There was only one study identified from the literature review that focused on factors influencing the behavioral intentions of acute care managers. Using a hospital-based sample of staff nurses and managers, Cavanagh and Coffin (1992) examined the impact of select factors on intent to stay. The findings revealed that good pay, greater kinship responsibilities, and greater job satisfaction depicted low to moderate correlations with a greater likelihood of staying with current employers. Conversely, a greater availability of alternative

jobs in the external environment was significantly associated with a lesser intent to stay. During path analysis, job satisfaction, kinship responsibilities, pay, and availability of alternative jobs emerged as the best predictors of intent to stay.

In summary, there are limited research findings on the key determinants and personal characteristics affecting behavioral intentions. However, certain work-related attitudes (i.e., psychological contract violations, job satisfaction, and organizational commitment) have been found to exert a strong, direct effect on intent to stay/leave. Only one study was identified that supported the influence of some of these factors on managers' intent to stay.

### **Summary**

Research studies have investigated the effects of numerous factors on psychological contract violations, job satisfaction, organizational commitment, and intent to stay/leave. Job-related and work environment factors have been found to exert moderate to strong effects on work-related attitudes and behavioral intentions. As well, there is a strong tendency for work-related attitudes to influence one another and behavioral intentions to varying degrees. The available research data is quite limited on factors influencing the attitudes and behaviors of acute care managers. There is an obvious need for further inquiry into this area, especially in light of the major restructuring initiatives in the health care system.

### **Discussion**

The preceding sections highlighted the positive and negative impacts of health care reform initiatives on various manager groups and organizational outcomes (e.g., quality and continuity of care, costs, etc.). A number of key factors were found to exert a separate and interactive effect on various outcomes. The diversity in study designs (qualitative, longitudinal prospective, formative-evaluation) and theoretical frameworks, the use of multiple data collection methods (e.g., structured/unstructured questionnaires, face-to-face interviews, etc.), and the use of variant instruments (e.g., Job Diagnostic Survey, Job Content Questionnaires, Hospital Culture Scale, etc.) highlighted the absence of a systematic, rigorous approach to the study of the impact of health care reforms.

Despite preliminary support for the variant effects of restructuring on how managers perceive psychological contract violations (Turnley & Feldman, 1998, 1999), no studies were identified that examined health care managers' perceptions. There is also limited research support for the negative impact of contract violations on managers' level of organizational commitment (Turnley & Feldman), job satisfaction (Robinson & Rousseau, 1994), and intentions to leave the organization (Turnley & Feldman; Robinson & Rousseau). Again, there were no studies identified that investigated the impact of contract violations on health care managers' work-related attitudes.

Research on the job satisfaction, organizational commitment, and behavioral intentions of nurse managers with differing roles and responsibilities is relatively new and still evolving. Reform initiatives (i.e., downsizing, reengineering, restructuring, hospital closures, and institutional mergers) create an environment of uncertainty, which impacts employees' attitudes regardless of their position in the organization (Irvine & Evans, 1995). In a review of nursing literature prior to and after 1987, Blegen (1993) and Irvine and Evans found that some of the factors influencing job satisfaction were often conceptualized and/or operationalized in diverse ways. Similar comments were made about operational measures for job satisfaction (Blegen; Irvine & Evans). Mathieu and Zajac (1990) and Irvine and Evans made comparable observations about organizational commitment and behavioral intentions, respectively. The conceptual ambiguities and use of multiple operational measures made cross-study comparisons difficult, and could be contributing to the inconclusive findings.

Additional research is obviously needed to examine the relevancy of theoretical models depicting associations among key predictor factors, intermediate outcomes, personal characteristics, and behavioral outcomes. As well, the reliability and validity of measurement tools must be established for different levels of management. Finally, more longitudinal, prospective study designs are needed to monitor changes in attitudes over time in response to health care reform initiatives.

### **Conceptual Model**

A number of comprehensive models and theories have been developed and used as frameworks for explaining nursing turnover behaviors (e.g., Alexander et al., 1998; Curry et al., 1985; Irvine & Evans, 1995; Mueller & Price, 1990; Parasuraman, 1989; Price & Mueller, 1981, 1986; Weisman et al., 1981). Despite variations in the level of complexity and the specific factors theorized to predict turnover, all models describe a multidimensional approach involving the separate and interactive effects of explanatory factors or determinants, attitudinal states, behavioral intentions, and correlates (i.e., personal characteristics or attributes). Many of these models have been revised based on findings from research studies designed to test the direction, strength, and nature of the linkages among the variables.

A causal model of turnover developed by Price and Mueller (1981), and later refined based on empirical data (Price & Mueller, 1986), is one of the most frequent models used to explain nurse turnover. Mueller and Price (1990) replaced the original causal model with an integrated model that incorporates the work of economists (individual choice and labor market variables), sociologists (structural characteristics of the work environment and work content), and psychologists (individual variables and intrapsychic processes). This integrated model is divided into three categories of variables or determinants: causal, intervening, and outcome. The causal variables include the structural



characteristics of the work setting (i.e., pay routinization, autonomy, feedback, work group cohesion, work load, and task identity), environmental constraints (i.e., perceived job opportunities, nurses' wait list, kinship responsibilities, community participation), and employee characteristics (i.e., general training, pre-entry variables, work motivation, professionalism, leaving plans, publicity - friends, violation - external, and explicitness). Job satisfaction, commitment, and intent to stay constitute the intervening variables, while turnover behavior (i.e., voluntarily leaving the organization) is the outcome variable.

In the Mueller and Price (1990) model, the attitudinal variables of job satisfaction and organizational commitment, and the behavioral component of intent to stay, are critical mediating variables (i.e., intervening between causal variables and turnover) between determinants and turnover behavior. The integrated model treats each intervening variable as a dependent variable or intermediate outcome in the turnover process. More specifically, this model supports the causal process of determinants exerting a direct impact on job satisfaction, commitment, and intent to stay. As well, the intervening variables impact each other. The basic causal sequence depicts job satisfaction as exerting a stronger influence on commitment, than either intent to stay or turnover behavior. As well, commitment is viewed as the direct causal link with intent to stay, and influences turnover only indirectly through intentions. Although many of the personal characteristics or attributes (i.e., demographic and work-

related variables) are not accounted for in the model, the authors acknowledge their importance and stress the need to consider them in research on turnover.

Besides the causal models of turnover behavior, there is a growing interest in exploring the impact of radical restructuring initiatives within the health care system on the psychological contracts. It has been argued that the psychological contracts which employees have with their organization have been changing, and not all of these changes have been positive (Morrison & Robinson, 1997; Robinson et al., 1994; Robinson & Rousseau, 1994; Turnley & Feldman, 1998, 1999). Both theorists and researchers are concerned with the potential negative impact of contract violations on employees' job satisfaction, organizational commitment, and intentions of leaving or staying.

Turnley and Feldman (1998, 1999) developed a framework to depict interrelationships among psychological contract violations, situational moderators (i.e., availability of attractive employment alternatives; procedural justice during layoffs, pay raises, and promotion decisions; likelihood of future violations; quality of relationships with supervisors; and quality of relationships with colleagues), and consequences (i.e., exit, voice, loyalty, and neglect) of perceived violations. The model proposes that employees respond to psychological contract violations by increasing exit behaviors, increasing voiced objections to upper management, decreasing loyalty to the organization, and greater neglect of in-role responsibilities. The model also postulates that situational moderators buffer the

impact of perceived violations on selected behavioral outcomes.

A model based on Mueller and Price's (1990) integrated causal model of turnover, and Turnley and Feldman's (1998, 1999) model on the consequences of psychological contract violations, is presented in Figure 1. This modified Conceptual Model of Behavioral Intentions is designed to reflect the hypothesized relationships among determinants, covariates or intermediate outcomes, and behavioral intentions. That is, determinants exert a separate and interactive effect on intermediate outcomes and behavioural intentions. Each intermediate outcome directly influences the other and exerts an indirect effect through each successive outcome. As well, each intermediate outcome exerts a separate and interactive effect on behavioural intentions. Finally, correlates or personal characteristics influence behavioral intentions directly and indirectly through determinants and intermediate outcomes.

### **Definitions**

The determinants investigated in this study were limited to perceptions of the importance of health care reforms and their impact on select job-related and work environment factors (i.e., emotional climate, practice-related issues, quality of care, safety issues, and standards of care) (Way, 1995).

The correlates of the work-related attitudes included personal characteristics (i.e., age, gender, education, region, area of responsibility, years

of experience, current position, and employment status). These personal characteristics (i.e., demographic and work-related) are consistent with those noted in previous research studies on work-related attitudes (Blegen, 1993; Brown et al., 1999; Irvine & Evans, 1995; Luthans & Sommer, 1999; Mathieu & Zajac, 1990; Mowday et al., 1982; Mueller & Price, 1990; Price & Mueller, 1981, 1986; Ringerman, 1990; Turnley & Feldman, 1999; Woodward et al., 2000).

The definitions of the intermediate outcome variables (i.e., psychological contract violation, job satisfaction, and organizational commitment) and the behavioral intention variable (i.e., intent to stay) investigated in this study were based on the work of several authors. Psychological contracts are based upon an individual's beliefs pertaining to reciprocal obligations, and affect both attitudes and behaviors. These beliefs become contractual when the employee believes he or she owes the employer certain contributions (e.g., hard work, loyalty) in return for considerations such as high pay and job security. Violations of psychological contracts occur when employees perceive that employers have not fulfilled perceived obligations (Rousseau, 1990).

Price and Mueller (1986) identified job satisfaction as a critical variable in turnover research. Satisfaction is viewed from a global perspective, that is, an assessment of liking the job overall.

Mowday, Steers, and Porter (1979) identify organizational commitment as the employee's active relationship with the organization. It is the strength of the

employee's identification with, and involvement in, the organization, and is characterized by the employee's belief in the organization's goals and values, willingness to exert considerable effort on behalf of the organization, and desire to remain with the organization.

Intent to stay is an employee's perception of the likelihood of remaining with an organization. The current study uses Turnley and Feldman's (1999) definition of exit behaviours. These authors define employees' intentions of staying with current employers as reflected in current job search behaviours.

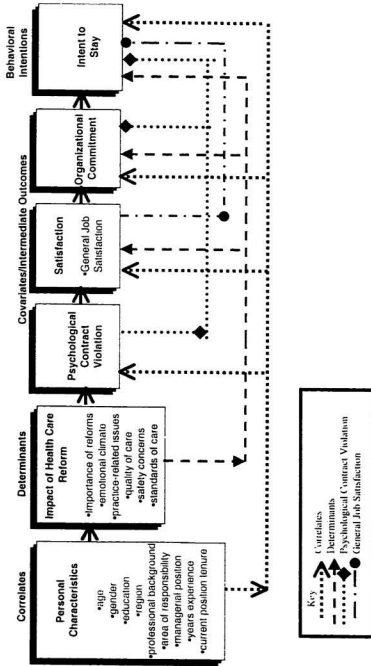


Figure 1: Modified Conceptual Model of Behavioral Intentions

The current model is based on the Conceptual Model of Behavioral Intentions for all provider groups participating in the larger study by Parfrey and colleagues.

## **CHAPTER 3**

### **Methodology**

A descriptive correlational design was used in this study to investigate the effects of health care reforms on acute care managers working in three regions of the province of Newfoundland and Labrador. The interrelationships among the key study variables (i.e., perceived impact of health care reforms, perceptions of regionalization of health services and program-based management objectives, personal characteristics, psychological contract violation, job satisfaction, organizational commitment, and intent to stay) were also examined. This chapter provides an overview of the sample, setting, instruments, procedure, ethical considerations, data analysis, and limitations.

### **Population and Sample**

The target population consisted of all managers employed in acute care settings within the province of Newfoundland and Labrador. The accessible population was restricted to managers who met the following inclusion criteria: (a) employed by one of the three collaborating health boards (i.e., agreed to become involved in all stages of the larger research project by Parfrey and colleagues), (b) were working in designated management positions (i.e., Senior Management, Corporate Directors, Corporate Managers, Clinical Program/Regional Directors, and Divisional/Patient Care Managers), and (c)

were willing to participate in health services research.

The total accessible population was 342. Because response rates from other professional groups in the larger study were generally below 50%, the decision was made to survey the entire accessible population. The final sample size of 197 respondents provided a response rate of 57.6%. This number was within the desired sample size range of 88 to 112 respondents, as determined by power analysis. Specifically, with a power level of .80 and alpha of .05, a sample size of 88 (i.e., effect size of .30) was needed for bivariate correlation tests. Using the same power and alpha levels, a sample size of 112 (i.e., effect size of .50) was needed for tests of difference (Polit & Hungler, 2000).

### **Setting**

The Health Care Corporation of St. John's (HCCSJ), Avalon Board, and Central West Board agreed in 1999 to participate in the research study focusing on the impact of restructuring of acute care hospitals in Newfoundland and Labrador (see Appendix A). The common approach to health care reform in the three provincial jurisdictions was the creation of regional health boards in the institutional sector as directed by amendments to the Hospitals Act (1971). The objectives of centralizing authority under one regional-based governing structure was to increase the effectiveness of local services, while increasing cost efficiency. What was different about the three regions was the variability in the



extent of restructuring. A brief overview is presented on the major restructuring initiatives in each region.

Eight tertiary and secondary care facilities were consolidated in 1995 under the authority of the HCCSJ. The various sites of the HCCSJ experienced integration of administrative and support services (e.g., human resources, financial systems, information systems, facilities management, health records, etc.). In 1996, the traditional departmental structure was eliminated, and clinical services were integrated under a program-based management structure. A professional practice model (i.e., shared governance) was also implemented to facilitate decentralized and collaborative decision-making. The consolidation of all services resulted in a significant reduction in all levels of management (i.e., from about 430 managers initially to 260). Since 1996, the children's rehabilitation centre has been merged with the children's hospital, and in 2000 one adult acute care hospital was closed and its services integrated with the two remaining adult acute care hospitals. In 2001, the children's hospital was relocated to a newly constructed facility adjoining a major tertiary care hospital. Based on Markham and Lomas's (1995) classification of multi-institutional arrangements, the HCCSJ is reflective of a merger/consolidation with limited individual institutional identity and autonomy.

In 1995, the Avalon Board was formed by consolidating six separate boards and management structures (i.e., six facilities consisting of a mixture of

acute care, long-term care, and health centres/clinics) within the region. With the downsizing of administrative services, management positions were cut from about 80 to 40 through attrition and early retirements, and an organizational structure was created which was functional, as opposed to facility-based. Rather than bring about a reduction in services, additional monies were infused into the system to facilitate a more equitable distribution of services (i.e., increased complexity and comprehensiveness) and continuity of care across sites. Multidisciplinary teams were formed to deliver programs and services, with a 50 percent focus on long-term care. The organizational culture is described as a climate of decentralized authority and participatory-style management (Butt & Downing, 2001).

The Central West Board was also formed in 1995 with the administrative consolidation of six independent boards. This Board administers nine facilities (i.e., regional health centre, cottage-hospital type facilities, and long-term care) and several clinics in outlying and isolated areas. As a result of the downsizing of administrative services, 40 to 50 percent of management positions were eliminated and a multidisciplinary team structure was adopted for delivering programs and services. The organizational culture is described as informal, with authority decentralized (Keats & Diamond, 2001).

### **Procedure**

The different phases of data collection for the larger project commenced following ethical approval from the Human Investigation Committee, Faculty of Medicine, Memorial University of Newfoundland (see Appendix B). Data were collected from acute care managers at the collaborating sites between April and July, 2000. The management groups employed by the three collaborating boards were identified by the CEOs' executive secretaries through an updated label listing. Only those managers working in the acute health care sector were included in the study. Each manager was assigned a file number. A master list identifying managers' names was kept separately in a locked filing cabinet accessible only to the Project Manager of the larger research study. Only the file number was recorded on the survey.

The surveys, including self-stamped return envelopes and accompanying cover letters, were placed in envelopes and sealed by research staff from the coordinating centre, and then forwarded to the executive secretaries for internal mail distribution. The cover letter explained the nature of the survey and confidentiality measures (see Appendix C). Reminder letters were mailed two weeks later (see Appendix D).

### **Instruments**

The Employee Attitude Survey (EAS) was used to collect data (see

Appendix E). The EAS is comprised of a General Information sheet and seven scales: Organizational Commitment Questionnaire (OCQ), Psychological Contract Violation (PCV) scale, General Job Satisfaction (GJS) scale, Intent to Stay (IS) scale, Revised Impact of Health Care Reform Scale (RIHCRS), Perception of Regionalization of Health Services (PRHS) scale, and Perception of Program Management (PPM) scale. A brief overview is presented of each data collection instrument used in the study.

### **General Information**

A general information section (Way, 1999) was included in the EAS to obtain data on select personal characteristics (i.e., management position, professional background, primary area of responsibility, total years experience in health care, years in current position, educational background, region, gender, age, and number of personnel under direct supervision).

### **Organizational Commitment Questionnaire**

The OCQ, developed by Mowday et al. (1979), was used to assess managers' overall commitment to an organization. The nine-item OCQ is rated on a seven-point Likert scale, ranging from (1) strongly disagree to (7) strongly agree. Higher scores are reflective of higher levels of organizational commitment. Factor analysis confirmed the construct validity of the instrument

and unidimensionality nature of the scale structure (Mowday et al.). Alpha coefficients were reported to range from .84 to .90, indicating strong internal consistency (Mowday et al.). The OCQ has been used extensively in studies of various health care provider groups.

### **Psychological Contract Violation Scale**

The PVC scale, developed by Turnley and Feldman (1999), was used to measure psychological contract violation. The PVC is a four-item Likert scale, which assesses both transactional (i.e., extrinsic exchanges) and relational (i.e., intrinsic exchanges) aspects of implied psychological contracts. Items were rated on a five-point scale, ranging from (1) very poorly fulfilled, very infrequently, much less than promised, or much less than it should, to (5) very well fulfilled, very frequently, much more than promised, or much more than it should. The higher the scale score, the less likelihood of perceived contract violation. Turnley and Feldman reported that the scale had a high internal consistency ( $\alpha = .86$ ). This scale has had limited use, with no applications in the health care field.

### **General Job Satisfaction Scale**

The GJS scale of the Hackman and Oldman (1975) Job Diagnostic Survey measured managers' overall job satisfaction. Permission was obtained from the authors to modify the GJS from its original format (i.e., deletion of two items

dealing with intent to leave/stay) in order to prevent overlap with the IS scale. The three-item GJS is rated on a seven-point Likert scale, ranging from (1) strongly disagree to (7) strongly agree. Higher scores reflect greater job satisfaction. This instrument has been extensively used in studies assessing nurses' job satisfaction, and has received strong reliability support.

### **Intent to Stay Scale**

The IS scale was adapted from Turnley and Feldman's (1999) Intent to Quit and Job Search scales. This scale was used to measure managers' likelihood of staying with their current employers, potential for leaving the organization if the opportunity occurred, and job search activities. The three-item IS scale is rated on a five-point Likert scale, ranging from (1) very unlikely/infrequently to (5) very likely/frequently.

### **Revised Impact of Health Care Reform Scale**

The RIHCRS was adapted from the IHCRS developed by Way (1995). The 28-item version of the RIHCRS (Way, 1999) was used to measure acute care hospital managers' perceptions of the impact of health care reforms in six content domains (i.e., importance of reforms, emotional climate, practice-related issues, quality concerns, safety concerns, and standards of care). Each item is rated on a six-point Likert scale, ranging from (1) strongly disagree to (6) strongly

agree. Way (1995) and Pyne (1998) reported on the strong validity and reliability of the original IHCRS. The alpha coefficient for the total scale was .87 and .83, respectively. Alpha coefficients for the five subscales ranged from .61 to .79 in the Way study and from .46 to .67 in the Pyne study.

#### **Perception of Regionalizaion of Health Services Scale**

The PRHS scale was developed by Gregory (1999) to assess management's perception of how well the objectives of regionalization had been achieved. Scale items were derived from the Report on the Reduction of Hospital Boards (Dobbin, 1993). The five-item PRHS is rated on a six-point Likert scale, ranging from (1) strongly disagree to (6) strongly agree. Higher scores are indicative of greater perceived achievement of the objectives of regionalization.

#### **Perception of Program Management Scale**

The PPM scale was developed by Gregory (1999) to assess managers' perceptions of the move from the traditional departmental structure to program-based management in acute care settings within the HCCSJ. Scale items were derived from the objectives of program-based management outlined in the Clinical and Clinical Support Program Implementation Manual (1996). The seven-item PPM is rated on a six-point Likert scale, ranging from (1) strongly

disagree to (6) strongly agree. Higher scores reflect positive perceptions of successful implementation of the objectives of program-based management.

### **Ethical Considerations**

Several steps were taken in this study to protect respondents' rights to privacy. The Human Investigation Committee, Faculty of Medicine, Memorial University of Newfoundland, and the Research Proposal Approval Committee of the Health Care Corporation of St. John's granted approval to conduct the study (see Appendix B). Letters of support were also received from the three participating regional boards (see Appendix A).

The CEOs' executive secretaries at the three collaborating boards provided an updated listing of acute care managers working for their organizations. Individual managers on each board's list were assigned a file number, and the master list with matching names was placed in a locked filing cabinet accessible only to the Project Manager of the larger research study. Only the file number was recorded on the survey instrument.

The purpose of the study was outlined on the cover letter accompanying the survey instrument. Potential participants were assured that complete anonymity and confidentiality would be maintained throughout the study. All questionnaires were locked in a room accessible only to the Project Manager, researcher, and thesis supervisor.



### **Data Analysis**

Data were coded and entered into the Statistical Package for the Social Sciences (SPSS) for analysis. Descriptive statistics were used to examine sample characteristics and the distribution of individual items, sub-scales, and total scale scores. Relationships between variables were determined using the appropriate bivariate correlation coefficient (i.e., parametric or non-parametric depending on the severity of score skewness). ANOVA and t-tests were also used to analyze the effects of key demographic and health-related variables. Alpha levels for tests of association and difference were set at .05. The Bonferroni and Tamhane multiple comparison procedures were used to identify specific group mean differences for ANOVA.

Stepwise multiple regression was used to test the hypothesized relationships among study variables, as depicted in the modified Conceptual Model of Behavioral Intentions. Only independent variables demonstrating a strong correlation with the dependent variables (i.e., intermediary and criterion) were entered into the regression equations. The internal consistency of all EAS scales was also assessed with Cronbach's alpha.

## **CHAPTER 4**

### **Results**

Study findings are presented in three sections. In the first section, a descriptive profile of the sample and key study variables is presented. In the second section, the relationships among the variables and the results of multiple regression analysis are discussed. In the final section, the reliability and validity of the instruments, based on study findings, are discussed.

#### **Descriptive Profile**

This section presents an overview of the personal characteristics of respondents. Descriptive findings are also presented on perceptions of the impact of health care reforms and restructuring initiatives (i.e., regionalization of health services and program-based management). Finally, the major findings on the work-related variables (i.e., psychological contract violation, general job satisfaction, organizational commitment, and intent to stay) are summarized.

#### **Personal Characteristics**

Tables 1 and 2 summarize key characteristics of the sample. The majority of respondents worked as program/regional directors or divisional/ patient managers (52.8%) and were employed in acute care facilities in the St. John's region (75.6%). A significant number of respondents were female (64%),

**Table 1****Description of the Sample (N = 197) <sup>1</sup>**

<b>Characteristic</b>	<b>n</b>	<b>%</b>
Management Position		
Senior	11	5.6
Corporate Directors	13	6.6
Corporate Managers	69	35.0
Clinical Program/Regional Directors <sup>2</sup>	25	12.7
Divisional/Patient Managers <sup>2</sup>	79	40.1
Region		
St. John's	149	75.6
Avalon	19	9.6
Central West	29	14.7
Gender		
Male	71	36.0
Female	126	64.0
Work Experience		
≤ 9 years	23	11.7
10 - 19 years	55	28.1
≥ 20 years	118	60.2
Current Position Tenure		
≤ 2 years	50	25.6
3 - 4 years	70	35.9
5 - 9 years	42	21.5
≥ 10 years	33	16.9

<sup>1</sup> Sample size is a function of missing data.<sup>2</sup> Responsible for clinical services.

**Table 2****Description of the Sample (Cont'd) (N = 197) <sup>1</sup>**

<b>Characteristic</b>	<b>n</b>	<b>%</b>
Education		
Diploma/certificate	85	43.1
Baccalaureate	78	39.6
≥ Masters	34	17.3
Professional Background		
Nursing	84	44.7
Other <sup>2</sup>	104	55.3
Responsible for Clinical Services		
Yes	104	47.2
No	93	52.8

<sup>1</sup> Sample size is a function of missing data.

<sup>2</sup> There were a number of professional backgrounds comprising the other category (e.g., business, education, medicine, social work, physiotherapy, occupational therapy, laboratory technology, psychology, etc.).

had 20 or more years of work experience (60.2%), and had less than 5 years in their current position (61.5%). Most respondents had a baccalaureate or higher level education (56.9%) and had non-nursing professional backgrounds (55.3%). A significant number of respondents were primarily responsible for clinical services (47.2%). Respondents ranged in age from 24 to 58 years. The mean age for the sample was 44.28 (SD  $\pm$  6.87).

### **Impact of Health Care Reforms**

The RIHCRS assessed managers' perceptions of the importance of reforms, emotional climate, practice-related issues, quality of care, safety concerns, and standards of care. Table 3 presents the means, standard deviations, and weighted means for total and subscale scores. Higher scores indicate more positive attitudes towards the impact of health care reforms.

The findings suggested that most managers had positive attitudes toward the overall impact of reforms ( $M = 3.94$ ). Respondents were most positive about the importance of reforms, safety concerns, and practice-related issues. Conversely, the emotional climate of the workplace, quality of care, and standards of care were viewed in the most negative light.

**Importance of reforms.** Most managers' viewed the importance of health care reforms in a positive light ( $M = 4.79$ ). More specifically, most

**Table 3****Mean and Standard Deviation Scores for RIHCRS (N = 197)<sup>1</sup>**

<b>Subscales</b>	<b><u>M</u></b>	<b><u>SD</u></b>	<b>Weighted<sup>2</sup> <u>M</u></b>
Importance of Reforms	19.16	2.93	4.79
Workplace Issues			
Emotional Climate	13.01	3.48	3.25
Practice-Related	16.74	3.16	4.19
Quality/Safety Concerns			
Quality of Care	13.50	4.08	3.38
Safety Concerns	16.88	3.24	4.22
Standards of Care	14.51	3.91	3.63
Overall Impact of Reforms	98.43 <sup>3</sup>	13.50	3.94

<sup>1</sup> Sample size for each subscale varies with the amount of missing data.

<sup>2</sup> Subscale scores were summed and divided by the number of items to generate a weighted mean for comparison purposes. The rating scale's mid-point is 3.5.

<sup>3</sup> The possible total score range is 28 to 168.

respondents indicated that they understood the importance of downsizing/restructuring (91.3%), believed that community based care is a positive step (84.7%), appreciated the challenges facing their profession (96.5%), and felt empowered to be an active participant in affirming an important future role for their profession (76%).

**Emotional climate.** Most managers viewed the emotional climate of the workplace in a negative light ( $M = 3.25$ ). More specifically, most respondents felt frustrated with the reduced level of care being provided due to increased workloads (51.7%), and believed that increased demands and stress in the workplace had led to unpleasant working relationships with coworkers and other health care providers (66.5%) and had engendered a sense of disillusionment and low morale (89.3%). The majority of respondents also did not find their jobs more satisfying and challenging since restructuring of the health care system (52.1%). On a more positive note, most respondents felt that due to the presence of a supportive environment, they could give that "extra" effort when their job demanded it (79%).

**Practice-related issues.** Overall, most managers held positive attitudes toward practice-related issues ( $M = 4.19$ ). Individual items making up this subscale provide greater insight into respondents' perceptions. Most respondents felt that opportunities (e.g., inservices, workshops, etc.) were being provided to keep current with latest developments (75.6%), and that the staff met

regularly with management to discuss workplace concerns (92.3%) and identify ways to resolve problems and build on strengths (82.6%). In contrast, a significant number of managers did not feel that system changes provided health care providers with an opportunity to have more control over their practice (52.3%).

**Quality of care.** The mean score ( $M = 3.38$ ) indicated that a significant number of managers had some concerns regarding the quality of care being provided in their institutions. Individual items making up this subscale provide greater insight into respondents' perceptions. Most respondents did not believe that supplies/resources were adequate to ensure patient/client comfort (72%). Furthermore, most respondents felt that due to increasing acuity levels it was not possible to adequately assess/meet patients' emotional/psychosocial needs (69.1%). In contrast, most respondents believed that despite downsizing/restructuring patients continue to have reasonable access to health services (65.5%). As well, patients'/clients' basic care needs are being met despite personnel reductions (61.7%).

**Safety issues.** The mean score ( $M = 4.22$ ) indicated that most managers were not concerned about safety in the workplace. Again, the individual items making up this subscale provide greater insight into respondents' perceptions. Most respondents felt that agency procedures were being performed in a safe and competent manner (90.3%), the necessary physical (82.1%) and human



(64.3%) resources were available to provide safe care, and they were confident that adequate teaching and counselling is being provided to patients/clients and their families prior to discharge (67%). In contrast, only a small percentage of respondents felt that adequate community resources were always available for patients/clients following hospital discharge (88.5%).

**Standards of care.** The mean score ( $M = 3.63$ ) indicated that managers were divided on how they rated their institutions on standards of care. Individual items making up this subscale provide greater insight into respondents' perceptions. The majority of respondents (80.0%) felt that inservice education on new policies/procedures were sufficient to avoid placing patients/clients at risk. In contrast, most respondents (66.6%) felt that patients/clients were more susceptible to potential harm from errors or delays due to increased demands in the workplace. Furthermore, a significant number of respondents felt that it was necessary to lower professional standards due to overwhelming workload demands (54.4%), and increased acuity and shortened lengths of stay (52.2%).

### **Restructuring Initiatives**

The discussion is divided according to managers' perceptions of regionalization of health services and program-based management. The mean, standard deviation, and weighted mean scores are presented in Table 4.

**Table 4**

**Mean and Standard Deviation Scores for PRHS and PPM (N = 197) <sup>1,2</sup>**

<b>Scales</b>	<b><u>M</u></b>	<b><u>SD</u></b>	<b>Weighted <sup>3</sup> <u>M</u></b>	<b>Range</b>
Regionalization of Services	20.89 <sup>4</sup>	4.94	4.18	1 - 6
Program-Based Management	29.57 <sup>5</sup>	6.65	4.22	1 - 6

<sup>1</sup> Sample size varies with the amount of missing data for each scale.

<sup>2</sup> Sample size for the PPM is limited to the HCCSJ.

<sup>3</sup> Subscale scores were summed and divided by the number of items to generate a weighted mean for comparison purposes.

<sup>4</sup> The possible total score range is 5 to 30.

<sup>5</sup> The possible total score range is 7 to 42.

**Note:** PRHS = Perception of Regionalization of Health Services; PPM = Perception of Program-Based Management.

**Regionalization of health services.** The weighted mean score for the PRHS scale ( $M = 4.18$ ) indicated that most managers believe that the objectives of regionalization have been achieved. The individual items for the PRHS provide greater insight into the specifics underlying managers' attitudes toward regionalization. For the most part, respondents felt that regionalization of health services provides opportunities for taking advantage of economies of scale through alternate board structures (84.7%), for enhancing coordination of acute and long-term care services (76.8%), and for ensuring the continuation of meaningful input into board operations by publicly appointed trustees (74%). Furthermore, most respondents indicated that regionalization allows their region to maintain/improve service quality (70.5%), and has resulted in more effective and efficient utilization of scarce human and fiscal resources (62%).

**Program-based management.** The weighted mean score ( $M = 4.22$ ) indicated that most of the HCCSJ managers felt the objectives of program-based management were being achieved. More specifically, most managers agreed that program-based management organizes health care provider groups according to commonality of patient conditions (88.9%), focuses on the continuum of care (82.2%), strengthens the interdisciplinary approach to service delivery (75.8%), and focuses on patient outcomes (74.5%). As well, most managers felt that program-based management has flattened organizational structures (69.6%), has increased staff and consumers involvement in decision-

making (69.8%), and has provided opportunities for greater authority, responsibility and accountability in managing resources (62.3%).

### **Work-Related Variables**

The discussion is organized according to major attitudes and behavioral intentions. Table 5 presents the means, standard deviations, and weighted means for the individual scales measuring study variables.

**Psychological contract violations.** The weighted mean score ( $M = 3.07$ ) indicates that there were a large number of "neutral or about the same" responses. This means that managers were divided on whether or not they believed the organization had violated implied psychological contracts. The individual items of the PCV scale present a more complete picture of managers' attitudes. Most respondents felt that their organization had fulfilled the commitments made to them upon hiring (62.1%), only infrequently failed to meet these commitments (58.6%), and felt that the amount of rewards received from the organization was about the same as promised (71.1%). In contrast, a significant percent (76.1%) indicated that the amount of rewards received was much lower than what should be provided by the organization.

**Job satisfaction.** Study findings indicated that, in general, managers were satisfied with their jobs ( $M = 4.78$ ). Individual items making up the GJS provide a more in-depth view of managers' attitudes. The majority of

**Table 5****Means and Standard Deviations for PCV, GJS, OCQ, and IS (N = 197) <sup>1</sup>**

<b>Scales</b>	<b><u>M</u></b>	<b><u>SD</u></b>	<b>Weighted <sup>2</sup> <u>M</u></b>	<b>Range</b>
Contract Violation	12.27	2.39	3.07	1 - 5
Job Satisfaction	14.34	3.84	4.78	1 - 7
Commitment	44.65	10.44	4.96	1 - 7
Intent to Stay	10.14	2.59	3.38	1 - 5

<sup>1</sup> Sample size varies with the amount of missing data for each scale.<sup>2</sup> Subscale scores were summed and divided by the number of items to generate a weighted mean for comparison purposes.**Note:** PCV = Psychological Contract Violation; GJS = General Job Satisfaction; OCQ = Organizational Commitment Questionnaire; and IS = Intent to Stay.

respondents were very satisfied with their jobs (72.5%) and the type of work in their jobs (85.3%). However, only 34.8% of respondents agreed that their coworkers were satisfied with their jobs.

**Organizational commitment.** The findings indicated that most managers were committed to their organizations ( $\bar{M} = 4.96$ ). Individual items of the OCQ present a more insightful picture of managers' attitudes. The findings indicated that the vast majority of managers really cared about the fate of the organization (91.8%) and were willing to give that extra effort to ensure its success (92.8%). Most respondents also felt that their values and those of their organization were similar (75.7%), were proud to tell others that they were part of the organization (74.2%), and have told others the organization is great to work for (63.8%). A smaller percent of respondents felt that they were really inspired to perform the best on the job (59.9%), were happy with their choice in selecting the organization over others (54.4%), and felt their organization was the best of all possible ones for which to work (51.6%). On the negative side, only a very small percent of respondents indicated that they would be willing to accept any type of job assignment to maintain employment with the organization (28.1%).

**Intent to stay.** The findings suggest that most managers were slightly unsure about whether or not they would stay with their organization ( $\bar{M} = 3.38$ ). The individual items for the scale provide greater insight into managers intentions concerning whether or not they would stay with current employers. Most

respondents indicated they would likely stay with their current employer (66%), and had not seriously engaged in job search activities (61.8%). In contrast, a significant percent indicated that they would likely leave their current position if another employment opportunity presented itself (39.5%), or were unsure about what they would do (39%).

### **Interrelationships among Study Variables**

This section examines the effect of personal characteristics or correlates (i.e., age, gender, education, professional background, region of employment, primary area of responsibility, managerial position, years of work experience, current position tenure, and employment status) on the perceived impact of health care reforms, restructuring initiatives, work-related attitudes, and behavioral intentions. One-way analysis of variance (ANOVA) and the t-test for independent groups were used to identify group differences. The Bonferroni and Tamhane multiple comparison procedures were used to identify specific group mean differences for ANOVA. An alpha level of .05 was selected as the significance level for all tests of difference.

When appropriate, the relationships among major study variables were also examined. Pearson's  $r$  was used to determine the relationship among variables. An alpha level of .05 was selected as the significance level for the tests of association.

### **Reform Impact and Personal Characteristics**

The influence of personal characteristics on reform impact variables was only assessed for managers responsible for clinical services. The reason for this restriction was that managers responsible for other administrative areas were not asked to rate items in the RIHCRS that specifically related to clinical issues. The findings revealed few significant differences across the correlates for managers responsible for clinical services in their organizations. There were no significant differences observed for any of the reform impact variables based on years of work experience, current position tenure, region of employment, education level, professional background, or age.

Managerial position and gender were observed to exert the greatest influence on reform impact variables (see Table 6). Clinical program/regional directors tended to perceive the importance of reforms,  $t(73.3) = -2.33$ ,  $p < .05$ , quality of care,  $t(102) = -2.85$ ,  $p < .01$ , and the overall impact of reforms,  $t(79) = -2.58$ ,  $p < .05$ , more positively than divisional and patient care managers. As well, male managers were significantly more positive about the emotional climate present in the workplace,  $t(84) = -2.68$ ,  $p < .01$ , and quality of care,  $t(102) = -2.25$ ,  $p < .05$ , than their female counterparts.

### **Restructuring and Personal Characteristics**

The influence of personal characteristics on the restructuring variables



Table 6

**RIHCR Scale by Personal Characteristics**

Scale	Managerial Position	Gender
Importance of Reforms	t = -2.33* (p = .023)	t = -1.14 (p = .256)
Workplace Issues		
Emotional Climate	t = -1.80 (p = .076)	t = -2.68** (p = .009)
Practice-Related	t = -1.12 (p = .267)	t = -0.85 (p = .396)
Quality/Safety Concerns		
Quality of Care	t = -2.85** (p = .005)	t = -2.25* (p = .027)
Safety Concerns	t = -1.54 (p = .126)	t = -1.68 (p = .097)
Standards of Care	t = -1.48 (p = .144)	t = 0.77 (p = .444)
Overall Impact	t = -2.58* (p = .012)	t = -1.87 (p = .065)

\*p &lt; .05, \*\*p &lt; .01

was assessed for all managers responding to the survey. A few correlates were observed to influence perceptions of regionalization, but only one affected perceptions of program-based management (i.e., professional background). Years of work experience, educational level, current position tenure, and age failed to achieve statistical significance for regionalization. However, significant differences were observed for managerial position, primary area of responsibility (i.e., clinical versus non-clinical), professional background, gender, and region of employment. Study findings for significant factors are summarized in Table 7.

Managers with non-nursing backgrounds tended to view achievement of the objectives of program-based management more positively than their counterparts with nursing backgrounds,  $t(136) = -2.40, p < .05$ . Senior managers viewed achievement of regionalization objectives more positively than divisional/patient care managers, clinical program/regional directors, and corporate managers; and clinical program/regional directors and corporate managers were more positive than divisional/patient care managers,  $F(4,180) = 8.98, p < .001$ . Managers not responsible for clinical services tended to view achievement of regionalization objectives more positively than their counterparts responsible for clinical services,  $t(183) = 4.22, p < .01$ . Furthermore, managers with non-nursing backgrounds tended to view achievement of regionalization objectives more positively than their counterparts with nursing backgrounds,  $t(176) = -3.20, p < .01$ . Finally, male managers and managers

**Table 7****PRHS and PPM by Personal Characteristics**

<b>Variable</b>	<b>Managerial Position</b>	<b>Primary Area</b>	<b>Professional Background</b>	<b>Gender</b>	<b>Region</b>
PRHS	F = 8.98*** (p = .000)	t = 4.22*** (p = .001)	t = -3.20** (p = .002)	t = 2.88** (p = .004)	t = -3.48** (p = .001)
PPM	F = 1.25 (p = .292)	t = 0.57 (p = .571)	t = -2.40* (p = .018)	t = 0.61 (p = .544)	N/A

\*p < .05, \*\*p < .01, \*\*\*p < .001

**Note:** PRHS = Perception of Regionalization of Health Services; and PPM = Perception of Program-Based Management.

working in the Avalon/Central West regions tended to view achievement of regionalization objectives more positively than female managers,  $t(183) = 2.88$ ,  $p < .01$ , and those within the St. John's region,  $t(183) = -3.48$ ,  $p < .01$ .

### **Work-Related Variables and Personal Characteristics**

There were a number of correlates that influenced managers' ratings on the various work-related variables - general job satisfaction, psychological contract violation, organizational commitment, and intent to stay. The findings are presented according to major study variables. Tables 8 and 9 summarize study findings.

**Psychological contract violations.** With regard to psychological contract violations, no significant differences were observed for managers based on years of work experience, education level, professional background, or age. Significant differences in perceptions of contract violations were obtained for managerial position, current position tenure, primary area of responsibility, region of employment, and gender. Senior managers were less likely to feel that their employers had violated implied contracts than either divisional/patient care managers or corporate managers,  $F(4,189) = 5.49$ ,  $p < .001$ . Managers with 3 to 4 years of experience in their current positions were more likely to feel that their employers had violated implied contracts than those with 2 years or less,  $F(3,188) = 5.79$ ,  $p < .01$ . As well, managers not responsible for clinical services

Table 8

**PCV, GJS, OCQ, and IS by Personal Characteristics**

<b>Variable</b>	<b>Managerial Position</b>	<b>Position Tenure</b>	<b>Primary Area</b>	<b>Work Experience</b>
Contract Violations	F = 5.49*** (p = .000)	F = 5.79** (p = .001)	t = 2.54* (p = .012)	t = 0.85 (p = .397)
Job Satisfaction	F = 6.32*** (p = .000)	F = 4.58** (p = .004)	t = 4.26*** (p = .000)	t = 1.58 (p = .117)
Commitment	F = 4.28** (p = .002)	F = 3.29* (p = .022)	t = 2.29* (p = .023)	t = -0.05 (p = .962)
Intent to Stay	F = 2.49* (p = .044)	F = 2.51 (p = .060)	t = 0.22 (p = .982)	t = -2.92** (p = .004)

\*p < .05, \*\*p < .01, \*\*\*p < .001

**Note:** GJS = General Job Satisfaction; PCV = Psychological Contract Violation; OCQ = Organizational Commitment Questionnaire; and IS = Intent to Stay.

**Table 9**

**PCV, GJS, OCQ, and IS by Personal Characteristics**

<b>Variable</b>	<b>Professional Background</b>	<b>Education Level</b>	<b>Gender</b>	<b>Age</b>	<b>Region</b>
Contract Violations	t = -1.62 (p = .107)	F = 0.82 (p = .442)	t = 2.24* (p = .026)	r = 0.05 (p = .461)	t = -4.58*** (p = .000)
Job Satisfaction	t = -3.65*** (p = .000)	F = 2.74 (p = .067)	t = 3.43** (p = .001)	r = 0.03 (p = .683)	t = -5.73*** (p = .000)
Commitment	t = -2.53* (p = .012)	F = 4.64* (p = .011)	t = 2.93** (p = .004)	r = 0.08 (p = .302)	t = -5.81*** (p = .000)
Intent to Stay	t = -0.86 (p = .389)	F = 7.98*** (p = .000)	t = 2.88** (p = .004)	r = 0.28*** (p = .000)	t = -2.63** (p = .009)

\*p < .05, \*\*p < .01, \*\*\*p < .001

**Note:** GJS = General Job Satisfaction; PCV = Psychological Contract Violation; OCQ = Organizational Commitment Questionnaire; and IS = Intent to Stay.

were less likely to feel that their employers had violated implied contracts than those responsible for clinical services,  $t(192) = 2.54, p < .05$ . Finally, male managers or managers from the Avalon/Central West regions of the province were less likely to feel that their employers had violated implied contracts than female managers,  $t(192) = 2.24, p < .05$ , or those working within the St. John's region,  $t(192) = -4.58, p < .001$ .

**General job satisfaction.** There were no significant differences in overall job satisfaction based on years of work experience, education level, or age. However, job satisfaction did vary with managerial position, current position tenure, primary area of responsibility, professional background, gender, and region of employment. Divisional/patient care managers were less satisfied with their jobs than senior management, corporate directors, and corporate managers,  $F(4,188) = 6.32, p < .001$ . Managers with 3 to 4 years of experience in their current positions were less satisfied with their jobs than those with 2 years or less and 10 years or more experience,  $F(3,187) = 4.58, p < .01$ . Managers primarily responsible for clinical services were less satisfied with their jobs than those not responsible for clinical services,  $t(191) = 4.26, p < .001$ . As well, managers with nursing backgrounds were less satisfied with their jobs than those with non-nursing backgrounds,  $t(157.04) = -3.65, p < .001$ . Finally, male managers and managers working in the Avalon/Central West regions tended to be more satisfied with their jobs than female managers,  $t(191) = 3.43, p < .01$ .

and those working within St. John's,  $t(108.03) = -5.73$ ,  $p < .001$ .

**Organizational commitment.** Significant differences were observed on the organizational commitment variable for most correlates (i.e., managerial position, years in current position, primary area of responsibility, professional background, educational level, gender, and region of employment). Only years of work experience and age failed to achieve statistical significance.

Divisional/patient care managers were significantly less committed to their organizations than senior managers,  $F(4,186) = 4.28$ ,  $p < .01$ . As well, managers with 3 to 4 years tenure in their current positions or managers primarily responsible for clinical services were significantly less committed to their organizations than those with 10 years or more tenure,  $F(3,185) = 3.29$ ,  $p < .05$ , or not responsible for clinical services,  $t(189) = 2.29$ ,  $p < .05$ . Furthermore, managers with non-nursing professional backgrounds and managers with diploma/certificate educational preparation tended to be more committed to their organizations than those with nursing backgrounds,  $t(180) = -2.53$ ,  $p < .05$ , or baccalaureate preparation,  $F(2,188) = 4.64$ ,  $p < .05$ . Finally, male managers or managers working in the Avalon/Central West regions were significantly more committed than female managers,  $t(189) = 2.93$ ,  $p < .01$ , or those from the St. John's region,  $t(193) = -5.81$ ,  $p < .001$ .

**Intent to stay.** There were no significant differences on intent to stay based on time spent in current position, primary area of responsibility, or



professional background. Significant differences were observed on the intent to stay variable for managerial position, years of work experience, education level, gender, age, and region of employment. However, managerial position failed to achieve statistical significance on the post-hoc comparison procedures.

Managers with 20 or more years of work were significantly more likely to stay with their current employers than those with 19 years or less of work experience,  $t(192) = -2.92, p < .01$ . As well, managers with diploma/certificate educational preparation were more likely to indicate that they would stay with their current employers than those with baccalaureate preparation,  $F(2,192) = 7.98, p < .001$ . Furthermore, male managers or older managers were significantly more likely to indicate that they would stay with their current employer than female managers,  $t(193) = 2.88, p < .01$ , or younger managers,  $r = .28, p < .001$ . Finally, managers working in the Avalon/Central West regions were significantly more likely to stay with their current employers than those working in the St. John's region,  $t(193) = -2.63, p < .01$ .

### **Reform Impact with Restructuring and Work-Related Variables**

Table 10 summarizes the correlation findings between the total and subscale scores of the RIHCRS, and restructuring and work-related variables. The findings are summarized in the relevant sections.

Table 10

**Correlation of RIHCRS with Restructuring & Work-Related Scales**

Variable	PRHS r	PPM r	PCV r	GJS r	OCQ r	IS r
Importance of Reforms	.47***	.46***	.37***	.32***	.42***	.27***
Workplace Issues						
Emotional Climate	.47***	.41**	.51***	.55***	.58***	.46***
Practice-Related	.44***	.14	.30**	.27**	.30**	.25*
Quality/Safety Concerns						
Quality of Care	.47***	.28**	.35***	.22**	.30***	.20**
Safety Concerns	.40***	.26*	.31**	.13	.30**	.24*
Standards of Care	.24*	.06	.15	.03	.15	.15
Overall Reform Impact	.53***	.35**	.49***	.37**	.45***	.34**

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Note: GJS = General Job Satisfaction; PCV = Psychological Contract Violation; OCQ = Organizational Commitment; IS = Intent to Stay; PRHS = Perception of Regionalization of Health Services; PPM = Perception of Program-based Management.

**Restructuring.** There were statistically, significant positive relationships among most major impact and restructuring variables. The only exceptions were practice-related issues and standards of care with program-based management. These findings suggest that managers who viewed the impact of health care reforms in a more positive light were significantly more likely to believe that the objectives of regionalization and program-based management had been achieved.

Based on the coefficient of determination (i.e.,  $r^2$ ), importance of reforms accounted for 22.1% and 21.2% of the variance in perception of regionalization and program-based management, respectively. The emotional climate of the work setting accounted for 22.1% and 16.8% of the observed variance, respectively. Practice-related issues accounted for 19.4% of the variance in perception of regionalization. Quality of care accounted for 22.1% and 7.8% of the variance in perception of regionalization and program-based management, respectively. Safety issues accounted for 16% and 6.8% of the observed variance, respectively. Standards of care accounted for 5.8% of the variance in perception of regionalization. Finally, the overall impact of reforms accounted for 28.1% and 12.3% of the variance in perception of regionalization and program-based management, respectively.

**Work-related attitudes.** There were also statistically, significant positive relationships among most major impact and work-related variables. The only

exceptions were standards of care with all of the variables, and safety concerns with general job satisfaction. Overall, these findings suggest that managers who viewed the impact of health care reforms in a more positive light were less likely to feel that employers had violated psychological contracts, more satisfied with their jobs, more committed to their organizations, and more likely to stay with current employers.

Based on the coefficient of determination (i.e.,  $r^2$ ), importance of reforms accounted for 13.7%, 10.2%, 17.6%, and 7.3% of the variance in psychological contract violation, general job satisfaction, organizational commitment, and intent to stay, respectively. The emotional climate of the work setting accounted for 26%, 30.3%, 33.6%, and 21.2% of the variance in psychological contract violation, general job satisfaction, organizational commitment, and intent to stay, respectively. Practice-related issues accounted for 9%, 7.3%, 9%, and 6.3% of the variance in psychological contract violation, general job satisfaction, organizational commitment, and intent to stay, respectively. Quality of care accounted for 12.3%, 4.8%, 9%, and 4% of the variance in psychological contract violation, general job satisfaction, organizational commitment, and intent to stay, respectively. Safety concerns accounted for 9.6%, 9%, and 5.8% of the variance in psychological contract violation, organizational commitment, and intent to stay, respectively. Finally, the overall impact of reforms accounted for 24%, 13.7%, 20.3%, and 11.6% of the variance in psychological contract violation, general job

satisfaction, organizational commitment, and intent to stay, respectively.

### **Restructuring and Work-Related Variables**

Statistically, significant positive relationships were observed among all work-related and restructuring variables (see Table 11). In terms of the coefficient of determination (i.e.,  $r^2$ ), perception of regionalization of health services accounted for 32.5%, 22.1%, 24%, 37.2%, and 17.6% of the variance in program-based management, psychological contract violations, job satisfaction, organizational commitment, and intent to stay, respectively. Program-based management accounted for 18.5%, 15.2%, 26%, and 10.9% of the variance in psychological contract violations, job satisfaction, organizational commitment, and intent to stay, respectively. Contract violations accounted for 36%, 44.9%, and 26% of the variance in job satisfaction, commitment, and intent to stay, respectively. In addition, general job satisfaction accounted for 53.3% and 20.3%, of the variance in organizational commitment and intent to stay, respectively. Finally, organizational commitment accounted for 37.2% of the variance in intent to stay.

Table 11

**Correlations among PRHS, PPM, PCV, GJS, OCQ & IS Scales**

	PRHS r	PPM r	PCV r	GJS r	OCQ r	IS r
<b>PRHS</b>						
<b>PPM</b>	.57***					
<b>PCV</b>	.47***	.43***				
<b>GJS</b>	.49***	.39***	.60***			
<b>OCQ</b>	.61***	.51***	.67***	.73***		
<b>IS</b>	.42***	.33***	.51***	.45***	.61***	

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Note: GJS = General Satisfaction; PCV = Psychological Contract Violation; OCQ = Organizational Commitment; IS = Intent to Stay; PRHS = Perception of Regionalization of Health Services; PPM = Perception of Program-based Management.

### **Predictors of Outcome**

Stepwise multiple regression analysis was used to identify significant predictors of intermediate outcomes (i.e., psychological contract violation, general job satisfaction, and organizational commitment) and behavioral intentions (i.e., intent to stay). Regression analysis was restricted to the managerial groups responsible for clinical services (i.e., clinical program/regional directors and divisional/patient managers). The reason for this restriction was that managers responsible for other administrative areas were not asked to rate items in the RIHCRS that specifically related to clinical issues.

Different combinations of predictor variables were used to identify the best regression model for each outcome variable. The reform impact variables were entered first as a group, followed by the covariates of each intermediate outcome variable, and finally the correlates (i.e., personal characteristics). The tabular presentations of the results are restricted to the final regression models for each outcome variable (see Tables 12 and 13) .

### **Psychological Contract Violations**

The first level modelling focused on examining the predictive power of the reform impact variables and correlates on perceived contract violation. Correlation analysis demonstrated significant positive relationships between all of the components of the RIHCRS (i.e., importance of reforms, emotional climate,

practice-related issues, quality of care, and safety concerns) and psychological contract violations. Several correlates (i.e., current position tenure, region of employment, and gender) were also found to influence contract violation.

During the first step of regression analysis, emotional climate and safety concerns combined to explain 33.4% of the variance in perceived contract violation. Emotional climate entered the regression equation first, accounting for 27.3% of the variance. This variable was followed by safety concerns, which accounted for an additional 6.1%. Importance of reforms, practice-related issues, and quality of care failed to enter the regression equation.

When the correlates were added at the second step, region, position tenure, and gender entered the regression equation along with emotional climate and safety to explain 45.3% of the variance in perceived contract violation. Emotional climate entered the regression equation first, accounting for 26.3% of the variance. This variable was followed by safety concerns, region of employment, position tenure, and gender which accounted for an additional 6.4%, 4.3%, 4.5%, and 3.8%, respectively (see Table 12).

### **General Job Satisfaction**

The second level modelling considered the predictive power of reform impact variables, psychological contract violation, and correlates on general job





satisfaction. Several of the impact variables (i.e., importance of reforms, emotional climate, practice-related issues, and quality of care), as well as contract violation, depicted significant positive correlations with job satisfaction. Several correlates (i.e., current position tenure, professional background, region of employment, and gender) also influenced job satisfaction.

The first regression model revealed that two reform impact variables, emotional climate and importance of reforms, combined to explain 33.5% of the variance in job satisfaction. Emotional climate and importance of reforms accounted for 29.7% and 3.8% of the explained variance, respectively. Practice-related issues and quality of care failed to enter the equation.

When perceived contract violation was added at the second step, it surpassed emotional climate in predictive power, while importance of reforms failed to enter the regression equation. Contract violation and emotional climate combined to explain 46.2% of the variance in job satisfaction, contributing 38.2% and 8%, respectively.

The correlates were entered at the third step. The final model revealed that contract violation, emotional climate, region of employment, professional background, and importance of reforms, combined to explain 57.5% of the variance in job satisfaction (see Table 12). Contract violation entered the regression equation first, accounting for 39.1% of the variance. This variable was followed by emotional climate, region, professional background, and

importance of reforms, which accounted for an additional 8.6%, 4.9%, 2.6%, and 2.3%, respectively. Current position tenure and gender failed to enter the regression equation.

### **Organizational Commitment**

The third level modelling considered the predictive power of reform impact variables, psychological contract violation, job satisfaction, and correlates on organizational commitment. Correlation analysis demonstrated moderate, positive relationships between organizational commitment and most reform impact variables (i.e., importance of reforms, emotional climate, practice-related issues, quality of care, and safety concerns), contract violation, and job satisfaction. Several correlates (i.e., current position tenure, region of employment, education level, and gender) also influenced commitment.

During the first step of regression analysis, emotional climate and importance of reforms combined to explain 40.4% of the variance in organizational commitment. Emotional climate and importance of reforms accounted for 32.1% and 8.3% of the explained variance, respectively. Practice-related issues, quality of care, and safety concerns failed to enter the equation.

When perceived contract violation was added at the second step, it surpassed emotional climate in predictive power. Contract violation, emotional climate, and importance of reforms combined to explain 52.3% of the variance

in commitment, contributing 39.6%, 8.3%, and 4.4%, respectively. When job satisfaction was added at the third step, it also became the best predictive variable and emotional climate failed to enter the regression equation. Job satisfaction, importance of reforms, and contract violation, combined to explain 69.5% of the variance in commitment, contributing 62.5%, 4.3%, and 2.7%, respectively.

The correlates were entered at the fourth step. The final model revealed that job satisfaction, importance of reforms, contract violations, and current position tenure combined to explain 74.1% of the variance in job satisfaction (see Table 13). Job satisfaction entered the regression equation first, accounting for 64.5% of the explained variance in organizational commitment. This variable was followed by importance of reforms, contract violations, and current position tenure which contributed an additional 5.1%, 2.7%, and 1.8%, respectively.

### **Intent to Stay**

The fourth level modelling considered the predictive power of reform impact variables, contract violation, job satisfaction, organizational commitment, and correlates on intent to stay. Intent depicted low to moderate, positive correlations with most impact variables (i.e., importance of reforms, emotional

**Table 13****Stepwise Multiple Regression on Commitment & Intent to Stay (n = 104)**

	<b>Multiple R</b>	<b>Adj. R<sup>2</sup></b>	<b>R<sup>2</sup> Change</b>	<b>F Value</b>	<b>p</b>
<b>Commitment</b>					
Job Satisfaction	.803	.640	.645	135.82	.000
Importance of Reforms	.834	.687	.051	84.23	.000
Contract Violations	.850	.712	.027	63.59	.000
Position Tenure	.861	.727	.018	51.72	.000
<b>Intent to Stay</b>					
Commitment	.604	.357	.365	43.17	.000
Contract Violations	.664	.425	.075	29.12	.000

climate, practice-related issues, quality of care, and safety concerns), job satisfaction, contract violation, and commitment. Most correlates (i.e., managerial position, region of employment, years of work experience, education level, gender, and age) had a significant influence on intent to stay.

During the first step of regression analysis, only emotional climate entered the equation to explain 20.5% of the variance in intent to stay. When perceived contract violation was added at the second step, it became the only variable in the regression equation, accounting for 35.8% of the explained variance in intent.

When job satisfaction was added at the third step, it became the best predictive variable. Job satisfaction combined with contract violation to account for 45% of the explained variance in intent to stay. Job satisfaction and contract violation contributed 36.9% and 8.1% of the explained variance, respectively.

When commitment was entered at the fourth step, it also became the best predictive variable and job satisfaction failed to enter the regression equation. Commitment and contract violation combined to explain 42.6% of the explained variance in intent to stay, contributing 36.5% and 6.1% to the explained variance.

The correlates were entered into the regression equation at the last step. None of the correlates entered the equation. The final model revealed that organizational commitment and contract violations combined to explain 44% of the variance in intent to stay (see Table 13). Commitment and contract violations contributed 36.5% and 7.5%, respectively.

### **Reliability and Validity of Study Instruments**

The reliability and validity of the RIHCRS and PRHS, PPM, PCV, GJS, OCQ, and IS scales were also examined for the study population. Cronbach's alpha was used to assess internal consistency. The intercorrelations among subscale and total scores assessed the construct validity of the RIHCRS.

#### **RIHCRS**

Within the current sample, the total instrument had an alpha coefficient of .83, indicating a high level of internal consistency. Alpha coefficients for the subscales ranged from .51 to .74: practice-related issues (.51), importance of reforms (.53), emotional climate (.64), safety concerns (.64), quality of care (.72), and standards of care (.74). These findings indicate that the total scale and the subscales have a fair to good internal consistency.

Most of the intercorrelations among the subscales were statistically significant and within the moderate to strong range (see Table 14). The only exceptions were the low correlations between importance of reforms and practice-related-issues, safety concerns, and standards of care. The findings suggest that the subscales are related and represent distinct dimensions of the impact of health care reforms (i.e., good discriminatory power). In summary, the intercorrelations among the subscales and the subscales to total scale suggest that the RIHCRS has good construct validity.

Table 14

**Correlations among RIHCRS and Subscales (n = 104)**

<b>Variable</b>	<b>EC</b>	<b>PR</b>	<b>QC</b>	<b>SI</b>	<b>SC</b>	<b>RIHCR</b>
<b>Importance of Reforms (IR)</b>	.40***	.24*	.28***	.19	.10	.50***
<b>Emotional Climate (EC)</b>		.45***	.37***	.31**	.32**	.69***
<b>Practice-Related (PR)</b>			.37***	.43***	.32**	.70***
<b>Quality of Care (QC)</b>				.57***	.44**	.70***
<b>Safety Issues (SI)</b>					.51***	.73***
<b>Standards of Care (CS)</b>						.68***

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$



**PRHS and PPM**

Alpha coefficients were also generated for the scales measuring perceptions of regionalization (i.e., PRHS) and program-based management (i.e., PPM). The internal consistency for the PRHS ( $\alpha = .89$ ) and PPM ( $\alpha = .87$ ) were quite strong in the current sample. Furthermore, the inter-item correlations were within the .30 to .70 range recommended by Nunnally (1978).

**PCV, GJS, OCQ, and IS**

Alpha coefficients were also generated for the scales measuring for psychological contract violations (i.e., PCV), general job satisfaction (GJS), organizational commitment (i.e., OCQ), and intent to stay (i.e., IS). The internal consistency for the PCV ( $\alpha = .74$ ), GJS ( $\alpha = .84$ ), OCQ ( $\alpha = .92$ ), and IS ( $\alpha = .78$ ) were quite strong in the current sample.

**Summary**

The managers in this study were generally more positive than negative about the overall impact of health care reforms following managerial restructuring and hospital downsizing. Respondents were most positive about the importance of reforms and the adequacy of safety measures, and most negative about the emotional climate of the workplace and the quality of care possible within their institutions. Only two correlates (i.e., managerial position and gender) were

found to influence perceptions about the impact of reforms.

The findings also demonstrated that managers generally believed the objectives of regionalization of health services and program management were being achieved. Managerial position, primary area of responsibility (i.e., clinical versus non-clinical), professional background (i.e., nursing versus non-nursing), gender, and region of employment were observed to influence perceptions of regionalization. Only one correlate, professional background, was found to influence perceptions of program-based management.

The findings also demonstrated that managers were more satisfied than dissatisfied with their jobs and were committed to their organizations. On the other hand, managers were divided on whether or not employers had violated implied psychological contracts, and were uncertain about whether they would stay with their current organization. The correlates most likely to influence work-related variables included managerial position, current position tenure, primary area of responsibility, gender, and region of employment. However, there were a few notable differences. Current position tenure and primary area of responsibility failed to affect intent to stay, whereas years of work experience and age only affected the intent variable. As well, the effects of education were limited to organizational commitment and intent to stay. Finally, professional background was only found to affect job satisfaction and organizational commitment.

Most of the restructuring initiative and work-related variables were significantly and positively related to the total RIHCRS score and its subscales. Greater beliefs in the achievement of the objectives of regionalization and program management, higher levels of job satisfaction, greater organizational commitment, less likelihood of contract violations, and greater intent to stay were associated with more positive perceptions of the importance of reforms, the emotional climate, practice-related issues, quality of care, and safety measures. One notable exception was the non-significant correlations observed between the work-related variables and standards of care. As well, all of the restructuring and work-related variables depicted significant, positive relationships with each other.

Different combinations of impact of reform variables and covariates emerged as significant predictors of psychological contract violation, job satisfaction, and organizational commitment. Two impact variables (i.e., emotional climate and safety concerns) emerged as significant predictors of psychological contract violation, accounting for 32.7% of the total variance. Region of employment, position tenure, and gender contributed an additional 12.6% to the explained variance. Emotional climate, importance of reforms, and one covariate (i.e., psychological contract violation) emerged as significant predictors of general job satisfaction, accounting for 50% of the total variance. Region of employment and professional background contributed an additional

7.5% to the explained variance.

With regard to organizational commitment, one impact variable (i.e., importance of reforms) and two covariates (i.e., job satisfaction and psychological contract violation) combined to explain 5.1% and 67.2%, respectively, of the explained variance in commitment. Position tenure contributed an additional 1.8% to the regression equation on commitment.

The regression findings on intent to stay revealed that organizational commitment was the best predictor variable. Two covariates (i.e., organizational commitment and psychological contract violation) combined to explain 44% of the variance in intent to stay.

## **CHAPTER 5**

### **Discussion**

The Conceptual Model of Behavioral Intentions (CMBI) provides the framework for this study. The discussion of the findings is organized according to the major components of the model.

The CMBI proposes that determinants, covariates or intermediate outcomes, and correlates (i.e., personal characteristics) exert a direct and indirect effect on behavioral intentions. The aspects of determinants selected for investigation in the current study are perceptions of the importance of reforms, emotional climate of the workplace, practice-related issues, quality of care, safety concerns, and standards of care. Psychological contract violations, general job satisfaction, and organizational commitment comprise the intermediate outcomes. The personal characteristics consist of managerial position, current position tenure, primary area of responsibility (i.e., clinical versus non-clinical), years of work experience, professional background (i.e., nursing versus non-nursing), education level, gender, age, and region of employment. Intent to stay measures behavioral intentions.

### **Determinants**

One of the research questions investigated in this study focused on acute care managers' perceptions of the impact of health care reforms. In the current

study, managers have positive attitudes toward the overall impact of reforms, as indicated by the mean score for the total scale. Specifically, managers are most positive about the importance of reforms, safety concerns, and practice-related issues, respectively. The emotional climate of the work place is viewed most negatively, followed by quality of care and standards of care. For the most part, similar findings were reported by Way (1995) and Pyne (1998) on the most positive and negative areas of reform impact. While the emotional climate is rated most negatively by managers in the current study, Way and Pyne found that the most negative ratings were given to quality of care by the staff nurses comprising their samples.

In the current study, a key factor influencing negative ratings of the emotional climate was the presence of unpleasant working relations with coworkers and other health care providers due to increased job demands and stress, as indicated by two-thirds of the managers. Although the goal of reducing management layers and introducing multidisciplinary teams is to decentralize decision-making and create more positive practice environments, there is empirical support for the negative impact of such changes on the work environment. Three studies were identified that examined acute care managers' perceptions of the work environment following transition from a functional design to a patient-centered system (Ingersoll et al., 1999; Redman & Jones, 1998; Seago, 1999). Another study examined managers' perceptions of change

following system redesign and administrative mergers across hospitals (Woodward et al., 2000).

In the Ingersoll et al. (1999) study, managers felt that they had become the target of staff anger and frustrations. As well, Ingersoll et al. and Redman and Jones (1998) reported that managers felt isolated from their peers who were also struggling with system changes. Furthermore, managers in the Seago (1999) study perceived a decline in the collaborative culture following implementation of a patient-focused care delivery system. Comparatively, Woodward et al. (2000) observed a significant decline in designated and non-designated supervisors' perceptions of coworker and supervisor support in the aftermath of reengineering initiatives and the administrative mergers of hospitals.

There is also empirical evidence which suggests that job demands and stress for managers increase following system changes (Ingersoll et al., 1999; Redman & Jones, 1998; Woodward et al., 2000). In addition, Markham and Lomas (1995) and Davis (1998/1999) noted that the formation of regional-based boards and multi-hospital arrangements might have negative emotional consequences for employees (e.g., increased anxiety, uncertainty and stress, job loss, lack of role clarity, etc.) and create managerial instability.

Although there is extensive research on staff nurses' perceptions of the effects of health care reforms on quality of care and care standards, limited attention has been given to managers' perceptions. In the current study,

managers rated the quality of care and standards of care as being low following system changes. Similar findings were reported by Redman and Jones (1998), who noted that managers in their study found they had less time available for monitoring service quality. Markham and Lomas (1995) also noted that the initial stages of regional-based multi-hospital arrangements might create conditions that would have negative repercussions for the quality of care possible (e.g., decreased access to services, disruptions in referrals and clinical practices, etc.).

In the current study, most managers gave practice-related issues (i.e., teamwork to address and resolve problems, as well as inservice opportunities) positive ratings. The one exception is the belief that system changes do not give providers greater control over their practice. Contrasting findings were reported by Woodward et al. (2000). These authors noted that teamwork evidenced a significant decline for designated and non-designated supervisory groups, whereas job influence and decision latitude received fairly consistent moderate ratings over time. Similarly, Seago (1999) found that managers identified a significant decrease in the collaborative culture present in the workplace. The inconsistent effects of reengineering initiatives on managers are further reinforced in studies by Acorn et al. (1997) and Ringerman (1990), who found that autonomous decision-making increased for managers in institutions with high levels of decentralization.



### **Intermediate Outcomes and Behavioral Intentions**

The current study investigated levels of psychological contract violations, general job satisfaction, organizational commitment, and intentions of staying with current employers in a sample of acute care managers. Given the variations in the regions with regard to the extent of restructuring (i.e., more extensive in St. John's versus the Avalon and Central West regions), it was also deemed necessary to investigate regional differences in managers' attitudes and behavioral intentions. The discussion of findings is organized according to intermediate outcomes and intent to stay.

### **Psychological Contract Violations**

The average mean score for the total scale indicates that the sample is divided on whether or not the organization violated psychological contracts. Turnley and Feldman (1998) reported similar findings for a sample of managers and executive level employees working for organizations that had been subjected to variant degrees of restructuring.

In the current study, most managers reported that the organization had fulfilled promised obligations made to them upon hiring, and only infrequently violated such commitments. However, managers in regions with extensive organizational restructuring were significantly more likely to report unfulfilled promises and more frequent violations than those working in regions with less

organizational restructuring. These findings concur with those of Turnley and Feldman (1998, 1999) who found that managers working in organizations with major restructuring (i.e., layoffs, reorganizations, mergers, and acquisitions) reported a higher frequency of, and more severe, contract violations.

The current study's findings also indicated that most managers felt the amount of rewards received was similar to what was promised, but less than expected. Comparatively, Robinson and Rousseau (1994) noted that 50% of their sample of graduate management alumni reported a discrepancy between what employers promised and what was realized (i.e., pay, benefits, and bonuses).

Finally, current study findings indicated that managers in more restructured organizations are more likely to report that financial and non-financial rewards have been less than what was promised and expected than their counterparts in less restructured organizations. In contrast, Turnley and Feldman (1998) found that managers exposed to lesser or greater degrees of organizational restructuring did not differ significantly on perceived compensation violations (i.e., promised and actual salaries, bonuses, or pay raises).

### **Job Satisfaction**

In the current study, the average mean score for the job satisfaction scale suggests that most managers are slightly satisfied with their jobs. In contrast,

Acorn et al. (1997) reported that the acute care managers in their study had moderate levels of job satisfaction. Similarly, moderate to high levels of job satisfaction for acute care managers, before and after the introduction of reengineering processes, were reported by Luthans and Sommer (1999) and Woodward et al. (2000).

In the current study, managers working in regions with extensive restructuring were more likely to evidence lower levels of job satisfaction than those in regions with less restructuring. Although the satisfaction levels were at moderate to high levels in the Luthans and Sommer (1999) and Woodward et al. (2000) studies, respectively, managers' satisfaction levels evidenced a significant decline following reengineering efforts. Contrasting findings were reported by Acorn et al. (1997) and Ringerman (1990), who observed that managers in very decentralized systems evidenced significantly greater job satisfaction than those in more centralized systems.

### **Organizational Commitment**

In the current study, the mean score for the organizational commitment scale indicates that most managers are slightly committed. Other researchers (Acorn et al., 1997; Lee & Henderson, 1996; Luthans & Sommer, 1999) reported slightly higher commitment levels for acute care managers.

With regard to differences based on the extent of restructuring present in

the regions included in the current study, the findings indicate that managers in hospitals with more extensive restructuring are significantly less committed than those in hospitals with less restructuring. Comparatively, Luthans and Sommer (1999) observed that the commitment levels of all managers significantly declined following restructuring, with those in departments most affected evidencing greater decreases.

In the current study, the managers in more decentralized systems evidence lower commitment levels than their counterparts in less decentralized systems. This finding contrasts with those reported by Acorn et al. (1997) and Ringerman (1990). In both studies, managers in very decentralized systems evidenced significantly greater organizational commitment than those in more centralized systems.

### **Behavioral Intentions**

In the current study, the average mean score of the intent to stay scale indicates that managers are slightly unsure about whether or not they will remain with their organizations. From the literature, only one study of acute care settings included managers in the sample. Cavanagh and Coffin (1992) reported that managers had a high probability of staying with their current employers. However, the contrasting findings between the two studies could be attributed to the variant samples, and the fact that the Cavanagh and Coffin study occurred

prior to major restructuring initiatives.

The current study's findings also suggest that managers working in more restructured environments are less inclined to stay than their counterparts who experienced less restructuring. No studies examining the impact of health care restructuring on intentions to leave or stay were identified from the literature. However, Turnley and Feldman (1998, 1999) reported that managers in the business sector who worked in firms with more extensive corporate restructuring were significantly more likely to intend to quit and engage in job search activities than their counterparts in more stable firms.

### **Factors Influencing Intermediate Outcomes and Behavioral Intentions**

The current study investigated the influence of determinants on psychological contract violation, general job satisfaction, organizational commitment, and intent to stay. Consideration is also given to the interrelationships among intermediate outcomes, as well as their effect on intent to stay. Finally, personal characteristics are examined for their effect on intermediate outcomes and intent to stay.

### **Determinants, Outcomes and Intentions**

One of the research questions in this study examined the effects of determinants on intermediate outcomes and behavioral intentions. The

discussion is organized according to the relevant intermediate outcome and intent to stay.

**Psychological contract violations.** The psychological contract violation score depicted moderate to strong relationships with the total RIHCR and most subscale scores, with standards of care the only exception. The findings suggest that lower levels of psychological contract violation are significantly associated with more positive perceptions of the overall impact of reforms, the importance of reforms, the emotional climate, practice-related issues, quality of care, and safety measures.

There were no comparable studies identified from the literature on acute care managers. However, Turnley and Feldman (1998, 1999) reported that managers working in firms undergoing restructuring felt that their employers had violated promises regarding input into decision-making, training opportunities, and responsibility and power. This finding adds credence to the observed relationship between contract violations and practice-related issues (i.e., inservice opportunities, active involvement in discussions of workplace problems and possible resolutions, and control over practice) in the current study. As well, Turnley and Feldman found that managers had a high propensity for reporting employer violations of other job-related factors (i.e., job challenge and excitement, coworker and supervisor support, organizational support, and feedback). This finding reinforces the strong relationship observed between the

emotional climate (i.e., working relations and contract, and job satisfaction and challenge) and contract violations in the current study.

**Job satisfaction.** This study's findings indicated that job satisfaction has low to moderate relationships with the total RIHCR and most subscale scores. The two exceptions were safety concerns and standards of care. The findings suggest that higher levels of general job satisfaction are significantly associated with more positive ratings of the overall impact of reforms, the importance of reforms, the emotional climate of the workplace, practice-related issues, and quality of care.

There is considerable support for the strong association between greater autonomy and/or participation in decision-making and higher levels of job satisfaction in samples of acute care managers (Acorn et al., 1997; Brown et al., 1999; Cavanagh & Coffin, 1992; Poulin, 1995; Ringerman, 1990; Woodward et al., 2000). These findings reinforce, in part, the positive association observed between job satisfaction and practice-related issues in the current study.

Study findings with acute care managers also suggest that higher levels of job satisfaction are significantly associated with greater coworker support (Brown et al., 1999; Luthans & Sommer, 1999; Poulin, 1995; Woodward et al., 2000) and greater supervisory support (Luthans & Sommer; Poulin; Woodward et al.). These findings also provide partial support for the positive effects of the emotional climate on the job satisfaction of managers in the current study.

**Organizational commitment.** The current study's findings revealed moderate to strong correlations between organizational commitment and the total RIHCR and most subscale scores. The only exception was the non-significant effect of standards of care on organizational commitment. The findings suggest that managers with higher levels of organizational commitment are significantly more likely to give higher ratings to the overall positive impact of reforms, the importance of reforms, the emotional climate of the workplace, practice-related issues, quality of care, and safety measures.

There is some empirical support for the positive effects of select job-related and work environment factors on the organizational commitment of acute care managers. Acorn et al. (1997) and Ringerman (1990) reported that managers with greater autonomy and/or participation in decision-making also had higher organizational commitment levels. In addition, Lee and Henderson (1996) and Luthans and Sommer (1999) reported that managers with greater colleague support also had higher levels of organizational commitment. Finally, Luthans and Sommer also noted that managers reporting higher levels of supervisory support were also more committed to their organizations. These findings also provide partial support for the observed positive effects of practice-related issues and the emotional climate of the workplace on the organizational commitment of managers in the current study.

**Intent to stay.** This study's findings revealed moderate correlations



between intent to stay and the total RIHCR score and most of its subscales. The only exception was the non-significant effect of standards of care. The findings suggest that managers with greater intentions of remaining with current employers are significantly more likely to give higher ratings to the overall positive impact of reforms, the importance of reforms, the emotional climate of the workplace, practice-related issues, quality of care, and safety measures. No studies were identified from the literature that examined the effects of the same job-related and work environment factors on managers' behavioral intentions, as investigated in the current study.

### **Interactive Effects**

One of the research questions for this study examined the interactive effects among intermediate outcomes and their influence on behavioral intentions. Moderate to strong correlations were observed among all intermediate outcome variables, and between intermediate outcomes and behavioral intentions.

The findings suggest that lower levels of psychological contract violations are strongly associated with greater general job satisfaction, higher levels of organizational commitment, and a greater likelihood of staying with current employers. Comparable findings on the strong association between lower levels of contract violations and greater job satisfaction, as well as a greater intent to

stay, were reported by Robinson and Rousseau (1994). Turnley and Feldman (1998, 1999) also found that lower levels of contract violations were moderately associated with greater loyalty toward the organization and a lesser intent to leave.

The current study's findings indicate that higher levels of job satisfaction are strongly associated with greater organizational commitment and moderately associated with a greater intent to stay. Comparable findings on the strong, positive relationship between the job satisfaction and organizational commitment of acute care managers were reported by Acorn et al. (1997), Luthans and Sommer (1999), and Ringerman (1990). As well, study findings by Cavanagh and Coffin (1992) and Robinson and Rousseau (1994) support the positive relationship between greater job satisfaction and a greater intent to stay.

In addition, this study's findings suggest that high levels of organizational commitment are strongly associated with a greater intent to stay. No studies of acute care managers were identified that examined this relationship. However, Turnley and Feldman's (1998, 1999) reported that greater manager loyalty was significantly associated with less likelihood of quitting or engaging in job search activities.

### **Correlates, Outcomes and Intentions**

The current study also examined the effects of correlates or personal

characteristics on intermediate outcomes and behavioral intentions. The findings indicate that most of the personal characteristics selected for investigation exert variant effects on the intermediate outcomes and behavioral intentions.

In the current study, psychological contract violations were more frequently reported by female managers and those with 3 to 4 years of experience in their current positions, positioned further down the managerial organizational hierarchy, working in the St. John's region, and/or primarily responsible for clinical services. No significant effects were found for age, education level, and years of total work experience. Although Turnley and Feldman (1999) also failed to detect significant effects for age, they also did not find that gender exerted a significant effect.

The current study's findings indicate that lower levels of general job satisfaction are more frequently reported by female managers and those with 3 to 4 years of experience in their current positions, lower down the managerial organizational hierarchy, working in the St. John's region, with a professional background in nursing, and/or primarily responsible for clinical services. No significant effects for age, education level, and years of experience on job satisfaction were evident. Conflicting findings have been reported in the literature on the effects of these factors on acute care managers' job satisfaction. Similar to the current study, Ringerman (1990) reported a significant effect for gender and position tenure (i.e., greater for males and those with longer tenure),

whereas age and education were not found to affect satisfaction levels. Acorn et al. (1997) failed to find significant effects for age, gender, or education, whereas Cavanagh and Coffin (1992) found that less educated employees were more satisfied. Luthans and Sommer (1999) found that longer-tenured and older managers were more satisfied with their jobs. As well, Poulin (1995) found that administrators were significantly more satisfied with their jobs than supervisors.

Current study findings also indicate that female managers and those with 3 to 4 years in current positions, a baccalaureate level of education, further down the managerial organizational hierarchy, working in the St. John's region, with a professional background in nursing, and/or primarily responsibility for clinical services are less committed to their organizations. No significant effects were evident for years of work experience and age. A couple of studies that examined the effects of decentralization on nurse managers failed to find support for the effects of age, gender, or education on commitment levels (Acorn et al., 1997; Ringerman, 1990). However, Luthans and Sommer (1999) found that older employees were more committed. In support of the current study's findings, Ringerman (1990) found that current position tenure had a positive effect on commitment levels. While senior managers were more committed than divisional/patient care managers in the current study, Lee and Henderson (1996) found that organizational commitment did not vary by managerial level.

In the current study, male managers and those who are older, have

diploma/certificate education, work in the St. John's region, and/or have more years of work experience reported greater intentions of staying with current employers. No significant effects were evident for primary area of responsibility, current position tenure, or managerial position. Comparatively, Cavanagh and Coffin (1992) found that employees with less education were more inclined to stay with current employers.

### **Predictors of Intermediate Outcomes and Behavioral Intentions**

Another research question in this study investigated the best predictors of intermediate outcomes and behavioral intentions. The reader is reminded that the predictor findings only relate to managers responsible for clinical services. The discussion is organized according to each intermediate outcome and behavioral intentions.

### **Psychological Contract Violations**

It was conjectured that determinants (i.e., job-related and work environment factors) most affected by restructuring of the health care system would alter employee/employer relations. As well, managers working in organizations which have undergone more extensive restructuring would be expected to have higher levels of psychological contract violations than their counterparts in more stable systems. The current study's findings confirm that

perceptions of the impact of health care reforms play an important role in determining the level of contract violations among managers.

The emotional climate and safety issues emerge as significant predictors of levels of contract violations (i.e., 32.7% of the explained variance). The emotional climate of the workplace is the most significant contributor to the regression equation. This implies that managers' assessment of restructuring's negative impact on their jobs and the work environment (i.e., working relations, morale, job satisfaction and challenge, environmental supports, and level of frustration with quality of care possible) affects the status of psychological contracts. Managers' perceptions of safety in the workplace (i.e., performance, adequacy of resources, and effectiveness of discharge planning) is the only other job factor surfacing as an important predictor of contract violations. No research studies were identified that examined the predictive influence of determinants on contract violations.

As well, three correlates in the current study (i.e., region of employment or extent of restructuring, position tenure, and gender) are important predictors of contract violations. This implies that managers from regions with more extensive restructuring, managers with less current position tenure, and male managers are less likely to feel that their contracts have been violated by employers. Using ANCOVA and extent of restructuring as the covariate, Turnley and Feldman (1998, 1999) also found that organizational and supervisor support, and job

challenge and excitement were important job factors that managers believed had been violated by employers of firms with more extensive restructuring.

### **General Job Satisfaction**

It was further conjectured that determinants (i.e., job-related and work environment factors) exert a direct effect on job satisfaction, as well as an indirect effect through psychological contract violations. The causal sequencing in the CMBI presents psychological contract violations as a significant intervening variable between determinants and job satisfaction. The findings confirm that contract violation is the most important factor influencing job satisfaction, and this factor also mediates the predictive effect of determinants.

Study findings provide partial support for the effects of determinants on health care managers' satisfaction levels. The emotional climate of the workplace and the importance of reforms (i.e., understood reform importance and its positive impact potential, appreciated the challenges facing their profession, and empowered to be active participants) combine to explain a significant percentage (i.e., 10.9% ) of the variance in general job satisfaction. As with psychological contract violations, the positive effects of the emotional climate continue to dominate the regression equation. Although there is strong support for the effects of job-related and work environment factors on job satisfaction (e.g., Blegen, 1993; Irvine & Evans, 1995), there is limited empirical support on

their predictive significance for management personnel. Similar to the current study's findings, Brown et al. (1999) reported that support mechanisms (i.e., coworker support) was a significant predictor of supervisors' job satisfaction. Woodward et al. (2000) also found that increasing teamwork was a significant predictor of greater job satisfaction for supervisors.

Psychological contract violations moderate the effects of the emotional climate and the importance of reforms on job satisfaction. Lower levels of contract violations and more positive perceptions of the emotional climate and the importance of reforms combine to explain 50% of the explained variance in managers' job satisfaction. From the literature, there was only one study identified that examined the implications of contract violations for satisfaction levels. Robinson and Rousseau (1994) reported that lower levels of psychological contract violations depicted a strong association with greater job and organizational satisfaction.

As predicted, most of the correlates in this study are observed to exert a minimal impact on satisfaction levels. Only region of employment and professional background emerge as important predictors of job satisfaction for managers. This supports the premise that managers working in regions with more extensive restructuring and those with a professional background in nursing have lower levels of job satisfaction. Although no comparable studies were found in the literature, other researchers have reported either a significant



decline (Luthans & Sommer, 1999; Woodward et al., 2000) or no change (Seago, 1999) in managers' level of job satisfaction following organizational restructuring. No studies were identified that addressed the satisfaction levels of managers based on professional background.

### **Organizational Commitment**

It was conjectured that determinants (i.e., job-related and work environment factors) exert a direct effect on organizational commitment, as well as an indirect effect through job satisfaction. The causal sequencing in the CMBI presents job satisfaction as a significant intervening variable between determinants (i.e., job-related and work environment factors), psychological contract violations, and organizational commitment. The findings confirm that job satisfaction is the most important factor influencing organizational commitment, and also mediates the predictive effects of determinants and contract violations. However, contrary to expectations, contract violations had less of an effect on commitment than determinants.

Study findings provide partial support for the effects of determinants on managers' organizational commitment. Initially, the emotional climate of the workplace and the importance of reforms (i.e., understood reform importance and its positive impact potential, appreciated the challenges facing their profession, and empowered to be active participants) combine to explain a significant

percentage (i.e., 40.4%) of the variance in organizational commitment. As predicted, when perceived contract violations is entered into the regression equation, it moderates the effects of the emotional climate and the importance of reforms.

When job satisfaction is added to the model, it emerges as the best predictor and mediates the effect of importance of reforms and contract violations, and overrides emotional climate. The total explained variance by the determinates is now reduced to 5.1%. As the major predictors in the regression model, higher levels of job satisfaction, more positive perceptions of the importance of reforms, and lower levels of psychological contract violations, combine to explain 72.3% of the explained variance in managers' level of organizational commitment. Only one correlate, less time in current position, entered the regression equation.

Studies examining the influence of restructuring and job satisfaction on managers' levels of commitment have reported similar and contrasting findings to the current study. While Acorn et al. (1997) found that job satisfaction was the most important determinant of commitment, Ringerman (1990) reported that autonomous work was the most important determinant followed by job satisfaction. Furthermore, similar to the current study, Ringerman failed to find a significant effect for decentralization. In contrast, Acorn et al. found that decentralization had a direct effect on organizational commitment and an indirect

effect through job satisfaction.

There were no prior studies identified that examined the predictive effects of importance of reforms or current position tenure on managers' levels of commitment. However, Turnley and Feldman (1998, 1999) found that psychological contract violation was a significant predictor of organizational commitment.

### **Intent to Stay**

It was conjectured that determinants (i.e., job-related and work environment factors) exert a direct effect on intent to stay, as well as an indirect effect through organizational commitment. The causal sequencing in the CMBI presents intent to stay as an outcome variable between determinants and intermediate outcomes or covariates. The findings confirm that organizational commitment is the most important factor influencing intent to stay, and moderates or overrides the predictive effects of other variables.

The study's findings provide partial support for the effects of determinants on acute care managers' intentions to stay. Initially, the emotional climate of the workplace (i.e., working relations, morale, job satisfaction and challenge, environmental supports, and level of frustration with quality of care possible) emerges as the most significant predictor of the regression equation. Consistent with the projections of the CMBI, psychological contract violations override the

effects of the emotional climate, and commitment moderates or overrides the effects of psychological contract violations and job satisfaction, respectively. Contrary to model projections, job satisfaction does not moderate the effects of contract violations. As the dominant predictors in the regression model, lower levels of organizational commitment and higher levels of contract violations combine to explain 44% of the explained variance in acute care managers' intent to stay.

From the literature, only one study was identified examining the intent to stay of hospital employees. Cavanagh and Coffin (1992) found job satisfaction to be a significant predictor of intent to stay. However, these authors did not examine the effects of commitment levels on intent. As well, Turnley and Feldman (1999) and Robinson and Rousseau (1994) found that psychological contract violation was an important predictor of intent to quit. However, these authors did not examine the interactive effects of contract violation, job satisfaction, and organizational commitment on intent to quit.

### **Implications of Findings for the CMBI**

Data from the current study provide moderate support for the major premises of the CMBI. Study results indicate that managers' behavioral intentions are the result of a complex interaction among personal characteristics and job/work variables, as well as attitudinal variables (i.e., psychological

contract violation, general job satisfaction, and organizational commitment). The findings also highlight the importance of organizational commitment as the most important determinant of intentions, as postulated by several authors (Mobley, Griffeth, Hand, & Meglino, 1979; Mueller and Price, 1990; Parasuraman, 1989; Price and Mueller, 1981, 1986).

It was conjectured that perceptions of the job and work environment (i.e., importance of health care reform, quality of care concerns, safety issues, practice-related issues, emotional climate, and standards of care) would have a stronger effect on work-related attitudes than intent to stay. Study findings support this assumption. Contrary to model assumptions, most job/work variables do not affect attitudinal variables or intentions. The emotional climate of the workplace is a consistent predictor of all attitudes, as well as intentions. While two other factors were found to affect attitudes - importance of reforms (i.e., job satisfaction and organizational commitment) and safety concerns (i.e., contract violation), none affect intentions. The low explanatory power of the determinants selected for investigation warrants further consideration.

It was also conjectured that attitude variables would exert a separate and interactive effect on each other, as well as intentions. The findings support this assumption. Each successive attitude (i.e., contract violation, job satisfaction, and organizational commitment) exerts a greater effect on the one that immediately follows it, while buffering the effect of the one preceding it.

Study findings provide minimal support for the CMBI assumption that personal characteristics are significant predictors of attitudes and intentions. Region of employment (i.e., extent of restructuring) has a direct effect on contract violation and job satisfaction. As well, position tenure has a direct effect on contract violations and commitment. Professional background exerts a direct effect on job satisfaction. Finally, gender is found to directly affect contract violation. The minimal effect of personal characteristics on attitudes and intentions supports the assertions of Price and Mueller (1981, 1986), Mueller and Price (1990), and Turnley and Feldman (1998, 1999).

### **Summary**

The primary purpose of this study was to investigate managers' perceptions of the impact of health care reforms and work-related variables following restructuring of acute care services under three regional boards. A second purpose was to identify the best predictors of intermediate outcomes and behavioral intentions. The study findings provide partial support for CMBI, which provided the conceptual framework for the study. As predicted, the determinants (i.e., perceptions of reform impact) were found to exert the greatest influence on contract violations, with diminishing effects on each successive attitude. Study findings also provide partial support for the influence of covariates on each other (i.e., psychological contract violations on job satisfaction and organizational

commitment; and job satisfaction on commitment) and behavioral intentions (i.e., psychological contract violations and organizational commitment on intent to stay). Personal characteristics or correlates were found to exert a minimal effect on most intermediate outcomes.

## CHAPTER 6

### Limitations and Implications

This chapter discusses the limitations of the study, and presents implications for administration, education, and research.

#### Limitations

The non-probability sample used in this study limits the generalizability of the findings, and caution should be used when interpreting these findings to other acute care managers. Additionally, these findings are first measures of a cross-sectional portion of a longitudinal study. Thus, the findings may not provide the most accurate representation of accelerated change. As well, the use of self-report scales and the uncontrolled environment in which the EAS was completed may have reduced the reliability of the data. More reliable data may have been obtained if the EAS was completed under controlled conditions.

Several other limitations of this study warrant consideration. First, this was the first time perceptions of the impact of health care reforms were used in a regression model. Therefore, gleaned information from the literature about which determinants were more or less important, was not possible. Second, while the internal consistency of the General Job Satisfaction scale was high, it may have been more meaningful to measure more specific aspects of job satisfaction that were noted in the research literature, and measured by the



McCloskey/Mueller Satisfaction scale (e.g., autonomy, pay, interaction, etc.).

Third, while most of the personal characteristics had minimal effects on intermediate outcomes and behavioral intentions, consideration of other key personal factors (i.e., organizational tenure, recent turnover experience, and promotion within the last two years) could have provided more useful data for regression analysis.

### **Implications**

The current study's findings have important implications for administration, education, and research. Many of the downsizing and reengineering initiatives in the province targeted management personnel (i.e., 40% to 50% reductions were reported by the CEOs of the three study sites). This pervasive reduction in management positions resulted in significant alterations in roles and responsibilities (e.g., managing programs and the delivery of services through a multidisciplinary team structure across sites, etc.). Such changes in workplace conditions and job requirements also had repercussions for the learning needs of all managers in both the short- and long-term. Finally, there are a limited number of research projects conducted with managers that are capable of providing decision-makers with useful data on the impact of system changes.

The managers surveyed in the current study represented all levels of the organizational hierarchy and had diverse professional backgrounds. Slightly less

than one-half of the managers responding to the survey were responsible for clinical services, with 58.7% of those having nursing backgrounds. Although the implications of study findings are centered on acute care nurse managers, for the most part, several have equal applicability for all health care managers. The implications for administration, education, and research are discussed separately in the relevant sections.

### **Administration**

Implications for health care administration will be discussed in terms of the perceived impact of health care reforms, and the observed relationships among personal characteristics, perceived impact, work-related attitudes, and behavioral intentions. The accessible population was restricted to managers working at study sites which had differing levels of system restructuring, but similar proportional reductions in management positions. Given the good response rate from all sites and the commonalities among regions outside of St. John's in terms of the extent of restructuring, the accessible population is probably representative of the target population locally (i.e., acute care managers).

Regardless of the extent of restructuring, the emotional climate of the workplace was perceived as the most negative area of reform impact by managers in all regions who were responsible for clinical services and had diverse professional backgrounds. The study's findings also indicated that those

managers were more likely to experience less job satisfaction and to be less committed to their organizations. The literature consistently identifies the importance of supportive environments and positive working relationships with supervisors and colleagues as being critical to successful organizational change. It is therefore important that health care organizations adopt a proactive approach which cultivates and maintains supportive environments and positive working relations. Employing the assistance of the "experts" (i.e., managers who have experienced system changes and have achieved a high level of success) to share lessons learned would be a feasible proactive approach. Administrative policies and practices should also reflect other important strategies directed towards facilitating change and building positive work environments (e.g., orientation programs for new managers that include role models for learning important skills; ensuring managers are part of the decision-making processes and actively involved in the development of new job descriptions; developing and implementing a sound communication plan to ensure that accurate and timely information is conveyed to all staff; implementing strategies that promote a greater sense of teamwork and cohesiveness; etc.). The workplace environment should be an agenda item for all of the meetings of the health care boards. It is imperative that the workplace environment is given high priority, at all levels of administration, in order to facilitate improvements.

Another area of particular concern was the low ratings given to quality of

care by a significant number of managers responsible for clinical services. Consideration should be given to the workload of nurse managers; in particular, greater emphasis should be placed on evaluating their span of control. The objective should be to streamline functions so that tasks and duties requiring minimal management judgement are eliminated or reduced. This approach, coupled with enhancing managers' managerial skills (e.g., measuring and managing outcomes, problem-solving, stress and time management, computer skills, etc.) through workshops and inservice, would provide managers with more time to monitor the quality and standards of client care.

The findings also indicated that each intervening attitude directly influences subsequent attitudinal states (i.e., contract violation to job satisfaction to organizational commitment). It is therefore important that special attention be given to addressing nurse managers' perceptions of violations of psychological contracts, especially during times of organizational change. Incongruence in employee and employer perceptions of obligations and expectations can be minimized through the implementation of regular performance reviews, involving managers in the decision-making process, and by honest, timely, and frequent communication regarding the rationale for change.

### **Education**

The massive changes occurring in the health care system reinforce, more

than ever, the importance of maintaining and developing the necessary competencies required for managers to assume the role of effective leaders and change agents. Without the necessary education, nurse managers will have difficulty adapting to, as well as coping with, turbulent work environments. The changing roles, expanded responsibilities, and numerous competencies required of nurse managers reinforce the need for advanced educational preparation. Educators in graduate nursing programs need to develop curriculum content in nursing administration, which includes change theory, financial management, team-building processes, human resource management, continuous quality improvement, organizational redesign, and stress management.

The literature clearly identified that management personnel require structural supports (i.e., preparation to help them make new-role transitions and to facilitate change prior to organizational restructuring, as well as support during the actual change process). The development and implementation of continuing educational strategies for nurse managers, that target new competencies (e.g., budget processes and change management strategies, etc.) would be one necessary structural support. Administrators or designates of acute care institutions should collaborate with relevant disciplines in university settings (e.g., Business Administration, Health Care Administration facilities, etc.) to develop continuing education programs aimed at developing/enhancing the new core competencies required by nurse managers. This strategy would require

continuous monitoring, and a high degree of flexibility to address individual needs. The new capabilities learned from professional development opportunities need to be reinforced and supported by the refinement and communication of organizational policies, and through the supportive actions of senior management.

The literature indicated that nurse managers who possess the necessary knowledge and competencies for successful organizational change (e.g., supportive management style, stress management, patient care delivery models, and measuring and managing outcomes, etc.) will shape the way nursing care is delivered. Extra attention must be given to supporting younger, less experienced managers, especially working in environments subject to more extensive restructuring. One important strategy would be the development and implementation of orientation programs for new managers that include role models for learning important skills. Such an approach, coupled with continuing education opportunities for enhancing the new core competencies required by nurse managers, would facilitate confidence and promote greater organizational commitment.

### **Research**

The study's findings highlight several avenues for future research. The observed variability in how managers at different organizational levels perceived

the impact of reforms, work-related attitudes, and behavioral intentions (i.e., more positive perceptions from managers positioned further up the organizational hierarchy) suggest that managers are not a homogenous group. It would probably be insightful to conduct qualitative inquiries with managers at various levels to identify possible factors responsible for these differences.

There is very limited research on management personnel in general, and in particular, acute care managers. Further research with this group is required, particularly of a longitudinal nature, to examine changes in work-related attitudes prospectively which would allow for more powerful testing of causal hypotheses. The current study's findings indicated that managers' work-related attitudes and behavioral intentions were negatively influenced by the impact of health care reforms. However, it still remains unclear which job-related and work environment factors are most responsible for relatively moderate levels of psychological contract violations, and the low levels of job satisfaction, organization commitment, and intent to stay. Additional studies of the experimental type are needed to identify intervention strategies that are capable of increasing managers' satisfaction, organizational commitment, and intentions of remaining with current employers.

Furthermore, it would be meaningful to examine the interactive effects among reform impact variables, intervening attitudes, behavioral intentions, and other important outcomes (e.g., turnover, productivity, health status, etc.). Some

studies have demonstrated that system changes may have negative emotional consequences for managers (e.g., uncertainty, stress, anxiety, etc.). Additional research studies should be conducted to investigate both the mental and physical health outcomes of acute care managers during and following restructuring initiatives. This type of data is critical to the development and implementation of proactive health promotion strategies (e.g., stress reduction programs, etc.).

In conclusion, a better understanding of the factors influencing managers' work-related attitudes and behavioral intentions, particularly when the health care area is undergoing change, is important if organizations are to retain managers who are satisfied and committed. Although intent to leave is an important variable, future research should be broadened to investigate turnover as an outcome. Additional research is necessary to address the following question - What impact do managers' work-related attitudes and behavioral intentions have on front-line staff and patient outcomes?

### **Summary**

The results of this study indicate that managers are more positive than negative regarding the impact of health care reforms. Specifically, managers are most positive about the importance of reforms, safety concerns, and practice-related issues, respectively, following wide-scale restructuring of the health care



system. Managers are also slightly satisfied with their jobs and slightly committed to their organizations, divided on whether or not organizations have violated psychological contracts, and unsure if they will remain with their current employers. Factors influencing managers' work-related attitudes and behavioral intentions are multiple and complex, with the extent of restructuring playing an important role. Although the study findings are not generalizable, they do provide comparison data for future research and can be used to guide administration direction, education, and research.

## References

- Acorn, S., & Crawford, M. (1996). First-line managers: Scope of responsibility in a time of fiscal restraint. *Healthcare Management Forum* 9 (2), 26-30.
- Acorn, S., Ratner, P.A., & Crawford, M. (1997). Decentralization as a determinant of autonomy, job satisfaction, and organizational commitment among nurse managers. *Nursing Research*, 46 (1), 52-58.
- Aiken, L. H., Clarke, S. P., & Sloane, D. M. (2000). Hospital restructuring: Does it adversely affect care and outcomes? *Journal of Nursing Administration*, 30 (10), 457-465.
- Alexander, J. A., Lichtenstein, R., Oh, H. J., & Ullman, E. (1998). A casual model of voluntary turnover among nursing personnel in long-term psychiatric settings. *Research in Nursing & Health*, 21, 415-427.
- Anderson, G. M. (1997). Hospital restructuring and the epidemiology of hospitalization: Recent experience in Ontario. *Medical Care*, 35 (10), S93-S101.
- Brayfield, A., & Rothe, H. F. (1951). An index of job satisfaction. *Journal of Applied Psychology*, 35, 305-311.
- Baumann, A., O'Brien-Pallas, L., Deber, R., Donner, G., Semogas, D., & Silverman, B. (1996). Downsizing in the hospital system: a restructuring process. *Forum*, 9 (4), 5-13.
- Baumgart, A. (1997). Hospital reform and nursing labor market trends in Canada. *Medical Care (Supplement)*, 35 (10), OS124-OS131.
- Blegen, M. A. (1993). Nurses' job satisfaction: A meta-analysis of related variables. *Nursing Research*, 42 (1), 36-41.
- Brown, J. A., Woodward, C. A., Shannon, H. S., Cunningham, B. L., Lendrum, E., McIntosh, J., & Rosenbloom, D. (1999). Determinants of job stress and job satisfaction among supervisory and non-supervisory employees of a large Canadian teaching hospital. *Healthcare Forum*, 12 (1), 27-33.
- Butt, G., & Downing, G. (2001). *Overview of Restructuring Initiatives for the Avalon Board*. Unpublished interview transcript. St. John's, NF: Patient Research Centre.

Canadian Institute for Health Information (2000). *Registered nurses database. Supply and distribution of registered nurses in Canada, 1999*. Ottawa; Canadian Institute for Health Information.

Cavanagh, S. J., & Coffin, D. A. (1992). Staff turnover among hospital nurses. *Journal of Advanced Nursing*, 17, 1369-1376.

Chase, L. (1994). Nurse manager competencies. *Journal of Nursing Administration*, 24 (48), 56-64.

Clinical and Clinical Support Program Implementation. (1996). Health Care Corporation of St. John's: Author.

Corser, W. D. (1998). The changing nature of organizational commitment in the acute care environment: Implications for nursing leadership. *Journal of Nursing Administration*, 28 (6), 32-36.

Cumbey, D. A., & Alexander, J. W. (1998). The relationship of job satisfaction with organizational variables in Public Health Nursing. *Journal of Nursing Administration*, 28 (5), 39-46.

Curry, J., Wakefield, D., Price, J., Mueller, C., & McCloskey, J. (1985). Determinants of turnover among nursing department employees. *Research in Nursing and Health*, 8, 397-411.

Davis, E. M. (1998/1999). Change, reform, positives, negatives and getting ready - Elizabeth Davis on healthcare reform in Newfoundland and Labrador. *Hospital Quarterly*, 51, 51-54.

Davis, E. M., & Tilley, G. (1996). The Health Care Corporation of St. John's, Newfoundland: Governance and management issues. In P. Leatt, L. Lemieux-Charles, C. Aird, & S. Leggat (Eds.), *Strategic alliances in health care* (pp. 171-181). Ottawa, Canada: Canadian College of Health Services Executives.

Decter, M. B. (1997). Canadian hospitals in transformation. *Medical Care*, 35 (10), OS70-OS75.

Dobbin, L.C. (1993, February). *Report on the reduction of hospital boards*. St. John's, Newfoundland.

Effken, J. A., & Stetler, C. B. (1997). Impact of organizational redesign. *Journal of Nursing Administration*, 27 (7/8), 23-32.

Gelinas, L. S., & Manthey, M. (1997). The impact of organizational redesign on nurse executive leadership. *Journal of Nursing Administration*, 27 (10), 35-42.

Hage, J., Aiken, M. (1967). Relationship of centralization to other structural properties. *Administrative Science Quarterly*, 126 (6), 72-91.

Hansen, H. E. (1995). The advanced practice nurse as a change agent. In M. Synder & M. P. Mirr (Eds.), *Advanced practice nursing: A guide to professional development* (pp. 197-213). U.S.A.: Springer Publishing Co.

Hospitals Act. (1971). *Hospitals Act: An Act to provide for the management and operation of hospitals in the province*. Newfoundland: Queens Printer.

Ingersoll, G. L., Cook, J., Fogel, S., Applegate, M., & Frank, B. (1999). The effects of patient-focused redesign on responsibilities and work environment. *Journal of Nursing Administration*, 29 (5), 21-27.

Irvine, D. M., & Evans, M. G. (1995). Job satisfaction and turnover among nurses: Integrating research findings across studies. *Nursing Research*, 44 (4), 246-253.

Jackson, R. (1995). The heartbeat of reform. *The Canadian Nurse*, 91 (3), 23-27.

Keats, D., & Diamond, D. (2001). *Overview of Restructuring Initiatives for the Central West Board*. Unpublished interview transcript. St. John's, NF: Patient Research Centre.

Knox, S., & Irving, J. (1997). Nurse manager perceptions of healthcare executive behaviors during organizational change. *Journal of Nursing Administration*, 27 (11), 33-49.

Leatt, P., Baker, G. R., Halverson, P. K., & Aird, C. (1997). Downsizing, reengineering, and restructuring: Long-term implications for healthcare organizations. *Frontiers of Health Management*, 13 (4), 3-37.

Lee, V., & Henderson, M. C. (1996). Occupational stress and organizational commitment in nurse administrators. *Journal of Nursing Administration*, 26 (5), 21-28.

Lemieux-Charles, L., Aird, C., & Barnsley, J. (1994). Careers in health care management, Part 2: Experiences, attitudes and definitions of success. *Healthcare Management Forum*, 7 (4), 36-43.

Lemieux-Charles, L., Murray, M., Aird, C., & Barnsley, J. (1994). Careers in health care management, Part 1: Attainment, expectations and aspirations. *Healthcare Management Forum*, 7 (2), 38-45.

Lomas, J., Woods, J., & Veenstra, G. (1997). Devolving authority for health care in Canada's provinces: 1. An introduction to the issues. *Canadian Medical Association*, 156 (3), 371-377.

Lucas, M. D., Atwood, J. R., & Hagaman, R. (1993). Replication and validation of anticipated turnover model for urban registered nurses. *Nursing Research*, 41 (1), 29-35.

Luthans, B. C., & Sommer, S. M. (1999). The impact of downsizing on workplace attitudes. *Group and Organization Management*, 24 (1), 46-60.

Markham, B., & Lomas, J. (1995). Review of the multi-hospital arrangements literature: Benefits, disadvantages and lessons for implementation. *Healthcare Management Forum*, 5 (3), 24-35.

Mathieu, J. E., & Zajac, D. M., (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin*, 108 (2), 171-194.

McConnell, E. A. (1998). How to thrive in merger mania. *AORN Journal*, 67 (2), 412-419.

McGillis Hall, L., & Donner, G. J. (1997, May/June). The changing role of hospital nurse managers: A literature review. *Canadian Journal of Nursing Administration*, 14-38.

McGirr, M., & Bakker, D. A. (2000). Shaping positive work environments for nurses: The contributions of nurses at various organizational levels. *Canadian Journal Nursing Leadership*, 13 (1), 7-13.

McKee, M., Aiken, L., Rafferty, A., & Sochalski, J. (1998). Organisational change and quality of health care: An evolving international agenda. *Quality in Health Care*, 7, 37-41.

McNeese-Smith, D. (1997). The influence of manager behaviour on nurses' job satisfaction, productivity, and commitment. *Journal of Nursing Administration*, 27 (9), 47-55.

Meyer, J. P., & Allen, N. J. (1997). A three-component conceptualization of organizational commitment. *Human Resources Management Review*, 1 (1), 61-89.

Mobley, W. H. (1982). *Employee turnover: Causes, consequences, and control*. Reading, MA: Addison-Wesley.

Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, 36 (5), 493-522.

Morris, K., Stuart, N., Monaghan, B., & Alton, D. (1994). An evaluation of program management: The West Park Hospital experience. *Healthcare Management Forum*, 7 (2), 29-37.

Morrison, E. W., & Robinson, S. L. (1997). When employees feel betrayed: A model how psychological contract violation develops. *The Academy Management Review*, 226- 256.

Mowday, R. T., Porter, L., & Steers, R. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.

Mowday, R. T., Steers, R. M., Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior*, 14 (2), 224-247.

Moyle, P. (1998). Longitudinal influences of managerial support on employee well-being. *Work & Stress*, 12 (1), 29-49.

Mueller, C., & Price, J. (1990). Economic, psychological, and sociological determinants of voluntary turnover. *The Journal of Behavioural Economics*, 19 (3), 321-325.

Nunnally, J. C. (1978). *Psychometric Theory* (2<sup>nd</sup> ed.). New York: McGraw-Hill Book Company.

Parasuraman, S. (1989). Nursing turnover: An integrated model. *Research Nursing and Health*, 12, 267-277.

Polit, D., Hungler, B. (2000). *Nursing research: Principle and methods* (6<sup>th</sup> ed.). Philadelphia: J. B. Lippincott.

Poulin (1995). Job satisfaction of social work supervisors and administrators. *Administration in Social Work*, 19 (4), 35-49.

Prescott, P. A. (1993). Nursing: An important component of hospital survival under a reformed health care system. *Nursing Economics*, 11 (4), 192-199.

Price, J., & Mueller, C. (1981). A casual model of turnover for nurses. *Academy of Management Journal*, 24 (3), 543-565.

Price, J., & Mueller, C. (1986). *Absenteeism and turnover of hospital employees*. Greenwich, Connecticut: Jai Press Inc.

Pyne, D. (1998). *Nurses' perceptions of the impact of health care reform and job satisfaction*. Unpublished master's thesis, Memorial University of Newfoundland, St. John's, NF: Canada.

Redman, R. W., & Jones, K. R. (1998). Effects of implementing patient-centered care model on nurse and non-nurse managers. *Journal of Nursing Administration*, 28 (11), 46-53.

Ringerman, E. S. (1990). Characteristics associated with decentralization experienced by nurse managers. *Western Journal of Nursing Research*, 12, 336-346.

Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligation and the psychological contract: A longitudinal study. *Academy of Management Journal*, 37 (1), 137-152.

Robinson, S. L., & Rousseau, D. M. (1994). Violating the psychological contract: Not the exception but the norm. *Journal of Organizational Behavior*, 14, 245-259.

Rousseau, D. M. (1990). New hire perceptions of their own and their employer's obligations: A study of psychological contracts. *Journal of Organizational Behavior*, 11, 389-400.

Seago, J. A. (1999). Evaluation of a hospital work redesign. *Journal of Nursing Administration*, 29 (11), 31-38.

Shamian, J., & Lightstone, E. L. (1997). Hospital restructuring initiatives in Canada. *Medical Care*, 35 (10), OS62-OS69.

Sochalski, J., Aiken, L. H., & Fagin, C. M. (1997). Hospital restructuring in the United States, Canada, and Western Europe. *Medical Care*, 35 (10), OS13-OS25.

Statistics Canada (1995). *Registered Nurses Management Data 1995*. Ottawa: Health Statistics Division, Health Canada.

Statistics Canada (1996). *Registered Nurses Management Data 1996*. Ottawa: Health Statistics Division, Health Canada.

Statistics Canada (1997). *Registered Nurses Management Data 1997*. Ottawa: Health Statistics Division, Health Canada.

Statistics Canada (1998). *Registered Nurses Management Data 1998*. Ottawa: Health Statistics Division, Health Canada.

Stengrevics, S. S., Kirby, K. K., Ollis, E. R. (1991). Nurse manager job satisfaction: The Massachusetts Perspective. *Nursing Management*, 22 (4), 60-64.

Turnley, W. H., & Feldman, D. C. (1998). Psychological contract violations during corporate restructuring. *Human Resource Management*, 37 (1), 71-83.

Turnley, W. H., & Feldman, D. C. (1999). The impact of psychological contract violations on exit, voice, loyalty, and neglect. *Human Relations*, 52 (7), 895-922.

Vail, S. (1995). The move to regionalization. *The Canadian Nurse*, 91 (9), 59-60.



Way, C. (1994). *Report on the analysis of responses to the ARNN special survey: Health system changes*. St. John's, NF: The ARNN.

Way, C. (1995). *Nurses' perception of health care reforms and their impact on the quality of health care and nursing practice*. St. John's, NF: The ARNN.

Way, C. (1999). *Revised Impact of Health Care Reform Scale*. St. John's: Memorial University of Newfoundland, Faculty of Medicine.

Weisman, C. S., Alexander, C. S., & Chase, G. A. (1981). Determinants of hospital staff nurse turnover. *Medical Care*, XIX (4), 431-443.

Wells, G. T. (1990). Influence of organizational structure on nurse manager job satisfaction. *Nursing Administration Quarterly*, 14 (4), 1-8.

Woodward, C. A., Shannon, H. S., Lendrum, B., Brown, J., McIntosh, J., & Cunningham, C. (2000). Predictors of job stress and satisfaction among hospital workers during: Differences by extent of supervisory responsibilities. *Healthcare Management Forum*, 13 (1), 29-35.

**Appendix A****Letters of Support from Participating Boards**

10 March 1999

Dr. Patrick Parfrey  
Patient Research Unit  
c/o Health Sciences Centre site

Dear Dr. Parfrey:

This letter endorses your application to the Canadian Health Services Research Foundation for support for your research project entitled *"The Impact of Restructuring in Acute Care Hospitals in Newfoundland and Labrador"*.

As a regional health institutions board created in April 1995, we have merged eight organizations, introduced a program-based organizational structure and begun the process of closing several facilities including an adult acute care hospital by Spring 2000. The merger was instituted by Government to improve efficiency, and our organization implemented the other processes in order to change the infrastructure to enable improved quality of care. All three major changes, coming in a short period of time, have had an impact on each physician and staff member in our organization.

Regretably, neither time nor circumstances had allowed appropriate research prior to the implementation. The research initiatives since April 1995 have not been linked to give us enough information to evaluate the effectiveness of the three changes, nor have we been able to create an appropriate baseline of data to enable us to monitor the effectiveness of the changes on an ongoing basis. We are aware that there are no comprehensive evaluations from other provinces to assist us in our efforts. We are also aware that some provincial governments, for a number of reasons, are considering making further changes to the regional structures again without the appropriate research having been developed.

Your research proposal is therefore both significant and timely. It brings together the research studies to date and builds on them to help us acquire the information we need in order to continue to develop our governance, management and program delivery structures. Without such evidence, we will continue to make major changes either intuitively or based on the most powerful voice at the moment. Neither of the two latter approaches is justified when the changes are affecting both quality of patient care and quality of worklife for staff and physicians.

**Corporate Office**

Waterford Bridge Road, St. John's, Newfoundland, Canada A1E 4J8 Tel. (709)758-1300 Fax (709)758-1302 or 758-1303

St. John's Health Centre • St. John's Rehabilitation Centre • Lunenburg & Miller Centre

We strongly endorse your research study by providing the data you require, by providing some financial and human resources to support the work, and by agreeing to share the outcomes of the study. Most importantly, we are committed to endorsing your research by using the results to strengthen our response to the health care needs of the people of our region and province.

We wish you well in your efforts to acquire the needed funding to support the research project.

Yours sincerely,

A handwritten signature in dark ink, reading "Elizabeth M. Davis". The signature is written in a cursive style with a large initial 'E'.

Elizabeth M. Davis, RSM  
Chief Executive Officer

EMD/bip



29 November 1999 182

Dr. Patrick Parfrey  
Patient Research Centre  
Health Sciences Centre  
Memorial University  
St. John's, NF  
A1B 3V6

Dear Dr. Parfrey:

The Avalon Health Care Institutions Board is happy to collaborate with you on the project "The Impact of Restructuring in Acute Care Hospitals in Newfoundland". We will provide information on:

- 1) Changes in care delivery that have occurred at Carbonear General Hospital since 1995
- 2) Costs since 1995
- 3) Human Resource Indicators since 1995
- 4) Utilization since 1995
- 5) We have already provided data on Efficiency in 1995 and 1999

We will facilitate your project(s) requiring chart audit, measurement of patient satisfaction, and measuring perceptions of Board members.

Sincerely,

A handwritten signature in black ink, appearing to read "George Butt".

George BUTT  
Chief Executive Officer

adm (c:\11\MedParfrey.Sty)

cc: Mr. D. Button  
Mr. G. Legge  
Mrs. D. Whalen  
AHCIB Trustees

# CENTRAL WEST HEALTH BOARD

183

Union Street • Grand Falls-Windsor, Newfoundland, A2A 2E1 • Tel: 709-292-2500 • Fax: 709-292-2249

December 1, 1999

**FAXED**

Dr. Patrick Parfrey  
Patient Research Centre  
Health Sciences Centre  
St. John's, NF A1B 3V6

Dear Dr. Parfrey:

The Central West Health Corporation is happy to collaborate with you on the project *"The Impact of Restructuring in Acute Care Hospitals in Newfoundland"*. We will provide information on:

- changes in health care delivery that have occurred in Central Newfoundland Regional Health Center since 1995
- costs since 1995
- human resource indicators since 1995
- utilization since 1995
- we have already provided data on efficiency in 1995 and 1999

We will facilitate your projects requiring chart audit, measurement of patient satisfaction and measuring perceptions of Board members.

Yours sincerely,

*Don Keats*

Don Keats  
Regional CEO

DK/lb

#### AGING FACILITIES:

Guy Memorial  
n Centre

Verte Peninsula  
n Centre

Elite House Senior  
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al Newfoundland  
nal Health Center

Bay Community  
n Centre

ugh Twomey  
n Care Centre

our Breton  
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Haven Manor  
n Citizens' Home

v Vista Senior  
ns' Home

#### NAL CLINICS AT...

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**Appendix B****Approval from Human Investigation Committee**



# Memorial

University of Newfoundland

Human Investigation Committee  
Research and Graduate Studies  
Faculty of Medicine  
The Health Sciences Centre

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1999 07 20

Reference #99.73

Dr. P. Parfrey  
C/o Ms. D. Gregory  
Patient Research Centre

Dear Dr. Parfrey:

At a meeting held on July 15, 1999, the Human Investigation Committee reviewed your application entitled "The Impact of Restructuring on Acute Care Hospitals in Newfoundland and Labrador" and granted approval of the application as submitted.

I wish you success with your study.

Sincerely,

H.B. Younghusband, PhD  
Chairman  
Human Investigation Committee

HBV:jlc

C Dr. K.M.W. Keough, Vice-President (Research)  
Dr. R. Williams, Vice-President, Medical Affairs, HCC







July 27, 1999

TO: Dr. Patrick Parfrey

FROM: Dr. Verna M. Skanes, Assistant Dean  
Research & Graduate Studies (Medicine)

SUBJECT: Application to the Human Investigation Committee - #99.73

////////////////////////////////////  
The Human Investigation Committee of the Faculty of Medicine has reviewed your proposal for the study entitled "The Impact of Restructuring on Acute Care Hospitals in Newfoundland & Labrador".

Full approval has been granted for one year, from point of view of ethics as defined in the terms of reference of this Faculty Committee. For a hospital-based study, it is your responsibility to seek necessary approval from the Health Care Corporation of St. John's.

Notwithstanding the approval of the HIC, the primary responsibility for the ethical conduct of the investigation remains with you.

Verna M. Skanes, PhD  
Assistant Dean

cc: Dr. K.M.W. Keough, Vice-President (Research)  
Dr. R. Williams, Vice-President, Medical Services, HCC



SUPPORT



August 30, 1999

Dr. P. Parfrey  
c/o General Hospital Site

Dear Dr. Parfrev:

Your research proposal *HIC 99.73 - The Impact of Restructuring on Acute Care Hospitals in Newfoundland And Labrador* has been considered by the Research Proposals Approval Committee (RPAC) of the Health Care Corporation of St. John's at its meeting on August 5, 1999.

The committee has approved your proposal to be conducted at the General, Grace, Janeway and St. Clare's sites within the Health Care Corporation of St. John's. This approval is contingent on the appropriate funding being provided and continued throughout the project and on the provision of regular progress reports at least annually to the RPAC Committee.

Yours sincerely,

Robert Williams, MD, MPH  
Vice President  
Medical Services

mh  
c Patient Research Centre

## General Hospital

300 Prince Philip Drive, St. John's, Newfoundland, Canada A1B 3V6 Tel: (709) 737-6300 Fax: (709) 737-6400

[illegible]

**Appendix C****Survey Cover Letter: Management Group**

***Your Input is Valuable!***

You have been selected to receive a questionnaire on health care reforms in general. Since the mid-1990s, a number of significant changes have occurred within the health care system as a result of downsizing and restructuring initiatives. We are extremely interested in your personal experiences with and opinions of your experiences as a member of the management team during this time. It is important that you answer all the questions yourself and that the questionnaire is not shared with your colleagues.

The Clinical Epidemiology Unit/Patient Research Centre, located in the Health Sciences Centre, is looking for feedback on health care reforms. In association with other stakeholders (i.e., professional associations, unions, Department of Health and Community Services, federal research bodies, Avalon Health Care Institutions Board, Health Care Corporation of St. John's, Central West Health Board), you have been selected to receive a questionnaire on health care reforms.

All identifying information has been retained by your organization to ensure confidentiality of responses.

We hope that you will take this opportunity to express your views. Your input is needed. If we get the desired response rate, the information will be presented to all interested parties.

Enclosed is an envelope (postage pre-paid) for you to return the questionnaire. Thank you for taking the time to help us with this project.

**The deadline reply date is July 14, 2000.**

Enclosure

**Appendix D****Reminder Letters: Management Group**

**MEMORANDUM**

**TO:**           **Managers**

**FROM:**       **Clinical Epidemiology Unit/Patient Research Centre**

**DATE:**       **April 13, 2000**

**SUBJECT:**   **Questionnaire, Perceptions of Health Care Reforms**

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In April, the Clinical Epidemiology Unit/Patient Research Centre sent you a questionnaire on your perceptions of health care and health care reforms.

This is a request that you complete the questionnaire and return it to us as your input would be greatly appreciated. Thank you, if you have already sent your response. Please call 737-6209/5035 if you need another questionnaire and we will send it to you immediately.

Thank you in advance for your response.

Your input by May 5, 2000 would be appreciated.

**MEMORANDUM**

**TO:**           **Managers**  
**FROM:**       **Clinical Epidemiology Unit/Patient Research Centre**  
**DATE:**       **June 8, 2000**  
**SUBJECT:**   **Questionnaire, Perceptions of Health Care Reforms**

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In May, the Clinical Epidemiology Unit/Patient Research Centre sent you a questionnaire on your perceptions of health care and health care reforms.

This is a request that you complete the questionnaire and return it to us as your input would be greatly appreciated. Thank you, if you have already sent your response. Please call 737-6209/5035 if you need another questionnaire and we will send it to you immediately.

Thank you in advance for your response.

Your input by June 29, 2000 would be appreciated.

**MEMORANDUM**

**TO:           Managers**

**FROM:       Clinical Epidemiology Unit/Patient Research Centre**

**DATE:       July 7, 2000**

**SUBJECT:    Questionnaire, Perceptions of Health Care Reforms**

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In June, the Clinical Epidemiology Unit/Patient Research Centre sent you a questionnaire on your perceptions of health care and health care reforms.

This is a request that you complete the questionnaire and return it to us as your input would be greatly appreciated. Thank you, if you have already sent your response. Please call 737-6209/5035 if you need another questionnaire and we will send it to you immediately.

Thank you in advance for your response.

Your input by July 21, 2000 would be appreciated.



**Appendix E**  
**Employee Attitudes Survey**

## Part I: General Information

The information that you provide in this section will be helpful in determining how representative the sample is in terms of the health care management. Please **ONLY CIRCLE ONE RESPONSE** for Questions 1 thru 5.

PLEASE DO NOT  
WRITE IN THIS  
SECTION.

	CODE
1. Management Position: Please specify _____	_____
2. Professional Background: ( <b>Circle one only</b> )	
(1) Nursing	
(2) Business Administration	
(3) Medicine	
(4) Education	
(5) Social Work	
(6) Other (please specify) _____	_____
3. Primary area of responsibility:	
(1) Clinical Services	
(2) Human Resources	
(3) Staff Development, Planning, Education	
(4) Facility Management (Eg., engineering, maintenance, etc.)	
(5) Other (please specify) _____	_____
4. Total Number of <b>Years Experience</b> in Health Care:	
(1) Less than 1 year (4) 5 to 9 years	
(2) 1 to 2 years                      (5) 10 to 19 years	
(3) 3 to 4 years                      (6) 20 years or greater	_____
5. Total number of <b>Years in Current Position</b> :	
(1) Less than 1 year (4) 5 to 9 years	
(2) 1 to 2 years                      (5) 10 to 19 years	
(3) 3 to 4 years                      (6) 20 years or greater	_____

PLEASE DO NOT  
WRITE IN THIS  
SECTION.

CODE

6. Educational Background: (Circle one only, i.e. highest level)

(1) Diploma/Certificate

(2) Baccalaureate

(3) Masters

(4) Doctorate

(5) Other (please specify) \_\_\_\_\_

\_\_\_\_\_

7. Region:

(1) HCCSJ

(2) Avalon

(3) Peninsulas

(4) Central East/West

(5) Western

(6) Labrador

(7) Northern

\_\_\_\_\_

8. Gender:

(1) Male

(2) Female

\_\_\_\_\_

9. Age in years: \_\_\_\_\_

\_\_\_\_\_

10. Number of personnel under direct supervision:

Please specify \_\_\_\_\_

\_\_\_\_\_

## Part II: Organizational Commitment

In this section of the questionnaire we are interested in how you would rate your commitment to your present organization. It is important that you respond to all items. Please **circle the number** that best describes your present position. Use the following scale to rate your degree of agreement/disagreement with each statement:

	1	2	3	4	5	6	7
	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Disagree or Agree	Slightly Agree	Moderately Agree	Strongly Agree
				Strongly Disagree			Strongly Agree
11. I am willing to put in a great deal of effort beyond that normally expected in order to help this organization be successful.	1	2	3	4	5	6	7
12. I talk up this organization to my friends as a great organization to work for.	1	2	3	4	5	6	7
13. I would accept almost any type of job assignment in order to keep working for this organization.	1	2	3	4	5	6	7
14. I find that my values and the organization's values are very similar.	1	2	3	4	5	6	7
15. I am proud to tell others that I am part of this organization.	1	2	3	4	5	6	7
16. This organization really inspires the very best in me in the way of job performance.	1	2	3	4	5	6	7
17. I am extremely glad that I chose this organization to work for over others I was considering at the time I joined.	1	2	3	4	5	6	7
18. I really care about the fate of this organization.	1	2	3	4	5	6	7
19. For me this is the best of all possible organizations for which to work.	1	2	3	4	5	6	7

### Part III: Psychological Contract Violation/Intentions

Use the following scales to rate how you feel about your organization. Again it is important that you respond to all items. Please circle the number that best captures your position.

20. Overall, then, **how well** has your organization fulfilled the commitments that were made to you when you were hired?

1	2	3	4	5
Very Poorly Fulfilled	Poorly Fulfilled	Neutral	Fulfilled	Very Well Fulfilled

21. Overall, then, **how often** has your employer failed to meet the commitments that were made to you when you were hired?

1	2	3	4	5
Very Infrequently	Infrequently	Neutral	Frequently	Very Frequently

22. Considering all of your job factors together, how does the amount of rewards that you actually receive from your organization **compare** to the amount of rewards that your organization promised you?

1	2	3	4	5
Much Less Than Promised	Less Than Promised	About the Same As Promised	More Than Promised	Much More Than Promised

23. Overall, how does the amount of rewards (both financial and non-financial) you receive from your organization **compare** to the amount that you think it should provide? The amount my organization supplies is:

1	2	3	4	5
Much Less Than It Should	Less Than It Should	About As Much As It Should	More Than It Should	Much More Than It Should

24. Considering the impact of downsizing/restructuring on the health care system, how likely is it that you will stay with your current employer?

1	2	3	4	5
Very Unlikely	Unlikely	Unsure	Likely	Very Likely

25. I would consider leaving my present position if another employment opportunity presented itself?

1	2	3	4	5
Very	Unlikely	Unsure	Likely	Very
Unlikely				Likely

26. How often have you put any serious effort into searching for a new job (e.g. checking newspapers or ads, making calls, sending resumes, etc.)?

1	2	3	4	5
Very	Infrequently	Neutral	Frequently	Very
Infrequently				Frequently

### Part IV: Satisfaction

In this section of the questionnaire we are interested in your overall satisfaction with your job as well as select areas related to managerial restructuring within your organization. Again it is important that you respond to all items. Please **circle the number** that best describes your present position.

Use the following scale to rate your degree of agreement/disagreement with each statement:

---

1	2	3	4	5	6	7
Strongly	Moderately	Slightly	Neutral	Slightly	Moderately	Strongly
Disagree	Disagree	Disagree		Agree	Agree	Agree

---

				Strongly			Strongly	
				Disagree			Agree	
<b><u>General Satisfaction</u></b>								
27. Generally speaking, I am very satisfied with this job.	1	2	3	4	5	6	7	
28. I am generally satisfied with the kind of work I do in this job.	1	2	3	4	5	6	7	
29. Most people in this job are very satisfied with the job.	1	2	3	4	5	6	7	

## Part V: Health Care Reform

In this section of the questionnaire we are interested in knowing how you view the changes that have occurred in the health care system. The content of the statements include overall impressions about the impact of health care reforms, as well as some specifics with regard to quality and safety concerns, workplace conditions, and professional issues. It is important that you respond to all items. Please circle the number that best describes your present position.

**You will notice that the numbering is not sequential. Certain items have been removed and placed in a subsequent section to be answered by managers responsible for clinical services.**

Use the following scale to rate your degree of agreement/disagreement with each statement:

	1	2	3	4	5	6
	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
35. I understand the importance of downsizing and restructuring the health care system in this province.	1	2	3	4	5	6
36. Health care reforms have not placed sufficient emphasis on maintaining quality care standards.	1	2	3	4	5	6
37. Patients/clients have reasonable access to health care services despite downsizing and managerial restructuring efforts.	1	2	3	4	5	6
38. The movement towards community based care is a positive step in helping facilitate greater patient/client accountability and responsibility.	1	2	3	4	5	6
39. Changes in the health care system have given health care providers the opportunity to gain greater control over their practice.	1	2	3	4	5	6
40. Supplies/resources are often not adequate to ensure patient/client comfort.	1	2	3	4	5	6

	1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 Slightly Agree	5 Moderately Agree	6 Strongly Agree
				Strongly Disagree		Strongly Agree
41. Despite personnel reductions, it is still possible to meet patients'/clients' basic care needs.				1 2 3 4	5 6	
42. Because of overwhelming workload demands, it is often necessary to lower care standards.				1 2 3 4	5 6	
43. Due to increasing acuity levels, it is not possible to adequately assess or meet patients'/clients' emotional/psychosocial needs.				1 2 3 4	5 6	
44. I am confident that in my agency procedures are being performed in a safe and competent manner.				1 2 3 4	5 6	
48. Most of the time we have the necessary <b>physical resources</b> (e.g. equipment, supplies, facilities) to provide safe care.				1 2 3 4	5 6	
49. Most of the time we have the necessary <b>human resources</b> (i.e. nurses, physicians, allied health professionals, and support staff) to provide safe care.				1 2 3 4	5 6	
50. Adequate health care resources are not always available in the community for patients/clients upon discharge.				1 2 3 4	5 6	
51. At my workplace, staff meet regularly with management to discuss workplace concerns.				1 2 3 4	5 6	
52. At my workplace, staff meet regularly with management to identify ways to resolve problems and build on strengths.				1 2 3 4	5 6	



	1	2	3	4	5	6
	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
				Strongly Disagree		Strongly Agree
56. As a consequence of recent changes in the health care system, I can appreciate the challenges facing my profession.	1	2	3	4	5	6
57. As a consequence of recent changes in the health care system, I feel empowered to be an active participant in affirming an important future role for my profession.	1	2	3	4	5	6
58. Because I work in a supportive environment, I am able to give that 'extra' effort when my job demands it.	1	2	3	4	5	6
61. Increased demands and stress in the workplace have led to unpleasant working relationships with co-workers and other health care providers.	1	2	3	4	5	6
62. In the aftermath of restructuring efforts, I find that my time management skills have become more important.	1	2	3	4	5	6
63. Increased demands and stress in the workplace have engendered a sense of disillusionment and low morale.	1	2	3	4	5	6
64. Since restructuring of the health care system, I find my job more satisfying and challenging.	1	2	3	4	5	6

**NOTE:** If you are **not** responsible for clinical services, please proceed to Part VII.

### Part VI: Clinical Service - Related Items

In this section of the questionnaire we are interested in knowing how clinical managers view the following identified areas.

Use the following scale to rate your degree of agreement/disagreement with each statement:

	1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 Slightly Agree	5 Moderately Agree	6 Strongly Agree
				Strongly Disagree		Strongly Agree
43. I am confident that patients/clients and family members receive adequate teaching and counselling in preparation for discharge.	1	2	3	4	5	6
46. Because of inadequate inservice education on new policies/procedures, I believe patients/clients are being placed at risk.	1	2	3	4	5	6
47. Patients/clients are more susceptible to potential harm from delays or errors due to increased demands and stressors in the workplace.	1	2	3	4	5	6
53. At my workplace, opportunities are provided to keep current with latest developments through reading and attending workshops, inservices, and teleconference sessions.	1	2	3	4	5	6
54. Due to increased acuity and shortened lengths of stay, it is not always possible to meet professional care standards.	1	2	3	4	5	6
59. Due to the heavy workload in my workplace, I feel really frustrated with the reduced level of care that is provided.	1	2	3	4	5	6

## Part VII: Objectives of Regionalization of Health Services

In this section of the questionnaire we are interested in knowing how you view the changes that have occurred as a result of regionalization of health services within the province of Newfoundland and Labrador. The content of the statements include overall impressions about the degree to which the implied objectives of regionalization were achieved. It is important that you respond to all items. Please **circle the number** that best describes your present position.

Use the following scale to rate your degree of agreement/disagreement with each statement:

	1 Strongly Disagree	2 Moderately Disagree	3 Slightly Disagree	4 Slightly Agree	5 Moderately Agree	6 Strongly Agree
				Strongly Disagree		Strongly Agree
65. Regionalization of health services has allowed your region to maintain/improve quality of services.	1	2	3	4	5	6
66. Regionalization of health services has provided opportunities for enhancing the coordination of acute and long term care services.	1	2	3	4	5	6
67. Regionalization has ensured the continuation of opportunities for publicly appointed trustees to have meaningful input into board operations.	1	2	3	4	5	6
68. Regionalization of health services has resulted in the effective and efficient utilization of scarce human and fiscal resources.	1	2	3	4	5	6
69. Regionalization of health services has provided the opportunity to take advantage of economies of scale (e.g., purchasing capacity) through alternate board structures (e.g., physical infrastructure).	1	2	3	4	5	6

**NOTE: Please complete this section if you work with the HCCSJ.**

### **Part VIII: Program Based Management Objectives**

In this section of the questionnaire we are interested in knowing how you view the changes that have occurred in the style of management within the Health Care Corporation of St. John's (i.e., program based management versus traditional departmental management). The content of the statements include overall impressions about the degree to which the stated objectives of program based management were achieved. It is important that you respond to all items. Please circle the number that best describes your present position.

Use the following scale to rate your degree of agreement/disagreement with each statement:

	1	2	3	4	5	6
	Strongly Disagree	Moderately Disagree	Slightly Disagree	Slightly Agree	Moderately Agree	Strongly Agree
				Strongly Disagree		Strongly Agree
70. Under program based management health care provider groups have been organized according to commonality of patient/client conditions.	1	2	3	4	5	6
71. Program based management has focused on the continuum of care.	1	2	3	4	5	6
72. Program based management has strengthened the interdisciplinary approach to service delivery.	1	2	3	4	5	6
73. Program based management has focused on outcomes.	1	2	3	4	5	6
74. Program based management has resulted in the flattening of organizational structures.	1	2	3	4	5	6
75. Program based management has increased the involvement of staff and health care consumers in the decision making process.	1	2	3	4	5	6
76. Program based management has provided the opportunity for greater authority, responsibility, and accountability in managing resources.	1	2	3	4	5	6



