STRESS AND COPING IN NURSE MANAGERS:

A QUALITATIVE DESCRIPTION

Maria R. Shirey

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Anna M. McDaniel, DNS, RN, FAAN, Chair

_____

Patricia R. Ebright, DNS, RN, CNS

Doctoral Committee

_____

Mary L. Fisher, PhD, RN, NEA-BC

Date of Defense
December 4, 2008

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Bradley N. Doebbeling, MD, MSc, FACP

DEDICATION

This work I dedicate to my husband, Dr. Daniel Ray Shirey, whose love and support of my every endeavor sustain and encourage me in everything I do. To my sons, Daniel, Randall, and Benjamin Shirey, I share with you this dissertation that is a testament to the value of education and a model of lifelong learning and inquiry. To my grandchild, Madison Grace Shirey, I wish that you grow up to be a bright, talented, happy, and independent woman capable of dreaming and making your wishes come true. To the nurse managers in this study who so generously shared their thoughts and experiences, I hope I have accurately captured your voices and that your message is heard through this work.

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ABSTRACT

Maria R. Shirey

<u>Stress and Coping in Nurse Managers: A Qualitative Description</u>

Objective: This study provided a qualitative description of stress and coping as perceived by today's nurse manager incumbents.

Background: The healthcare work environment as a source of overwork and stress has been implicated in today's nursing shortage. Nurse managers play a pivotal role in creating work environments for staff nurses, but little is known about the nature of nurse manager work.

Methods: This qualitative descriptive study determined what situations contribute to nurse manager stress, what coping strategies they utilize, what health outcomes they report, and what decision-making processes they follow to address stressful situations in their roles. A purposive sample of 21 nurse managers employed at three U.S. acute care hospitals participated in the study. Participants completed a demographic questionnaire and a 14-question interview incorporating components of the Critical Decision Method. Content analysis was completed and themes identified.

Results: Difficult situations reported included feeling pressure to perform, interpersonal conflicts associated with organizational communication deficits, and issues of human resources and staffing. Nurse managers utilized a combination of emotion-focused and problem-focused coping strategies. When comparing novice nurse managers (3 years or less in role) with experienced nurse managers (greater than 3 years in role), the novices used predominantly emotion-focused coping strategies, a narrow repertoire of self-care strategies, and experienced negative psychological, physiological, and

functional outcomes related to their coping efforts. Experienced nurse managers working

as co-managers demonstrated mostly problem-focused coping strategies, a broad

repertoire of self-care strategies, and reported no negative health outcomes. The study

produced a cognitive model in the form of 10 questions that guide nurse manager

decision-making related to stressful situations. The study generated four themes

amenable to intervention.

Conclusions: Performance expectations for nurse managers in acute care

hospitals have increased since the 1990's making the role requirements unrealistic.

Rising expectations increase nurse manager stress perceptions, making coping more

difficult, and potentially harming nurse manager and work environment well-being.

Findings from this study suggest that to address stress, coping, and complexity in the

nurse manager role requires a combination of strategies that address individual factors as

well as organizational culture, supportive structures, and systems that facilitate the role.

Anna M. McDaniel, DNS, RN, FAAN, Chair

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Nurse managers play an integral role in creating the health care work environment and

their actions are known to be essential precursors for building and sustaining safe and

healthy workplaces.

-Qualifying exam, September 2006

Chapter I

Introduction

A shortage of 800,000 registered nurses is expected by 2020 (Buerhaus, Donelan, Ulrich, Norman & Dittus, 2006; U.S. Department of Health & Human Services, 2002). The health care work environment as a source of overwork and stress has been implicated in the nursing shortage and conditions of the typical work environment characterized as a serious threat to patient safety (Institute of Medicine [IOM], 2004). Because stress causes illness and may impair decision-making, stress contributes to rising health care costs, disability (Bruhn, Chesney & Slacido, 1995; Jones, Tanigawa & Weiss, 2003), and employee fatigue that worsens the nursing shortage and predisposes to significant medical errors (IOM, 2004). Creating a healthy work environment for nursing practice represents a priority for not only maintaining an adequate nurse workforce, but also for promoting patient care quality and safety. Nurse managers play a pivotal role in creating the health care work environment and their actions are known to be essential precursors for building and sustaining safe (IOM, 2004) and healthy (American Association of Critical-Care Nurses [AACN], 2005) workplaces. It follows that minimizing nurse manager stress, enhancing nurse manager coping behaviors, and facilitating desirable nurse manager decision-making are all strategies consistent with retaining both nurse managers and staff nurses in the profession. These same strategies are also vital for promoting cultures of patient safety.

The nursing shortage literature explores stress and coping in the staff nurse role, but literature available using nurse manager subjects is sparse. The U.S. studies available primarily focus on the "old" head nurse role prior to the re-engineering of the health care industry that took place in the mid 1990's. The literature available fails to provide an

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understanding of current nurse manager work and the impact of that work on nurse manager and work environment outcomes. Given the increasing complexity of today's health care work environment, the significant nursing shortage, and the recognition of the manager's role as a major source of threat to patient safety (IOM, 2004), understanding the impact of the nurse manager role expansion following re-engineering is crucial to maintaining an adequate nurse workforce and safe environments for practice.

Background and Significance

The nursing profession is in the midst of one of the most crippling nursing shortages in its history. Researchers estimate that by year 2020, the available registered nurse workforce will fall 29% below projected requirements (U.S. Department of Health & Human Resources, 2002) and this deficit will result in a shortfall of as many as 800,000 RNs (Buerhaus et al., 2006; U.S. Department of Health & Human Services, 2002). Although growth of the hospital nursing shortage appears to have temporarily slowed down, an actual shortage of nurses still continues to exist (Buerhaus, Staiger & Auerbach, 2003).

According to the Health Resources and Services Administration (HRSA), a division of the U.S. Department of Health and Human Services (2000), 8.4% of the 2.7 million U.S. registered nurses are employed in nurse manager or supervisory roles. Based on the overall nurse shortfall predicted, these data suggest an anticipated shortage of at least 67,200 (800,000 x 8.4%) nurse managers by 2020. This conservative estimate, however does not take into account additional nurse manager attrition related to the planned retirement of aging nurse managers. This figure also does not include the demographic trend of nurse managers to transition into areas of less environmental stress

and less demanding roles (Haynor & Wells, 1998) to achieve more balance in their

professional and personal lives (Thorpe & Loo, 2003). Additionally, the conservative

shortfall estimate does not take into account a declining trend in graduate nursing

administration program enrollment (Haynor & Wells, 1998), the closure of some

graduate nursing administration programs in academic institutions (Rudan, 2002), and the

perceived undesirability by younger nurses of the nurse manager role (Sherman, 2005).

All factors combined create a potential leadership void and an impending workforce

crisis of major proportions. In fact, some might argue that the beginning of the nursing

leadership workforce crisis is already here. In a study of senior nursing officers (SNO)

commissioned by the American Organization of Nurse Executives (AONE, 2003a), 53%

of the SNO respondents (n=103) reported difficulty in recruiting nurse managers. This

finding is consistent with observations of significant nurse manager vacancies in some

parts of the U.S. (AONE, 2002).

The health care industry re-engineering efforts of the 1990's have already resulted

in the initial exodus of nurse managers from the acute care setting and the expansion of

responsibilities for those nurse managers remaining (Curtin, 2001). Those "change

dazed" nurse managers who remain face significant challenges and a vicious cycle of

stress (Figure 1) as they must develop strategies to refine current operational models and

shape the nurse manager role to more effectively deal with today's organizational

realities (Vestal, 2003). The challenges and stressors most nurse managers will continue

to face relate to constant changes in the health care work environment combined with a

continuing trend in expanded scope of control and administrative responsibilities

(Kleinman, 2003). This observation underscores the importance of maintaining nurse

Figure 1. The Vicious Cycle of Stress in the Health Care Work Environment and its
          Effects on Nurse Managers

| Complex health care work environment characterized by over work and stress | → | Overwhelming stress beyond coping capabilities→ ↓ job satisfaction and ↑burnout | → | Loss of nurse managers to either:

Less stressful jobs

Illness or disability

Career change | → | Worsening of the work environment and nursing shortage with ↑↑nurse manager vacancies → ↑↑ stress in remaining managers |
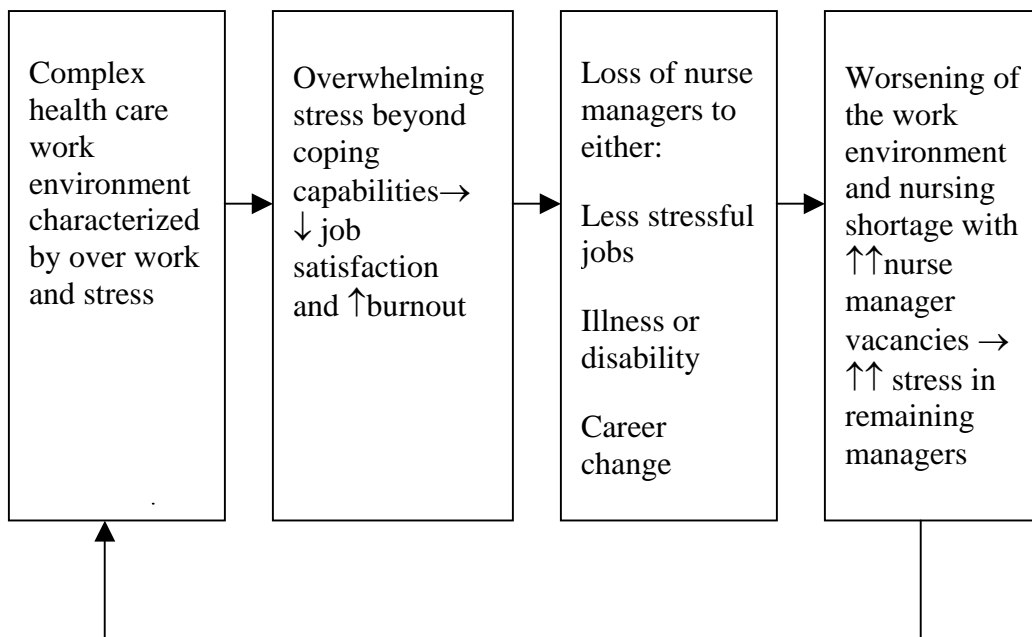
manager resiliency particularly in light of staff nurses reporting their managers to be a most important resource in times of uncertainty and stress (Hendel, Fish & Aboudi, 2000).

The current nursing shortage has prompted policy makers to increasingly focus on the health care work environment as a source of overwork and stress. Accordingly, major health care organizations have published documents advocating the need to transform the health care work environment (AACN, 2005; AONE, 2003b; IOM, 2004; Joint Commission on Accreditation of Healthcare Organizations, 2001). The IOM report (2004) clearly identified decreases in the number of nurse managers as one of many components of the work environment that have adversely affected nursing care quality and patient safety.

Stress in the Health Care Work Environment

Stress in the work environment is of concern from multiple perspectives (Taylor & Seeman, 1997). First, stress contributes to organizational inefficiency, high staff turnover, sickness absenteeism, decreased quality and quantity of care, increased costs of health care, and decreased job satisfaction (Wheeler & Riding, 1994). Chronic stress at work is gaining increasing attention, as this phenomenon increases the incidence of mental illness (Couser, 2008) and the risk for metabolic syndrome (Chandola, Brunner & Marmot, 2006), a precursor of coronary heart disease (CHD). Research findings document that a supportive work environment prevents CHD (De Bacquer et al., 2005).

Second, Americans are spending increasingly greater time at work than in years past. This observation is particularly alarming given that 40% of American workers reported their jobs to be extremely stressful (U.S. Department of Health and Human

Services, 1999). Nurse managers, in particular, usually work 12 to 14 hour days and have 24-hour accountability for their areas of responsibility (Rudan, 2002). Although the span of control in other industries such as the government sector may be 7 to 15 employees per supervisor (Office of the Vice-President of the U.S., 1993), the span of control for each nurse manager in acute care hospitals is 54, 44, 30, and 16 staff members in facilities of greater than 350, 100-349, 50-99, and less than 50 beds, respectively (AONE, 2002). In some health care facilities, however, span of control may exceed 100 employees per nurse manager and result in an inverse relationship between span of control and employee engagement (Cathcart, Jeska, Karnas, Miller, Pechacek & Rheault, 2004). The literature clearly suggests that even under the most positive of leadership styles and conditions, no leadership can overcome the detrimental effects of a wide span of control (Doran et al., 2004).

Third, the estimated cost of stress-related illnesses in the U.S. is $4.2 to $60 billion a year (Benton, 2000) with per employee annual costs reported at $13,000 regardless of profession (Bruhn et al., 1995). Because nurse managers practice in a human services profession, they are reportedly more at risk to experience the detrimental effects of stress and burnout (Maslach & Leiter, 1998a). Little research, however, is available to specifically explain how chronic stress affects nurse health outcomes throughout their career much less how a nurses' health status may affect patient care outcomes (McNeely, 2005).

Lastly, given that the literature supports a relationship between stress, coping, social support, and individual health outcomes, a program of study to explore these relationships is warranted in the setting of complex, constantly changing health care

environments. In past years, the occupational stress and burnout literature seemed to cite personal characteristics of the individual as the primary contributors to negative health outcomes (Medland, Howard-Ruben & Whitaker, 2004). Increasingly, the current literature seems to place more emphasis on work environment and organizational structure as the primary contributors to stress and burnout (Maslach & Leiter, 1998b; Maslach & Leiter, 1999). Because stress-related illness contributes to rising health care costs and disability, creating a healthy work environment is a priority for maintaining an adequate nurse workforce and safe environments for practice (AACN, 2005). If ever a long-term solution for chronic stress in the workplace is to be found, this will require the intersection of nursing administration research focusing on individuals as the unit of analysis and health services research focusing on generating the evidence to transform health systems and to drive health care policy (Jennings, 2004; Jones & Mark, 2005).

The Nurse Manager's Unique Contributions

Through their leadership behaviors, nurse managers play an integral role in creating the health care work environment and modeling the way for staff nurses. Research has identified the positive relationship between leadership behavior and staff nurse job satisfaction, productivity, organizational commitment (McNeese-Smith, 1995; McNeese-Smith, 1996; McNeese-Smith, 1997), empowerment (Laschinger, Wong, McMahon & Kaufmann, 1999), and retention (Anthony et al., 2005; Taunton, Boyle, Woods, Hansen & Bott, 1997; Shader, Broome, Broome, West & Nash, 2001; Boyle, Bott, Hansen, Woods & Taunton, 1999). The cascading effect of leadership behaviors extends beyond modeling the way to include challenging the process, inspiring a shared vision, enabling others to act, and encouraging the heart (Kouzes & Posner, 2002).

Managers can significantly reduce stress, increase communication (Blegen, 1993; Irvine & Evans, 1995; Anthony & Preuss, 2002), and foster collaboration (IOM, 2004) to enhance elements of the work environment conducive to job satisfaction and patient safety. The complexity of the situations the nurse manager faces, however, may also overload managers beyond their own resources and this can have a detrimental effect on both the nurse manager and the nursing practice work environment.

Purpose

There is a lack of knowledge about occupational stress and related outcomes in today's U.S. nurse managers. Although a small body of literature exists to explain the historical evolution of stress and coping research in the nurse manager role (Shirey, 2006a; Shirey 2006b), little current research exists within the U.S. context to provide a distinct understanding of the complexities and difficulties unique to this role. In order to develop targeted strategies to break the vicious cycle of stress (Figure 1) identified in nurse managers, a better understanding of stress and coping is needed particularly from the perspective of those experiencing the phenomenon of interest. The purpose of this study is to provide a qualitative description of stress and coping as perceived by today's nurse manager incumbents.

Research Questions

This study was designed to answer the following four research questions:

1. What situations contribute to stress in today's nurse managers?

2. What coping strategies do nurse managers utilize to deal with stressful situations in their nurse manager role?

3. What health outcomes do nurse managers report as a result of frequent exposure to stressful situations in their nurse manager role?

4. What decision-making processes do nurse managers utilize to address stressful situations in their nurse manager role?

Summary

Four chapters follow this introductory chapter. Chapter II presents the literature review and theoretical concepts that informed this research. In Chapter II, the author reviews three decades of empirical literature that explores the stress and coping experiences of nurse managers working in the acute care hospital setting. Based on findings of the integrative review of the literature, the author identifies gaps in the literature that justify the need for the present study. Chapter II also discusses findings from a preliminary study that helped to inform the current research.

Chapter III explains the methodology used for this study. Chapter IV presents the findings from the study and answers the research questions. Chapter V highlights the implications of the study for healthcare and nursing leadership as well as for the broader field of health services research. Chapter V concludes with recommendations for future research.

Chapter II

Review of the Literature

The purpose of this work is to provide a qualitative description of stress and coping as perceived by today's nurse manager incumbents. Of particular interest is the need for insight regarding situations that contribute to nurse manager work-related stress, the coping strategies nurse managers utilize, and the health outcomes and decision-making processes they report.

What follows is an integrative review of the primary literature as it relates to stress, coping, and health outcomes in nurse managers. The primary literature is presented along with a pertinent discussion of cognitive decision-making within the context of stress and complexity. Chapter II also includes an overview of the transaction-based theory of stress and complexity science, two theoretical frameworks that inform the current research. The chapter ends with a discussion of preliminary studies that combined with an understanding of stress theory, complexity science, and the critical review of the literature influenced the theoretical, methodological, and measurement dimensions incorporated into the current research.

Stress, Coping, and Health Outcomes in Nurse Managers

A synthesis of the existing nurse manager stress, coping, and health outcomes empirical literature covering the time period from 1980 to 2006 suggests that the evidence may be divided into three broad categories: pre, intra, and post re-engineering of the mid 1990's (Table 1). Literature from 1980 to 1991 addressed the pre-engineering period and predominantly focused on the "old" head nurse role. The head nurse role prior to re-engineering typically directed the activities of a single unit and had a primary

clinical focus with limited oversight of the unit budget and financial performance.

Literature published starting in 1992 (intra re-engineering period) through today (post re-engineering period) reflects a transition of the head nurse role from that of the single unit supervisor to that of the multi-unit department manager with a primary managerial focus and accountability for the department's financial and operational performance. The literature exists within the backdrop of two major nursing shortages of the 1980's and late 1990's that continue today. Although much of the nurse manager stress and coping literature prior to 1992 was based on studies conducted in the U.S., the majority of the studies since 1992 have been conducted in Canada and Europe. Despite the excellent nursing research that is being generated outside the U.S., cultural, professional, practice, and health care system differences limit the generalizability of these studies. Given that this is the research that is currently available, researchers must learn from what has been studied in order to fill the voids with research conducted in the U.S.

The lack of focus in the U.S. on nurse manager stress and coping during and following re-engineering may be related to the fact that re-engineering downsized many of the indirect care providers (nurse managers) from the workforce. Observers of this phenomena may conclude that nurse managers likely were either "not there" to be studied or that the turbulence of the time period may have taken precedence over concerns about individual stress. The current nursing shortage, however, has brought the crucial role of the nurse manager back to the forefront. Increasingly, the literature is validating the key role nurse managers play in creating safe and healthy work environments that impact whole health care organizations (Carrol, 1993; Oroviogoicoechea, 1996; Everson-Bates, 1992; Shirey, 2006c).

Studies on nurse manager stress conducted from 1980 to 1991, primarily associated stress in the head nurse role with physician causes (Leatt & Schneck, 1980; Gribbins & Marshall, 1984), task and time allocation challenges (Leatt & Schneck, 1980; Gribbins & Marshall, 1984; Bunsey, DeFazio, Pierce & Jones, 1991), lack of available resources (Frisch, Dembeck & Shannon, 1991), excessive workload (Frisch et al., 1991), powerlessness (Frisch et al., 1991), role conflict/ambiguity (Skorga & Taunton, 1989), and patient-related stress (Leatt & Schneck, 1980). Length of time in the head nurse role was reported to affect stress with less experienced individuals reporting greater perceptions of stress in one study (Frisch et al., 1991) yet not in another (Hess & Drew, 1990). Overall, nurse managers reported satisfaction with their positions despite the perceived high stress of the job (Cooper, Manning & Poteet, 1988). Mental health outcomes in nurse managers were reported to be significantly better than such outcomes in normative groups within the civilian sector (Cooper et al., 1988), but not in the military context (Jennings, 1990). Factors used to predict mental health included degrees of stress at work and personality characteristics of individuals (Cooper et al., 1988). Reference to leadership and organizational support within the head nurse role during this time period does not appear evident. The literature refers to the interaction of the head nurse role with complex single medical units (Gribbins & Marshall, 1984), but little reference is made to turbulence or ambiguity in the broader health care work environment. Head nurse coping strategies reported were mostly problem-focused (Frisch et al., 1991).

Literature from 1992 to 1999, focused mostly on examining the transition from the traditional head nurse role to the nurse manager role of the 1990's (Nicklin, 1995; Oroviogoicoechea, 1996; Hall & Donner, 1997). The literature during this time period

attempted to summarize the new skill set needed for success in the more complex and

evolving nurse manager role (Mark, 1994). Lack of role clarity was referenced as a

source of conflict and stress for nurse managers (Oroviogoicoechea, 1996) as was the

demand to be visible (Everson-Bates, 1992), the resurfacing of repetitive problems, and

the feeling of work never being done (Jezierski, 1993). One Canadian study using nurse

managers (n=91) as subjects identified lack of empowerment structures available to first

line managers (Goddard & Laschinger, 1997). This lack of empowerment contributed to

the perception that individuals in front line managerial positions, while having increasing

responsibility, were still lacking in power and opportunity. A second Swedish study of

nurse managers (n=33) identified survival as the central coping strategy of the times

(Persson & Thylefors, 1999). The Swedish nurse managers described themselves as

being overworked and labeled their role within the category of a "career with no return."

A similar label of "magician" was used to describe the abilities needed to deal with

conflicting demands of the nurse manager role (Rudan, 2002). A third Canadian study

identified the rapid organizational changes characteristic of re-engineering as a source of

decreased job satisfaction and increased job stress (Woodward, Shannon, Lendrum,

Brown, McIntosh & Cunningham, 2000). These outcomes were observed regardless of

whether the subjects (both nurses and nurse managers) were employed in a supervisory

position or not. A consistent theme of the literature in the latter part of the 1990's was

that of survivorship coping strategies used by nurse managers (Persson & Thylefors,

1999; Woodward et al., 2000).

The nurse manager stress literature from 2000 to today focuses on the

increasingly complex and stressful nature of the nurse manager role and its related health

care work environment. Staffing shortages, workforce performance management issues, and balancing competing priorities seem to overwhelm nurse managers in their roles (Schroeder & Worrall-Carter, 2002). In the U.S., there is concern over increasing nurse manager vacancies causing additional stress for nurse manager incumbents (Silvetti, Rudan, Frederickson & Sullivan, 2000) and resulting in a vicious cycle of stress (Figure 1). The increasing span of control is reported to cause a domino effect resulting in lack of mentoring, increasing stress, and decreasing job satisfaction (Silvetti et al., 2000). Most of the nurse manager stress studies in this time period have been conducted in Canada (Jamal & Baba, 2000; Greenglass & Burke, 2001; Thorpe & Loo, 2003; Laschinger, Almost, Purdy & Kim, 2004) and in Europe (Rodham & Bell, 2002; Lindholm, Dejin-Karlsson, Ostergen & Uden, 2003; Suominen, Savikko, Puuka, Doran & Leino-Kilpi, 2005; Lindholm, 2006) with some studies conducted in Australia (Schroeder & Worrall-Carter, 2002). Four studies conducted by the same U.S. author were limited to the study of hardiness and its relationship to stress in nurse managers (Judkins, 2001; Judkins & Ingram, 2002; Judkins, 2004; Judkins, Massey & Huff, 2006). Although the U.S. studies have included the testing of a hardiness intervention, these studies have yet to explore the underlying dynamics of nurse manager work in order to better develop the needed tailored interventions. Hardiness has been a construct with wide appeal to nurse researchers, however, a critical analysis of hardiness reveals rigor in using the construct has for too long been lacking (Jennings & Staggers, 1994).

The findings of the currently available research (Jamal & Baba, 2000) establish a relationship between job stress and burnout (emotional exhaustion, lack of accomplishment, and depersonalization). The finding that job stress is related to burnout

is consistent with results of an earlier meta-analysis of burnout (Lee & Ashforth, 1996). Similarly, excessive workload has been found to be a most significant predictor of stress with greater workload leading to greater emotional exhaustion (Greenglass & Burke, 2001). Job stress also has been found to significantly correlate with psychosomatic health problems, job satisfaction, and organizational commitment (Jamal & Baba, 2000). Measurement of health outcomes in nurse managers has been limited to the emotional outcomes of stress and only recently has a link to emotional exhaustion in nurse managers been empirically established (Laschinger et al., 2004). When nurse managers have been studied regarding stress at work, they appear to be unaware of the effects of work stressors on their own health and that of their staff (Rodham & Bell, 2002). The nurse manager stress literature reports an overwhelming culture of acceptance and expectation of work stressors combined with a lack of awareness of ways to effectively and proactively manage stress (Rodham & Bell, 2002). This observation appears consistent with a shift in coping strategies from problem-focused coping in the 1980's, to survivorship (distancing) in the late 1990's, to escape-avoidance coping in the 2000's. In relating these coping strategies to the transaction-based theory of stress (Lazarus & Folkman, 1984), this shift represents deterioration from a more desirable problem-focused (mastery of the problem) approach to a predominantly emotion-focused (distancing, avoiding) coping strategy. The work by Laschinger and colleagues (2004) provides evidence to support this deterioration in coping patterns and is manifested in the high levels of emotional exhaustion measured in Canadian nurse managers. Alarmingly, the level of nurse manager emotional exhaustion in Laschinger's study (2004) was higher than in previous studies presenting significant concern about the sustainability of

personal well-being under conditions of chronic work stress. Clearly, the implication is

that chronic work stress combined with inadequate coping abilities, lack of proactive

stress management strategies, and inadequate organizational resources is not sustainable

over time without significant threat to nurse manager health and potential work

environment consequences.

Research has demonstrated that nurse managers who adapted to work stress with

high job satisfaction were more inclined to adopt problem-focused coping (Judkins,

2001). Stress tolerant nurse managers with high hardiness levels reported 35% fewer sick

hours than their low hardiness counterparts (Judkins, Masse & Huff, 2006). Stress

tolerant nurse managers have demonstrated less frequent use of avoidance and defensive

coping strategies and typically reported the perception of high levels of family support

(Judkins, 2001). The importance of social support in the workplace is also evident in the

literature and has been found to relate to increased empowerment, increased motivation,

and decreased job strain (Shirey, 2004). To enhance the personal and professional

outcomes of the role, nurse managers have specifically identified the need for more

support from senior administration in dealing with role changes and challenges (Thorpe

& Loo, 2003), more power and respect consistent with increasing nurse manager

responsibilities (Suominen et al., 2005), and further educational preparation and training

opportunities to help them better cope with their continually evolving roles (Suominen et

al., 2005). One Finnish study (n=279) noted, however, that the high work demands

associated with the nurse manager role may have become so great that ordinary

supportive efforts may no longer be adequate to address stress in the role (Suominen et

al., 2005).

It is apparent from today's frenetic health care work environment that the increasing demands for greater efficiency and productivity have not only adversely affected patient safety (IOM, 2004), but also have negatively impacted the coping strategies and self-reported health outcomes of nurse managers (Lindholm et al., 2003; Laschinger et al., 2004). There is clearly a need for a "kinder, gentler" health care work environment and this healthier work environment is needed for nurse managers and staff nurses alike. Change and complexity are part of a reality that likely will continue. Eliminating personal stress appraisals (particularly perception of threat), however, is dependent upon a combination of an individual's personal strengths, the environment, organizational structure, and/or the coping abilities of nurse managers. Nurse managers have the potential to favorably affect the stress appraisals in their lives and the lives of their employees. Development of tailored interventions to affect stress appraisals and related coping, however, requires a better understanding of nurse manager work and related stress. Employer-generated organizational responsibility for support in recognizing and addressing occupational stress is warranted (Rodham & Bell, 2002) and cannot be underestimated (Maslach & Leiter, 1998b; Judkins, 2001).

Table 1. Overview of Stress, Coping, and Health Outcomes Literature Related to the Nurse Manager Role: 1980 to 2006

Timeline	1980-1991	1992-1999	2000-2006
Period	Pre re-engineering period	Intra re-engineering period	Post re-engineering period
Nurse manager role description	Traditional head nurse role Primary clinical focus	Expanded nurse manager role (Early) Primary role focus in transition	Expanded nurse manager role (Mature) Primary management focus
Concurrent events in health care industry	Nursing shortage Prospective payment system begins	Health care re-engineering with focus on corporatizing health care; boom in mergers, acquisitions, and downsizing; decentralization	Nursing shortage Managed care gains popularity Pay for performance systems emerging
Integrative review of the empirical literature	•Leatt & Schneck (1980) •Gribbins & Marshall (1984) •Cooper, Manning, Poteet & Hingley (1988) •Skorga & Taunton (1989) •Jennings (1990) •Hess & Drew (1990) •Bunsey, DeFazio, Pierce & Jones (1991) •Frisch, Dembeck & Shannon (1991)	•Everson-Bates (1992) •Jezierski (1993) •Goddard & Laschinger (1997) •Persson & Thylefors (1999) •Woodward, Shannon, Lendrum, Brown, McIntosh & Cunningham (2000)	•Jamal & Baba (2000) •Greenglass & Burke (2001) •Rodham & Bell (2002) •Judkins & Ingram (2002) •Schroeder & Worrall-Carter (2002) •Lindholm, Dejin-Karlsson, Ostergren & Uden (2003) •Thorpe & Loo (2003) •Judkins (2004) •Laschinger, Almost, Purdy & Kim (2004) •Suominen, Savikko, Puukka, Doran & Leino-Kilpi (2005) •Lindholm (2006) •Judkins, Massey & Huff (2006)

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Anecdotal literature informing the research topic	•Hyndham & Personius (1983)	•Oroviogoicoechea (1996) •Nicklin (1995) •Hall & Donner (1997) •Duffield & Lumby (1994)	•Silvetti, Rudan, Frederickson, Keville & Sullivan (2000) •Andrews & Dziegielewski (2005)
General observations from the literature	•Studies mostly in U.S.; no distinct theme evident •Focus is on task orientation •Stress reduction seen as individual obligation •Little mention of health outcomes related to stress	•Literature is limited; theme is on change •Focus is on transition from traditional head nurse to nurse manager role •Stress and coping focus not evident	•Studies mostly outside U.S.; theme is on turbulence and survivorship •Focus is more on role complexity and less on actual stress measures •Stress reduction seen as an organizational obligation •Some mention of health outcomes related to stress
Specific findings regarding 6 major parameters:			
Sources of stress	•Physician causes •Task and time allocation challenges •Lack of available resources •Excessive workload •Powerlessness •Role conflict and ambiguity	•Lack of role clarity •Demands of being visible •Resurfacing of repetitive problems •Feeling work is never done •Lack of empowerment structures	•↑ nurse manager vacancies → ↑ stress for incumbents •Excessive workload •↑ span of control •Conflicting demands

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Job satisfaction	• Job satisfaction despite perceived high stress on the job	• ↓ job satisfaction and ↑ stress	• ↑ span of control → ↑stress → ↓ job satisfaction
Health outcomes	• Mental health outcomes significantly better than normative groups for civilian sector, but not military context	• Not mentioned	• Limited to emotional outcomes of stress • Lack of awareness of work stressors on health
Organizational support	• Personal accountability for occupational stress	• Not mentioned	• Organizational responsibility for support in occupational stress
Coping strategies	• Problem-focused	• Survivorship	• Escape avoidance = deterioration
Complexity	• Little reference	• Rapid organizational changes and constraints • Complexity of nurse manager role poorly understood	• Increasing complexity and uncertainty in work environment • More nurse manager role complexity; role remains misunderstood and its value not fully articulated • The importance of the nurse manager role gaining renewed interest • Rapid organizational changes and constraints

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Cognitive Decision-Making Amidst Stress and Complexity

The literature suggests that under conditions of stress, changes in the adequacy of cognitive functioning and skilled performance may ensue (Lazarus, 1966; Lazarus & Folkman, 1984). Dating back to the 1950's, research has shown that the negative effects of stress on cognition include changes in perceptions, thoughts, judgment, problem solving, perceptual and motor skills, and social adaptation (Lazarus, 1966). More recently, chronic stress from long work hours and employer demands for greater productivity has been reported to produce sleeplessness in working adults (National Sleep Foundation, 2008). Sleep deprivation in turn has been shown to impair alertness, reaction time, attention, and vigilance necessary for quality decision-making (Kilgore, Balkin & Wesensten, 2006). Individuals working in today's health care work environments, frequently experience the dynamics of escalating stress and complexity that at times borders on chaos. Accordingly, it is important to understand these dynamics and know how they interact with each other so that targeted interventions may be developed to enhance individuals and the systems in which they work.

Recent patient safety research has established a link between complexity in the health care work environment and the cognitive work of nurses (Ebright, Patterson, Chalko & Render, 2003; Potter et al., 2004; Potter et al, 2005; Hedberg & Larsson, 2004). This research suggests that the nurse's clinical decision-making in the acute care hospital setting is influenced by the nurse's knowing and attention to focus as well as by factors within the workplace such as obstacles, multiple goals, missing data, and behaviors surrounding care situations (Ebright et al., 2003). Increasing demands,

complexity, and disruption of the nurse's cognitive work predisposes to errors or omissions that threaten the integrity of patient care systems (Potter et al., 2005).

Although research to date has not explored cognitive decision-making in nurse managers, leadership research in the business sector supports the findings from the clinician literature (Snowden & Boone, 2007). Of prominence is the business decision-making research that links workplace interruptions with lower performance on complex tasks (Speier, Valacich & Vessey, 2007), a phenomenon that with multi-tasking has also been associated with information loss in the clinical setting (Laxmisan et al., 2007).

Theoretical Framework

The investigator's conceptual outlook about stress and coping in this study is informed by the transaction-based theory of stress and complexity science. Consistent with the philosophical underpinnings of qualitative description used in the current work, this study includes no manipulation of pre-selected variables and no prior commitment to any one theoretical view. Concepts from the transaction-based theory of stress and complexity science merely provide guidance in building elements of the current study.

Transaction-Based Theoretical View of Stress

The transaction-based theoretical view of stress proposes that stress does not exist as an event, but rather as a result of the transaction between persons and their environment (Lazarus, 1966; Lazarus & Folkman, 1984). Within this context, stress encompasses cognitive, affective, and coping variables. A major theme of the transactional approach is the importance placed upon the role of appraisal. The theory suggests that the primary mediator of person-environment transactions is appraisal. Three types of appraisal exist within this framework that determine emotions and coping

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behavior: primary, secondary, and reappraisal (Lazarus & Folkman, 1984). Primary

appraisal is a cognitive process that relates to an individual's judgment about an

encounter. The individual may determine an encounter to involve a threat that is then

appraised as stress. A stress appraisal represents an anticipated harm that is determined

when demands are perceived to exceed available resources. Alternatively, primary

appraisal may determine an encounter to be viewed as either a challenge or to be benign

or irrelevant. In this alternative scenario, a threat is not identified and thus a stress

appraisal does not occur. Secondary appraisal involves evaluating coping options to deal

with the primary appraisal. Reappraisal involves the process of continually evaluating

and re-labeling earlier primary and secondary appraisals.

Coping in the transaction-based theoretical view of stress identifies two forms of

coping: problem-focused and emotion-focused (Lazarus & Folkman, 1984). Problem-

focused strategies are adaptive strategies that involve managing or altering the problem

with the environment or the person. Emotion-focused strategies involve regulating the

emotional response to the problem. Individuals may use both types of strategies to deal

with stressors. Emotion-focused (denial and avoidance) forms of coping, however, can

impair health by impeding adaptive health and illness related behavior (Lazarus &

Folkman, 1984). When primarily using emotion-focused strategies, individuals may

initially succeed in lowering emotional distress, but in the process, they fail to address a

problem that may be responsive to suitable action (Lazarus & Folkman, 1984).

Three types of adaptational outcomes are evident in the transactional-based

approach to stress: functioning in work and social living, morale or life satisfaction, and

somatic health (Lazarus & Folkman, 1984). Within adaptational outcomes, health

encompasses physical (somatic), psychological (cognitive), and social (interactive)

functioning. This triad approach to stress is most consistent with a holistic perspective of

the individual and with the nursing profession's view of the human experience (Lyon &

Werner, 1987; Lyon & Rice, 2000).

Complexity Science

Complexity science encompasses multiple theoretical perspectives to study

complex adaptive systems (Zimmerman, Lindberg & Plsek, 2001). Complex adaptive

systems (CAS) are represented as embedded parts that are interconnected and function

within a larger ecosystem. For example, individuals (nurses and nurse managers) are part

of a larger system (health care organization) that interacts with multiple other agents

(physicians and patients) as part of a whole (community). Complexity science allows

researchers to explore the interconnectedness of component parts within a framework of

constant non-linear change, unpredictability, adaptability, and sustainability. Viewing

the world within a complexity lens allows researchers to understand the biological and

flexible components of a CAS to better address specific component parts and more

positively impact the whole.

Complexity within this study is conceptualized as an antecedent or situation factor

in the proposed model of stress-related variables (Figure 2). Complexity in the health

care work environment is characterized by ambiguity, gaps/discontinuity, overload, and

uncertainty that may be perceived as demands. Understanding complexity within the

health care work environment is key as the complexity in which health care workers

make judgments and decisions about their roles in patient care has an effect on outcomes

such as resiliency of health care workers and patient safety (Ebright, Patterson & Render, 2002).

It is hypothesized that negative proximal and distal outcomes within the conceptual model (i.e. decreased health outcomes, decreased nurse manager resiliency, decreased staff nurse resiliency, decreased patient safety) occur as a result of demands within the health care system. Examples of hypothesized reasons to explain these demands focus on deficiencies within systems sometimes referred to as "gaps" (i.e. lack of social support in the workplace, chronic negative emotions) that lead to vulnerability in individuals and organizations and directly affect the sustainability of the CAS. Identifying demands within the CAS is key because the pursuit of demands as a research target offers potential for guiding scientific inquiry (Cook, Render & Woods, 2000). In this study, identifying the system demands related to stress and coping may offer solutions to ultimately impact stress, health care worker resiliency, and patient safety. Further, understanding the stress and coping dynamics of nurse managers in acute care hospital settings is critical to the successful redesign of work environments (Ebright et al., 2003) and roles necessary to improve health care worker well-being, retention, and patient safety within the CAS.

Figure 2. Proposed Model of Stress-Related Variables and Outcomes Associated with Nurse Manager Role Demands
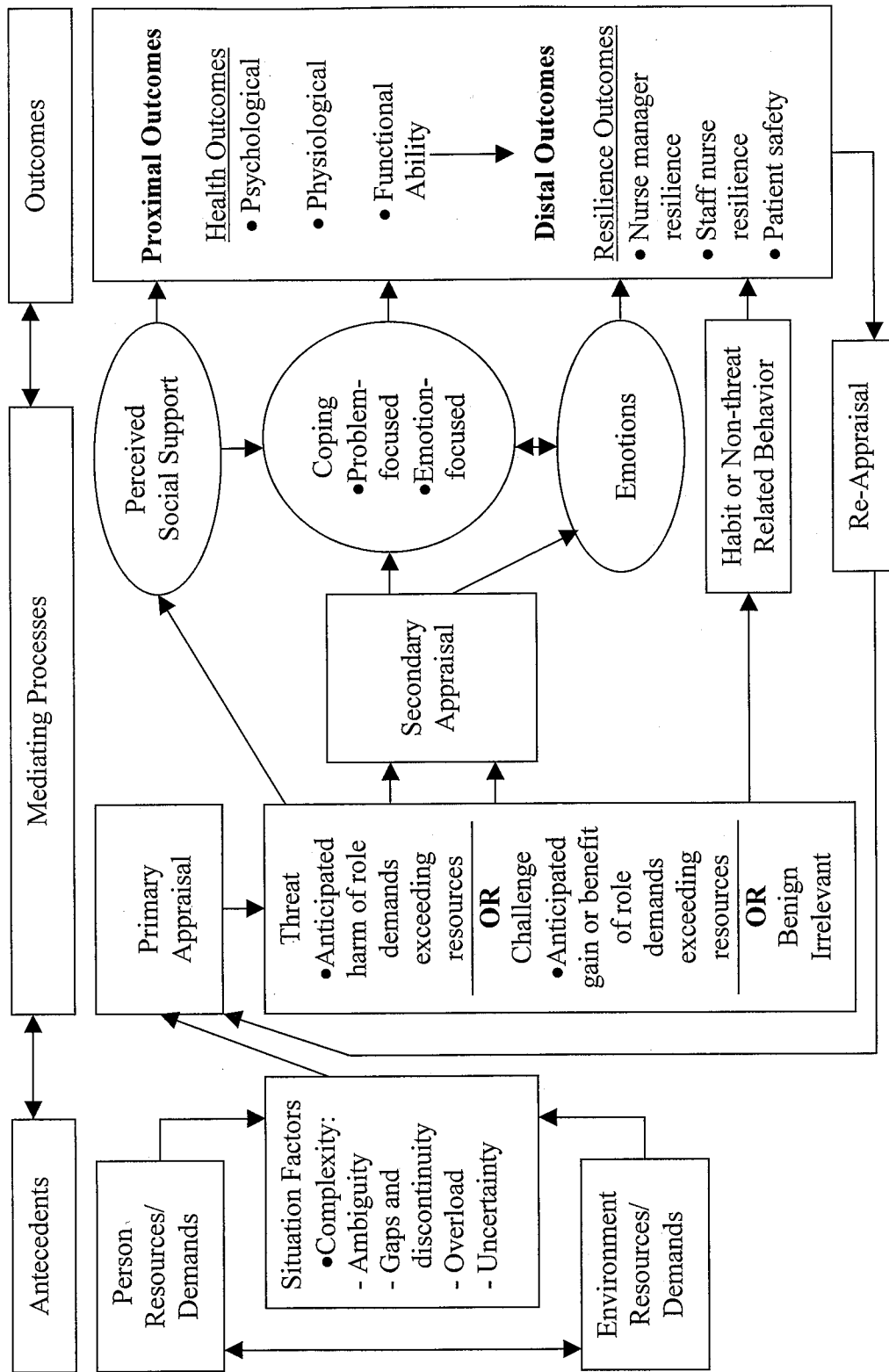
Preliminary Studies

A qualitative descriptive pilot study was conducted during the summer of 2006 prior to initiation of the dissertation research. The purpose of the pilot study was to obtain a first hand qualitative description of nurse manager stress and coping experiences (Shirey, Ebright & McDaniel, 2008) that would inform the dissertation. The pilot study used a convenience sample of n=5 experienced nurse managers employed in a large U.S. Midwestern acute care hospital. The participants completed a demographic questionnaire and a structured face-to-face interview. The interview consisted of five open-ended questions incorporating components of the Critical Decision Method (CDM). The CDM is a retrospective interview strategy with cognitive probes that focuses on non-routine, difficult situations to generate a cognitive task analysis (Figure 3). Saturation for eight themes was achieved with the pilot study sample.

Use of the CDM generated a rich description of nurse manager work. The data were categorized into eight major themes and are briefly described as follows:

1. Nature of nurse manager work. The major challenges in this category had to do with complexity and uncertainty in the role and the work environment, unrealistic expectations of the role, deciding among frequent competing priorities, wide span of control (50-132 FTE; 60-160 direct employee reports), death by meeting, lack of slack time for innovation, and work-life imbalance. The overwhelming nature of the role kept nurse managers in a frequent state they described as a "fear of losing it."

2. Sources of stress. Role conflict/ambiguity/complexity, workplace complexity, powerlessness, lack of control over work schedules precluding time for strategic

Figure 3. The Critical Decision Method (CDM) for Eliciting Cognitive Factors
(Klein et al., 1989)

Step 1: Select incident
- Incidents that are non-routine or difficult are used for analysis.

Step 2: Obtain unstructured incident account
- The participant is asked to describe an incident from the time it began to the time the incident was judged to be under control.

Step 3: Construct incident timeline
- After the incident has been related, the interviewer proceeds to reconstruct the account in the form of a timeline establishing the sequence and duration of each event.

Step 4: Decision point identification
- Specific decisions during the timeline construction are explored.

Step 5: Decision point probing
- In the case of participants identifying other reasonable courses of action, the investigator elicits the details regarding alternative courses of action.

planning and building/sustaining relationships, value conflicts, lack of resources, and excessive workload were reported as sources of stress.

3. Emotions. A range of both positive and negative emotions was noted. The positive emotions reported were joy, empathy, and optimism that came primarily from the relationships with staff and with the opportunity to make a difference in the nurse manager role. The negative emotions reported were anger, guilt, frustration, aggravation, and worry. Expressing anger in the role was very difficult for some of the nurse managers and almost bordered on fear of constructively expressing anger. Of those who were able to report feeling angry, there was a sense of powerlessness in resolving the underlying source of the anger. Despite the fact that nurse managers had significant responsibility in their roles, they still lacked in power consistent with their responsibilities.

4. Values and moral distress. The nurse managers reported their values being challenged and of being pushed to a point they felt was bordering, if not "crossing the line." These incidents occurred often and primarily involved financial matters particularly in situations in which senior administrators issued mandates with money apparently the overriding consideration. The moral distress was compounded by lack of nurse manager voice in the decision-making process above the nurse manager level and as a result of perceived lack of consideration for the impact of organizational decisions on staff (retention and well-being) and patient (quality and/or safety) outcomes. Overall, the acceptance of a culture of silence seemed to prevail as only 1 of 5 nurse managers reported openly verbalizing objection to "crossing the line." This observation has significant

implications for cultures of patient safety (or lack of them) particularly given that recent patient safety research indicates "silence kills" (Maxfield, Grenny, McMillan, Patterson & Spitzer, 2005).

5. Coping. The nurse managers demonstrated a combination of both problem-focused and emotion-focused coping approaches yet they mostly utilized emotion-focused strategies.

6. Social support. The major source of nurse manager support reported came from sources outside of work. Although spouses or significant others provided most of the nurse manager social support, the work-life imbalance associated with the role minimized the nurse manager's ability to cultivate and strengthen these much needed and very important relationships. Sources of social support from work came mostly from the nurse manager's own peer group. Although nurse managers gave much in the way of social support at work, they received very little social support at work.

7. Relationships and communication. The essence of the role and major source of joy in the role came from relationships and communication. The nurse managers indicated, however, that the unrealistic expectations of the role made it very difficult for them to devote the necessary time needed to build strong relationships and enhance communication. Nurse managers indicated that investing in relationship building and communication activities was a crucial requirement for success in the role.

8. Health outcomes. The nurse managers reported experiencing both psychological (restless mind, irritability, impatience, emotional exhaustion, and "being wired")

and physiological (tensed muscles and physical exhaustion) outcomes. All study participants reported difficulty falling asleep and staying asleep at night. Nurse managers reported an inability to totally unwind as manifested by thoughts of work awakening them in the middle of their sleep, visualizing their workdays while in the shower, and calling their voice mails at work while off duty to leave themselves messages regarding things needing to be done. Despite the psychological (many) and physiological (fewer) symptoms presented, none of the nurse managers reported that these health outcomes impeded their functioning on a daily basis. Given the nurse manager's chronic exposure to occupational stress (when asked to identify a difficult situation that caused stress over the last week, the nurse managers had difficulty in identifying just one incident), this raises questions about the nurse manager's ability to sustain positive health outcomes and functional ability over the long-term.

<div align="center">Summary</div>

A review of almost three decades of the nurse manager stress, coping, and health outcomes literature reveals five key gaps. First, given that the currently available nurse manager stress and coping studies have been done mostly outside the U.S. and the studies date back to 1980, a need exists to conduct current stress and coping research in U.S. nurse manager subjects. This is particularly important in light of the significant changes in the nature of the nurse manager role and current work environments for nursing practice. That a few recent studies using U.S. nurse manager subjects focus only on the individual concept of hardiness, barely begins to touch upon the need to better understand

the nature of today's nurse manager work and the broader organizational context in which they practice.

Second, the literature suggests deterioration in the coping strategies of nurse managers and this warrants further exploration. Evidence that nurse managers are emotionally exhausted is a finding consistent with burnout in this group of key leaders. The empirical literature demonstrates that burnout is contagious (Bakker, LeBlanc & Schaufeli, 2005). If nurse managers are to create safe and healthy work environments for staff nurses to practice, these managers must first be emotionally, physically, and functionally fit themselves.

Third, limited research has been conducted on nurse manager health outcomes related to occupational stress. The nurse managers who have been studied did not seem to recognize the impact of stress on their own health or that of others. Similarly, nurse managers appear to lack awareness about proactive stress management strategies. These factors combined with the limited studies available identify the need for further investigation of health outcomes in order to identify proactive health behavior strategies in this population.

Fourth, emphasis on a long-term solution for stress in the nurse manager role is not apparent in the literature. Only one U.S. researcher group appears to have attempted an intervention study teaching hardiness skills to reduce stress and enhance long-term coping in nurse managers (Judkins & Ingram, 2002). Sustainable positive health outcomes, however, are not likely under relentless exposure to chronic, unabated work stress especially when both individual and organizational aspects of stress cannot be addressed together. Interventions, as well meaning as they may seem, do not serve a

long-term benefit when the underlying dynamics of stress and coping in today's nurse managers is not fully understood.

Fifth, the reviewed empirical studies suggest opportunities exist to improve nursing scholarship in stress and coping. Of the 25 empirical articles identified (Table 1), eight articles are from the pre-reengineering period (1980-1991), five articles from the intra-reengineering period (1992-1999), and twelve articles from the post-reengineering period (2000-2006). A critical analysis and synthesis suggests there are serious theoretical, methodological, and measurement flaws in the evidence (Shirey, 2006a). This observation is consistent with previous findings in reviews of nursing studies of stress in general (Lyon & Werner, 1987) and stress in nurse managers in particular (Jennings, 1986).

From a theoretical perspective, only 48% (n=12) of the studies reviewed specified a research question or hypothesis. Fifty-two percent of the studies (n=13) cited were either atheoretical or failed to identify a theoretical framework to support the work. Identified theoretical frameworks spanned the spectrum and reflected an eclectic variety of stress conceptualizations. Of the theoretical frameworks presented, only one study used the full Lazarus & Folkman (1984) transaction-based theory of stress (Frisch et al., 1991).

From the standpoint of methodology, a major threat to the generalizability of the study findings was the use of convenience samples in almost half of the studies reviewed. The individual was the primary unit of analysis in 100% of the studies. Sample sizes were small (< 100) in 56% of the studies reviewed. These samples were generated from

selection of subjects who were primarily employed in civilian acute care hospitals and context was an issue as many of the studies were conducted outside the U.S.

Self-report was used in 100% of the studies. Of great threat to validity was the inconsistency of definitions used in determining what constitutes a nurse manager and how to incorporate this standardized definition into a homogeneous sample of nurse managers. Uniformity in the definition of a nurse manager was clearly lacking. Although 68% (n=17) of the studies used quantitative methodologies (15 descriptive correlational, 1 longitudinal, 1 quasi–experimental, 0 experimental), an increasing number of qualitative studies (n=5 or 20%) used "pure" qualitative methods (2 qualitative description, 2 grounded theory, and 1 ethnography). The three (12%) mixed method studies combined either qualitative description with descriptive correlational designs or used grounded theory with the Delphi method.

From a measurement perspective, instrumentation, by far, represented the greatest challenge in reviewing the literature. In most studies, the reader had to dig to find details about the instruments used. The analysis was made more complicated by virtue of at least 80% of the articles lacking full validity and reliability (trustworthiness in qualitative research) information. Observation of these deficiencies is consistent with previous findings in a review of practice-relevant stress research (Lyon & Werner, 1987).

Based on the compelling critical review of almost three decades of empirical literature on stress, coping, and health outcomes in nurse managers and given the findings of the pilot study, the methodology used in the current study incorporates five key recommendations. The following methodology recommendations attempt to bridge the

research gaps identified and these recommendations are integrated into the Chapter III

narrative:

1. Subject selection. A need exists to conduct stress and coping research in U.S.

   nurse manager subjects and to study the U.S. context using a larger multi-site

   sample. Given that little is empirically known about stress and coping in today's

   U.S. nurse managers, researchers must first begin with exploratory studies in

   order to better understand the nature of current nurse manager work. A trajectory

   of interventional studies is ill advised at this time.

2. Deterioration in coping strategies. A need exists to further explore ways of

   coping in today's U.S. nurse managers. If the empirical findings of coping

   deterioration, emotional exhaustion, and early burnout identified in Canada hold

   true for the U.S. context, this would have significant implications for other

   negative health outcomes in U.S. nurse manager subjects. Given the significant

   linkage between leader behavior and its effect on staff nurses, the study of nurse

   manager stress and coping and staff nurse stress and coping is inextricably linked.

3. Health outcomes. A need exists to study health outcomes in U.S. nurse managers

   as these outcomes have to date not been studied in this population. Given that

   nursing is a predominantly female profession, findings from such research have

   potential generalizability to the broader women's health context.

4. Long-term solution. A need exists to focus on a long-term solution to chronic

   work-related stress. Although research addressing occupational stress in general

   has been conducted for decades, there has been limited work in translating

   research into practice. Further, the primary unit of analysis in these studies has

been the individual. Given that individuals do not exist in isolation in their workplaces, organizational structures relevant to work stress must be studied as well. To advance a long-term solution to stress, researchers must not only study individuals, they must also study those individuals within the context of complex health care systems. It is also imperative for researchers to remember that the research is not over until the findings are translated into practice. The desire then becomes the need for new questions to emerge from professional practice to continue the cycle of research needed to build cumulative science, improve the profession, and affect policy that impacts the health care work environment.

5. Theoretical, methodological, and measurement issues. A need exists to obtain a more thorough understanding of stress and coping in nurse manager work suggesting the initial need for qualitative exploration of this phenomena. As the work evolves, a need exists to ground the research in theory and to further enhance sampling techniques and sample sizes. As a further qualitative understanding of the phenomenon of interest develops, a gradual movement toward more quantitative methods of inquiry will be warranted. Moving into quantitative methodology will require a standardized definition of what is a nurse manager, establishing clear conceptual and operational definitions for study variables, and strengthening the validity and reliability of available instruments to include not only self-report measures, but also objective validation of the variables studied.

Chapter III

Methodology

This study utilized a qualitative descriptive design to generate an understanding of stress and coping as perceived by today's nurse manager incumbents. The complex health care systems in which the nurse managers in this study worked had not previously examined the work-related experiences of their nurse managers. Of the three Indianapolis, Indiana facilities in the study, one was concurrently involved in a Magnet designation journey. The Magnet Recognition Program of the American Nurses Credentialing Center (ANCC, 2008) requires in-depth organizational analysis and reflection in order to gain insight into the quality of nursing practice and the related work environment of its nurses. The remaining two hospitals in the study were not currently Magnet-designated and were not pursuing Magnet designation. Use of the three facilities not only enhanced the sample size, but also allowed for observations across individuals (cases) working in different organizational contexts.

Design

A qualitative descriptive design was used to achieve the purpose of this study. This research design is the method of choice when straight descriptions of phenomena are desired and when the goal of the study is a comprehensive understanding of events or experiences in everyday terms (Sandelowski, 2000). Consistent with the findings of the preliminary pilot study, the integrative review of the literature, and the identified need for a better understanding of stress and coping in nurse managers, a qualitative descriptive design was chosen as this design is known to facilitate in-depth interviewing and yield rich participant narratives. According to Sandelowski (2000), "knowing any

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phenomenon (or event or experience) requires, at the very least, knowing the 'facts' about the phenomenon" (p. 335). Qualitative description aids in getting the facts as well as the meaning participants give to those facts. Further, qualitative description is an especially useful approach for guiding future intervention development because it enhances the study's internal validity (Sandelowski, 1996; Sullivan-Bolyai et al., 2005). Qualitative description enhances internal validity by collecting data directly from subjects (in their own words) about ways to manage a particular issue thereby decreasing the likelihood that competing explanations could be responsible for the relationship between a future intervention and an outcome variable (Sullivan-Bolyai, Bova & Harper, 2005). Accordingly, qualitative description is useful in providing the necessary groundwork to establish an understanding of stress and coping in nurse managers and to build the science necessary to design and pilot future interventions.

<div align="center">Human Subjects Approval</div>

This study was approved by the institutional review board for protection of human subjects of Indiana University-Purdue University-Indianapolis (IUPUI). Approvals were obtained from the three participating hospitals in the study: Clarian North Hospital (Appendix A), St. Vincent's Hospital (Appendix B), and the Roudebush VA Medical Center (Appendix C).

This study consisted of administering a demographic questionnaire and a structured interview to nurse managers. Patients were not part of the study and no planned interventions took place. Given the minimal risk involved in this study, expedited review by the Investigational Review Board (IRB) at IUPUI was received in the Behavioral and Social Sciences category of research.

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Participation in the study was voluntary and required informed consent (Appendix D). Confidentiality and anonymity were safeguarded through use of a system of participant coding. The principal investigator (PI) maintained data management. No representative of the organization employing study participants had access to the data. A master list of all study participants with name, addresses, telephone numbers, and corresponding code numbers was kept in a locked file and made available only to the PI and study co-investigators. The master participant list, interview transcripts, and audio recordings will be destroyed at the earliest possible time following completion of the study and dissemination of the findings. The computer used to store the study data was protected with both software and hardware firewalls. Password protected access to computerized data was established and maintained.

There were no specific monetary benefits gained for participation in the study. Professional benefits were identified and included knowledge acquisition to improve the health care work environment for nurses and nurse managers. The potential benefits of the proposed study outweighed the potential minimal risk to individual study participants.

Participants

The sample (n=21) in this study was derived from the target population of accessible nurse managers currently working at three acute care hospitals in Indianapolis, Indiana. The first hospital (Clarian North) is a 170-bed for-profit community hospital designed and built around the concept of healing environments. The second hospital (St. Vincent's) is a 528-bed not-for-profit, faith-based tertiary hospital located in an urban area of the city. The third hospital (Roudebush VA Medical Center) is a 170-bed tertiary not-for-profit government teaching hospital in an inner city location.

"Nurse manager" was defined as a registered nurse holding the title of nurse manager and having 24-hour accountability for at least one patient care unit. To participate in this study, nurse managers needed to have one or more years experience in the nurse manager role and have self-identified as having experienced difficult situations in their manager roles. The use of diverse subjects from three organizational cultures and varying levels of experience assisted in looking for common themes across diversity. To increase the likelihood of diverse participants, an equal number of subjects from each of the three different institutions was sought and experience represented a diversity component. Maximum variation sampling techniques used in this study assisted in describing the unique aspects related to stress and coping that emerged from a few richly detailed cases arising from a heterogeneous participant group (Sandelowski, 2000; Patton, 1990).

The investigator identified a purposive sample of potentially eligible participants for the study. With the permission of the facility Chief Nursing Officer (CNO), the investigator attended a meeting of each organization's nurse managers, briefly discussing the purpose of the study, and inviting interested nurse managers who met the study inclusion criteria to participate. The investigator provided a business card to nurse managers in attendance. The first nurse managers (up to 10 from each institution) who called to volunteer and met the inclusion criteria were selected and enrolled in the study. Although an effort was made to keep the groups balanced such that each of the three groups had a similar distribution of both novice (3 years or less experience) and experienced (greater than 3 years experience) nurse managers, the sample included mostly experienced nurse managers.

Procedures

Participants in the study received a one-time administration of a demographic questionnaire and a structured interview (Appendix E) that was conducted with the full sample of 21 subjects. Each of the 21 individual face-to-face structured interviews was pre-scheduled and conducted by the investigator in a private area in the nurse manager's work setting. The confidential interviews were audio-recorded and transcribed by a trained data management assistant. All interviews lasted 1.5 to 2 hours.

Instruments

Questions used in the structured interview were informed by the transaction-based theoretical view of stress (Lazarus & Folkman, 1984), a synthesis of the nurse manager stress, coping, and health outcomes literature (Shirey, 2006a), and findings from the pilot study (Shirey, Ebright & McDaniel, 2008). The demographic questionnaire inclusive of an interview guide with 14 open-ended questions (Appendix E) addressed stress and coping related to a participant-identified difficult situation. All 21 participants were interviewed using the 14 structured questions.

The interview guide questions and additional probes used during each interview incorporated components of the Klein et al. (1989) Critical Decision Method (CDM). The 5-step CDM (Figure 3) uses a retrospective interview strategy with cognitive probes that focuses on non-routine, difficult situations to generate a cognitive task analysis. According to Klein et al. (1989), "incidents that are non-routine or difficult are usually the richest sources of data about the capabilities of highly skilled personnel" (p. 465).

Prior to initiation of this study, content validity of the 14-item questionnaire and interview guide was established by a panel of experts. Consensus on the data analysis for

this study was achieved through a panel of analyzers (members of the dissertation committee) who worked collaboratively to categorize interview themes and validate interpretation of the findings.

Data Analysis

All individual interviews were confidential and audio-recorded for transcription. Immediately following each interview, the investigator completed a debriefing session and summarized the preliminary themes emerging from the interview. The evolving pattern of themes helped to guide cognitive probes that supplemented responses to the 14 open-ended questions in subsequent interviews. Transcriptions were checked for accuracy by comparing the transcripts to the investigator's field notes and through simultaneously listening to the audio-recordings and reading of the transcripts.

After a review of the audiotapes, a case study summary that addressed answers to each of the 14 interview questions was generated for each interview (or case). A case theme summary with supporting quotes was completed for each interview. A synthesis of data across cases was completed and coded (first level analysis) with significant statements extracted, categorized, and analyzed for content and themes (second level analysis). Qualitative content analysis of the data was achieved through collaboration and discussion with the dissertation committee led by Dr. Anna McDaniel, Chair and Dr. Patricia Ebright, Methodologist. Discussions and review of cases produced agreement on four major themes that were identified in all cases and determined to be pertinent for this study.

Trustworthiness of the Data

To ensure trustworthiness of the data, the research team incorporated four techniques used in qualitative research to support the rigor of the work: credibility, dependability, confirmability, and transferability (Guba & Lincoln, 1994). Trustworthiness strategies included the following:

1. Credibility. Members of the research team have considerable experience as nurse leaders with three of four members having served in the role of nurse manager (Shirey, Ebright, Fisher) and two of four members (Shirey, Fisher) having served as nurse executives in complex health care organizations. Four members of the research team (McDaniel, Ebright, Doebbeling, Fisher) have extensive experience in qualitative and multi-method research methodology and thus provided direction to maintain the integrity of the research process.

2. Dependability. One researcher (Shirey) who has been observed and received feedback on interviewing techniques by a senior nurse researcher (Ebright) conducted all the interviews for the study. This approach facilitated consistency of the data collection methods.

3. Confirmability. All interviews were audio-recorded contributing toward maintaining an audit trail that could trace each step of the analysis back to the original study protocol. Content analysis of the data and peer review of the steps in the analysis was achieved through iterative feedback with the dissertation advisors.

4. Transferability. Participants in this study were all classified in the same way (as nurse managers) and each was required to meet strict inclusion criteria. A clear

definition of what constitutes a nurse manager has been lacking in the literature thus making it difficult to analyze and synthesize findings from previous studies. Uniformity in the nurse manager definition in this study allows for application of the research findings with confidence.

Limitations

There were three primary limitations to this study: purposive sampling techniques, cross-sectional measures, and self-report data. Although the moderately sized, purposive sample in this study aimed to achieve a rich description of stress and coping to emerge through the voices of nurse managers currently in the role, the study design limited generalizability of the findings. The cross-sectional measures only provided a snapshot of the phenomenon of interest. The self-report data may not have provided a full picture of stress and coping in nurse managers.

Summary

The collection and compilation of individual level data using diverse subjects from three health care organizational cultures and varying levels of experience assisted in looking for common themes across diversity. Utilizing a similar number of participants from each of the three different institutions assisted in generating richly detailed data to better describe the unique aspects related to stress and coping in the nurse manager role. Chapter IV outlines and explains the results of this qualitative study. Chapter V follows with identification of the study conclusions and pertinent recommendations.

Chapter IV

Results

The purpose of the research design was to generate an understanding of stress and coping as perceived by today's nurse manager incumbents. A qualitative description was undertaken and data were collected from participants using a demographic questionnaire that included an interview guide with 14 open-ended questions. Data collection involved face-to-face interviews in which participants were asked to reflect on a difficult situation they had experienced within the last week as a nurse manager. Cognitive probes were used throughout the interviews to elicit rich details regarding each nurse manager's self-identified difficult situation.

In the following sections, a synthesis of the demographic and retrospective data analysis is presented. Qualitative content analysis of the data was achieved through collaboration and discussion with the dissertation committee led by Dr. Anna McDaniel, Chair and Dr. Patricia Ebright, Methodologist. Discussion and review of cases produced agreement on four major themes that were identified in all cases and determined to be pertinent for this study. Discussion of the data is presented from the perspective of the themes emerging within the research questions posed in Chapter I.

Demographic Data

A purposive sample of 21 nurse managers working in three acute care hospitals in the Midwestern United States participated in the study. Of the participants in the sample, all but one were Caucasian and all were females ranging in age from 37 to 62 years (Table 2). Almost half of the participants (48%) were over 50 years of age.

Table 2. Frequency and Percentage Distribution of Nurse Managers by Age, Gender, and
　　　　 Race

_____

Variable	Total Sample	
	n	%

_____

<u>Age</u> (Years)

35-39	1	4.8
40-44	6	28.6
45-49	4	19.0
50-54	7	33.3
Over 54	3	14.3
	___	____
Total	21	100.0

<u>Gender</u>

Female	21	100.0
Male	0	0.0
	___	____
Total	21	100.0

<u>Race</u>

Caucasian	20	95.2
Black	1	4.8
	___	____
Total	21	100.0

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Two-thirds of the participants were married (67%) and slightly over one-fourth

(29%) had children at home (Table 3). The participants had 12 to 35 years of experience

in nursing with almost three-fourths (72%) reporting they had over 20 years experience in

nursing (Table 4). Experience in the nurse manager role ranged from 1.5 to 18 years with

most (48%) nurse managers having held the role between 6 and 10 years. Of the 21 nurse

managers, three (14%) were novices to the role (3 years or less as a nurse manager) and

18 (86%) were experienced nurse managers (greater than 3 years as a nurse manager).

Within the experienced category of nurse managers were two nurse managers who were

currently working in a co-manager arrangement. These two nurse managers shared equal

responsibility for three patient care units, 200 full-time equivalents (FTE), and 255

employees.

Table 3. Frequency and Percentage Distribution of Nurse Managers by Marital Status
          and Children Living at Home

_____

Variable	Total Sample	
	n	%

_____

Marital Status

Single	2	9.5
Married	14	66.7
Divorced	4	19.0
Widowed	1	4.8
	___	____
Total	21	100.0

Children Living at Home

Yes	6	28.6
No	15	71.4
	___	____
Total	21	100.0

_____

Table 4. Frequency and Percentage Distribution of Nurse Managers by Experience in
         Nursing and Experience in the Nurse Manager Role

_____

Variable	Total Sample	
	n	%

_____

Experience in Nursing (Years)

1-5	0	0.0
6-10	0	0.0
11-15	2	9.5
16-20	4	19.0
21-25	4	19.0
Over 25	11	52.5
	___	____
Total	21	100.0

Experience in Nurse Manager Role (Years)

1-5	6	28.6
6-10	10	47.6
11-15	1	4.8
16-20	4	19.0
21-25	0	0.0
Over 25	0	0.0
	___	____
Total	21	100.0

_____

Basic education in nursing was mostly at the baccalaureate level with 15 of 21

(72%) nurse managers entering the profession with a Bachelor of Science in Nursing

(Table 5). The highest education in nursing was also the baccalaureate degree and 18

(86%) nurse managers had this educational preparation. Four (19%) of the nurse

managers held masters degrees; one was in nursing, one was in education, and the

remaining two were in business. One-third (33%) of the nurse managers held a clinical

specialty certification in nursing (critical care, oncology, and medical-surgical nursing among others). None of the nurse managers held certification in nursing administration.

The nurse managers reported having responsibility for 21 to 251 FTEs and being accountable for 21 to 325 employees each (Table 6). Most (81%) nurse managers had accountability for 110 FTEs or less. For 66% of the nurse managers, the FTE count translated to 110 or fewer employees. Most of the nurse managers supervised one or two nursing units (71%) and only six (29%) were responsible for three or more units. Of the 11 nurse managers who reported supervising more than one unit, all had responsibility for additional units on the same hospital campus yet most units were located on different floors within their hospitals. Only one nurse manager reported having responsibility for multiple units on more than one hospital campus.

Eleven (52%) nurse managers reported having zero to one assistant manager or charge nurse (Table 7). As for advanced practice nursing support (APN such as a clinical nurse specialist or nurse practitioner), 17 of the 21 (81%) nurse managers indicated not having such resources. Of the 17 nurse managers reporting no APN support, three (14%) had access to a clinical nurse specialist who reported to the facility CNO. The nurse managers saw the APN role as positive, but could only identify help with checking staff nurse competences as a way that an APN could complement the nurse manager role.

Most nurse managers (91%) indicated working 8 to 10 hours per day (mode was 10 hours) with almost half of the nurse managers (48%) recording 46 to 51 work hours per week (Table 8). Almost half (48%) of the nurse managers took work home spending between 5 to 9 hours per week at home completing hospital-related business which was pertinent to their roles.

Table 5. Frequency and Percentage Distribution of Nurse Managers by Educational
Preparation and Specialty Certification

_____

Variable	Total Sample	
	n	%

_____

Basic Education in Nursing

Diploma	2	9.5
Associate Degree (ASN)	4	19.0
Bachelors Degree (BSN)	15	71.5
	___	____
Total	21	100.0

Highest Education in Nursing

Diploma	0	0.0
Associate Degree (ASN)	2	9.5
Bachelors Degree (BSN)	18	85.7
Masters Degree (MSN)	1	4.8
	___	____
Total	21	100.0

Clinical Specialty Certification in Nursing

Yes	7	33.3
No	14	66.7
	___	____
Total	21	100.0

Specialty Certification in Nursing Administration

Yes	0	100.0
No	21	0.0
	___	____
Total	21	100.0

_____

Table 6. Frequency and Percentage Distribution of Nurse Managers by Role
Responsibility: Full-Time Equivalents, Number of Employees Supervised, and
Units Assigned

Variable	Total Sample	
	n	%
Full-Time Equivalents		
21-50	10	47.6
51-80	5	23.8
81-110	2	9.5
111-140	0	0.0
141-170	1	4.8
Over 170	3	14.3
Total	21	100.0
Number of Employees Supervised		
21-50	6	28.5
51-80	5	23.8
81-110	3	14.3
111-140	3	14.3
141-170	1	4.8
Over 170	3	14.3
Total	21	100.0
Number of Units Assigned		
1-2	15	71.4
3-4	5	23.8
Over 4	1	4.8
Total	21	100.0

Table 7. Frequency and Percentage Distribution of Nurse Managers by Role Resources: Number of Assistants and Advanced Practice Nurse Direct Reports

_____

Variable	Total Sample	
	n	%

_____

Number of Assistants Available

0-1	11	52.4
2-3	6	28.5
4-5	1	4.8
6-7	1	4.8
Over 7	2	9.5
	___	____
Total	21	100.0

Advanced Practice Nurse Direct Reports

Yes	4	19.0
No	17	81.0
	___	____
Total	21	100.0

Access to Advanced Practice Nurse

Yes	3	14.3
No	18	85.7
	___	____
Total	21	100.0
	___	____

_____

Nurse managers participated in 3 to 13 committees each with 10 (48%) of the nurse managers reporting involvement in 6 to 10 committees, many in which they also

Table 8. Frequency and Percentage Distribution of Nurse Managers by Worked Hours: Hours Worked Per Day, Hours Worked Per Week, and Additional Hours Worked Per Week at Home

Variable	Total Sample	
	n	%
Hours Worked Per Day At Work		
8-10	19	90.5
11-13	2	9.5
Over 13	0	0.0
Total	21	100.0
Hours Worked Per Week At Work		
40-45	8	38.0
46-51	10	47.7
52-57	2	9.5
Over 57	1	4.8
Total	21	100.0
Additional Hours Worked Per Week At Home		
0-4	8	38.0
5-9	10	47.7
Over 9	3	14.3
Total	21	100.0

served as the committee chairperson (Table 9). When interviewed, the nurse managers

itemized their list of committees that came to mind, but most reported there were more

committees that they just did not remember. Twelve (57%) of the nurse managers

reported never having involvement in direct patient care. Nine (43%) nurse managers

indicated they routinely worked as helpers covering for meal breaks, answering call

lights, doing patient treatments, and taking charge nurse duties.

Table 9. Frequency and Percentage Distribution of Nurse Managers by Committee
　　　　　Participation and Involvement in Direct Patient Care

_____

Variable	Total Sample	
	n	%

_____

Committee Participation (Total Number)

1-5	7	33.3
6-10	10	47.7
Over 10	4	19.0
	___	____
Total	21	100.0

Involvement in Direct Patient Care

Yes	9	42.9
No	12	57.1
	___	____
Total	21	100.0

_____

Description of Difficult Situations

Of the 21 participants or cases retrospectively describing difficult situations, 11

(52%) involved feeling pressure to perform, six (29%) reported interpersonal conflicts

associated with organizational communication deficits, and four (19%) described issues

of human resources and staffing. The cases related to performance included frequently

having to rise to the occasion with a stretch goal and having multiple commitments and

excessive committee work. The nurse managers verbalized a need to do "whatever it

takes" to get the job done even at great personal cost inclusive of experiencing moral

distress. The cases associated with interpersonal conflict centered upon perceived

organizational communication deficits that were clustered within a group of participants

employed at an organization with a reportedly negative organizational culture. Issues

regarding human resources and staffing had to do with nurse manager perceptions of

personnel downsizing (terminating employees), upsizing (recruiting, interviewing, hiring

individuals to fill vacant positions), and rightsizing (floating, re-assigning, and retaining

employees).

<div align="center">Research Questions</div>

Content analysis of the interview transcripts produced agreement on four major

themes (sources of stress, coping strategies, health outcomes, and decision-making) that

are addressed within the answers to the research questions posed in this study. Table 10

summarizes the four major themes and twelve sub-themes identified and relates these to

the four research questions posed in Chapter I. Table 11 provides further detail about the

study sub-themes.

Research Question 1*:* What situations contribute to stress in today's nurse managers?

Theme 1, Sources of Stress. One major theme identified across cases was sources

of stress that directly addresses the first research question. Four sub-themes for sources

of stress were identified to include situations in general that are sources of stress, factors

that increase or decrease stress, and emotions associated with stress (Tables 10 and 11).

Table 10. Research Questions, Major Themes, and Sub-Themes Surrounding Nurse
Manager Stress and Coping Experiences

Themes	Sub-themes
Sources of Stress	• Situations in general that are sources of stress
RQ1: What situations contribute to stress in today's nurse managers?	• Factors that increase stress
	• Factors that decrease stress
	• Emotions associated with stress
Coping Strategies	• Using a combination of strategies
RQ 2: What coping strategies do nurse managers utilize to deal with stressful situations in their nurse manager role?	• Experience and differences in coping strategies
	• Co-manager model and differences in coping
Health Outcomes	• Psychological outcomes
RQ 3: What health outcomes do nurse managers report as a result of frequent exposure to stressful situations in their nurse manager role?	• Physiological outcomes
	• Functional ability outcomes
Decision-Making	• 10 questions that guide decision-making
RQ 4: What factors influence nurse manager decision-making related to stressful situations?	• Effects of stress on decision-making

Table 11. Stress and Coping in Nurse Managers: Synthesis of Themes and Sub-Themes
          Across Cases

_____

Themes and Sub-Themes

_____

1. **Theme: Sources of Stress**

   Sub-Theme: Situations in general that are sources of stress

   - People and Resources
   - Tasks and Work
   - Performance Outcomes

   Sub-Theme: Factors that increase stress

   - Issues related to actual nurse manager work
   - Issues surrounding nurse manager work

   Sub-Theme: Factors that decrease stress

   - Focusing on the positives
   - Having support from others
   - Completing and achieving targets
   - Incorporating quality down time

   Sub-Theme: Emotions associated with stress

   - Pure positive emotions
   - Pure negative emotions
   - Mixed emotions

_____

2. **Theme: Coping Strategies**

   Sub-Theme: Using a combination of strategies

   - Use of both emotion-focused and problem-focused
     coping strategies
   - Narrow versus extensive repertoire of self-care strategies

Sub-Theme: Experience and differences in coping strategies

- Coping strategy variations based on level of nurse manager experience
- Organizational culture and effects on nurse manager coping

Sub-Theme: Co-manager model and differences in coping

- Co-manager model and positive effects on coping
- Development of sensing abilities in experienced nurse managers regardless of co-manager model

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3. **Theme: Health Outcomes**

Sub-Theme: Psychological outcomes

- Differences in psychological outcomes based on nurse manager experience
- Feeling overwhelmed, level of experience, and span of control
- Differences in psychological outcomes based on co-manager model

Sub-Theme: Physiological outcomes

- Insomnia as a physiological outcome
- Differences in physiological outcomes based on co-manager model

Sub-Theme: Functional ability outcomes

- High level of functional ability despite frequent difficult situations
- Differences in functional ability outcomes based on co-manager model

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4. **Theme: Decision-Making**

Sub-Theme: 10 questions that guide decision-making (Who? What? When?)

- Who is asking?
- What worked before and what will likely be supported now?
- What are the norms within the organizational culture?
- What is the effort-reward ratio associated with the decision?
- What is the level of urgency in this situation?
- What is the right thing to do?
- What are the potential personal consequences of my actions?
- What will be the impact of my decisions or that of others on my staff and our patients?

- Is there a deadline? If so, when?
- What is within my control?

Sub-Theme: Effects of stress on decision-making

- Negative effects on quality decision-making while at work
- Negative effects on preponderance for decision-making when at home

---

Sub-Theme, Situations in General That Are Sources of Stress. Situations in general that are sources of nurse manager stress may be sub-divided into three categories: people and resources, tasks and work, and performance outcomes. Regarding people and resources, 18 of 21 (86%) nurse managers cited this as a source of stress. Within this category, nurse managers talked about dealing with negative people, having to give performance counseling to sub-performing employees, and working through associate relationships (politics with lack of transparency, difficulties with interdepartmental collaboration). Additionally, people and resources issues had to do with patient and family complaints, maintaining physician relationships, procuring individuals to fill position vacancies (including taking on temporary additional responsibilities to ensure the overall functioning of their units), procuring resources to facilitate the nurse manager role, and navigating difficult matrix reporting relationships. The inability to procure the necessary human resources needed to operate their units was cited as most burdening for nurse managers. Two nurse managers discussed difficulties related to people and resources as follows:

> The stress comes in just getting enough nurses to actually take care of patients
> 12 hours at a time. But to compound that, having this overwhelming sense
> that you are responsible for everything related to staffing, but you don't
> have all the tools you need. An example would be, I really feel my human
> resources (HR) department and my nurse recruiter specifically, was not
> doing her job and I spent as far back as December meeting with HR and
> telling them we are going to be in crisis mode here, we have got to do more,
> and giving them my input on what I think we could do. They were very

60

slow in responding to my concerns. We met in the beginning of December,

and at the end of January, still really nothing had been done. Meanwhile,

the patients are here and I am responsible for taking care of them. I spent

from January until now (April) just going back and re-tracking my steps

with HR. I spent considerable time emailing her asking to set up interviews

and going back four weeks later and seeing that the emails had not even been

opened. So I called the HR department and told them that I hated to take this

personally, but it was truly affecting my personal life and my work life

balance if I did not have nurses here. I was trying to make them understand

why I am passionate about finding nurses to fill my positions. I think the

frustration is being the responsible party, but having none of the power to

control the situation so it is very frustrating.

I don't have a quality improvement manager right now so I am trying

to keep that stuff going (in addition to doing my nurse manager job).

Handling the people and resources part of the role was reported to be both the best

and the worst part of the job. This aspect of the role was said to require an extraordinary

amount of nurse manager energy, but it was investment of time and effort that was mostly

invisible to others. One nurse manager stated:

The people piece is the best and worst part of the job. The best part

is developing my (assistant) managers. Understanding and helping

them with their goals to become independent is rewarding. The worst

part is dealing with difficult people and disciplining, especially when

guiding others in the process. We had an employee who needed disciplining

and he was not accepting accountability for behaviors resulting in a

grievance and us needing to respond to that. I did a mental check of the

time it took me to deal with this matter and I counted 25 hours in one week.

More and more it became frustrating when I was spending so much time

on this matter when I have so many other things I needed to spend time

and energy on. I understand why some managers choose to ignore

behaviors and performance issues on employees that should be gone.

I do think that it is an expectation to just figure it out day in and day out.

I don't know if people recognize the labor and dedication and the brains

it takes to figure it out every day. I feel constantly challenged to do the

impossible.

Relationships with physicians were cited as a potential source of stress in all three

health care organizations. The nurse manager/physician relationships were mostly

positive in organizations in which the nurse managers indicated a positive organizational

culture existed. When disruptive physician behavior was commonplace, nurse managers

reported disrespectful behaviors that threatened working relationships and had

implications for patient care quality and safety. One nurse manager stated:

The physician I work with (medical director of the unit) is someone

I consider bipolar. Some days he is really good and others, he is

really not. The other day, he ripped one of my nurses apart in front

of other physicians. The nurse told me and I had to deal with the

aftermath. Nurses are very uncomfortable with this physician and

I end up being the middleman. After talking to him, I said to myself,

I have dealt with this before. It's probable that I am going to deal

with it again. As a nurse manager, I do not have much within my

purview that I can do about a physician's behavior. He's the head of

my unit. I don't feel that I can go above him to get to the root of the

problem. That's the way it is. The people above him are not available.

They don't want to be bothered by this kind of stuff. I'm not just talking

about his path of authority. I also mean my path of authority. I don't

feel I am supported much.

Added complexity in the nurse manager role represented a source of stress and

this occurred often as a result of confusing matrix reporting relationships. When

consistency between goals, objectives, and mission critical strategies was not evident

between senior leaders, this caused the nurse manager to be caught in the middle of the

supervisor misalignment. One nurse manager described this dilemma.

My Vice-President of HR and the facility CNO tell me to continue doing

what I have been doing. My director (of nursing) on the other hand, tells

me to do something different. In the meantime, the conflicting instructions

impede the department's progress, cause me to feel less effective, and

create concerns that this situation may indirectly affect the department, my people, and our patients.

Situations in general that are sources of nurse manager stress include three categories and the second category to be discussed involves tasks and work. Regarding tasks and work, 16 of 21 (76%) nurse managers identified staffing, understanding the financial side of the nurse manager role (most stressful in the first two years as a nurse manager), and sheer volume of work (wearing many hats, add on work, and extensive committee work). Some nurse managers also discussed having to rotate house supervisor duties in addition to the nurse manager role as a stressor and major job dissatisfier. Staffing was cited as *the* most stress producing part of the nurse manager role and was mentioned as a "tipping point" or that which could push many over the edge. Most of the nurse managers made specific comments regarding staffing and the following is a representative sample of those comments:

Staffing is the number one stressor for me.

I've often said, if it wasn't for the staffing issues, this job would be a good job to have. It is the staffing part of it that gets you down day after day after day.

Staffing concerns me especially when I don't have a closet full of nurses. I know how horrible it feels to work short and having others think there's nothing being done about it, but the nurses are just not there.

Although the novice nurse managers reported understanding the financial aspects of the role as most problematic, the experienced nurse managers reported having less anxiety regarding these aspects of their positions. The experienced nurse managers indicated that it took them approximately two years of on-the-job training to feel comfortable with the financial management aspects of their roles. One experienced nurse manager stated:

> It's getting better, but I think understanding the financial side of a job like this can be very stressful. Managing the budget and creating the budget is not one of my most stressful feats anymore. After a couple of years in the role, I was able to put all the pieces together. You need to first learn the system, then you learn the numbers the system gives you, and then you can put it together and analyze it. It was probably two years that it took me to get to the point of feeling comfortable.

The sheer volume of work expected of the nurse managers represented an area of concern for effectiveness in the role. Nurse manager work volume was compounded by add-on work that came in the form of activities beyond the scope of the unit's daily operations (new initiatives, construction projects, and committee work requiring multiple meetings). The nurse managers reported having more work to do than was humanly possible for one individual. Although nurse managers working in the co-manager model also reported having considerable amounts of work to complete, they nevertheless indicated that having another nurse manager equally invested in the role contributed to their collective positive outcomes and raised their performance to a new level of

innovation. The following comments relate to what the nurse managers had to say about

sheer volume of work:

> The bottom line is the volume of work. I could work 12 hours a day
>
> straight and not get it all done. I am easily distracted. It looks like a
>
> revolving door at my office. There's constantly people here asking me
>
> questions and so I feel I am constantly being sidetracked. It is very
>
> stressing and hard to focus on work and get something done here.

> Previously there were three people doing my job. Now there is just me.

> I have really struggled since the first of the year feeling like I am not
>
> coping as well with the additional stress in my role. I think part of it
>
> is maybe related to our unit renovations. Doing all that in addition to
>
> my regular job has just become a little bit overwhelming to me.

> What makes it difficult is the matter of the time constraints. The deadline
>
> is an issue, but doing everything else that is expected in the role is big.
>
> You continue to attend meetings, check your financials, make sure that
>
> staffing is okay plus keep up with your day-to-day activities plus prepare
>
> ahead of time. It makes for long hours especially for the past several
>
> weeks.

I have a lot of day-to-day things that can't be ignored. When your boss

asks for something, you can't ignore it. When it's time for employees to

get their evaluations, you don't want to be late. I have all this stuff to

accomplish and it causes stress. I don't want to be late.

If you're expected to do everything well, you're not going to do anything

well.

I spent my first two years managing the units that I manage. I probably

could not have thought of being creative then either. My initial creativity

was around how did I get the staffing where I needed it to be and I was

focusing on my survival skills. But now I feel we are well beyond the

survival mode on the units that we co-manage together. We are now

at the point of how do I make improvements to that. Every day I walk

the path of what do I need to do next. I think the co-leading arrangement helps.

Situations in general that are sources of nurse manager stress include three

categories and the third category to be discussed involves performance outcomes.

Regarding performance outcomes, 14 of 21 (67%) nurse managers cited this category as a

major source of stress. This category centered on concerns about patient satisfaction

scores, employee retention and vacancy rates, operational efficiencies, and patient and

staff safety. The nurse managers were astute systems thinkers and had a keen

understanding for the interrelationship between their role performance and the effect on

organizational outcomes for which they were held accountable. The nurse managers

understood how affecting one parameter (inadequate staffing) could negatively affect

desired outcomes (patient satisfaction, staff nurse retention) and they worked hard to

juggle the different elements of the role to "fix things" before they had to be told to do so.

Nurse manager statements related to performance outcomes include:

> Having low or less than desirable patient satisfaction scores, having
>
> an increase in employee turnover, and needing to implement changes
>
> identified by my supervisor would be negative stress for me.

> If six months from now, I still have a high vacancy rate and high
>
> turnover, I can expect negative consequences. We need to be able to get
>
> good people in here and then retain them. As a person, I take this role
>
> very personally and would see myself as being a failure personally and as
>
> a manager if I can't fix it. It is my job to fix it. Everything is my job to fix.

> Another big one for me is patient safety whether it's falls, medications, care,
>
> all that stuff. I am also concerned about the safety of the nurses and that they
>
> have what they need to do their job.

Sub-Theme, Factors That Increase Stress. Factors that increase stress fall into

two categories: issues related to actual nurse manager work and issues surrounding nurse

manager work. Regarding issues related to actual nurse manager work, 10 of 21 (48%)

nurse managers cited this category of issues to include responsibility and knowing what

the right thing to do is yet lacking power to get it done. The category related to not

having enough hours in the day to do the work, being torn in multiple directions, having

excessive meetings and committee work, and experiencing numerous interruptions.

Having multiple projects that interfered with the nurse manager's ability to strategize,

staffing challenges including high patient acuity, sorting through multiple sources of

communication, and employees not demonstrating personal and professional

accountability added to the actual nurse manager work category. Specific quotes that

support the issues related to actual nurse manager work are as follows:

> Really feeling that you know what the right thing to do is, but not having
>
> the power to do something about it increases my stress.

> The stress of staffing will always be there and I recognize that. I just want
>
> to make it as small as it needs to be. I think the frustration is being the
>
> responsible party, but having none of the power to control the situation
>
> so it is very frustrating. You would think that clinical care would be
>
> one of those stressors, but that is something I think I have control over
>
> so this is something that does not tend to stress me out. It does not
>
> cause me stress because I have the power to change it and fix it.

> Day in, day out, every 12 hours, I am responsible for having adequate nurses
>
> to take care of these patients, but I have no ability to decide how we are recruiting
>
> these nurses. I guess I am kind of left to constantly plead my case
>
> or spend 6 weeks justifying actions that I feel are completely at the mercy of

an external department to decide what they are going to bring into action.

I can tell them (HR) I am going to be looking at a staffing crisis. I can tell them that my census is going to go up in the winter. I can tell them that I only have enough nurses to take care of 4 patients, but I have no ability to turn patients away. So when we have 12 patients, I am the one here trying to figure out how to take care of them. So I really have no control of either the input or the output. Laughter. Take all comers with what you have and just do it.

I am very conscious of the fact that I know how long it takes me to get things done. I don't have any problem saying no. I don't have enough hours in the day to dedicate to things. I am very conscious of not taking on more than I can chew. I have done that in the past, but I am not doing it right now. I am very thorough and I don't want to be the jack-of-all trades but master of none. I like to get things done and do them well and then move on.

I can leave my office to walk out to the nurses' station with a task to do and five people have asked me something before I get there.

High patient acuity increases stress because that increases the nurses' stress directly and that in turn affects me.

Putting out fires involves simultaneously staffing a unit aggravated by

the fact that you do not have a full complement of staff, being asked to

help with an emergency situation, having the HR department call to say

an applicant is here for a job interview, going to your office and finding

out that you have an email with a project that has a short-term deadline

and it involves pulling data. On top of this, you notice that you have 50

emails in your inbox. The number of emails in the course of the day is

stressful especially when people see this as a priority.

From the time you get here, all you hear all day long is can I ask you

a question, can you do something about this, can you do something

about that. I just can't breathe for one minute and I can't say no.

Regarding issues surrounding nurse manager work, 13 of 21 (62%) nurse

managers cited this category of issues to include organizational red tape, interpersonal

conflict, regulatory issues, multiple ongoing hospital initiatives occurring simultaneously,

and system inefficiencies. Specific quotes that support the issues surrounding nurse

manager work are as follows:

To me, things that look pretty easy to solve and we have to jump through

hoops and provide more data when it is obvious you already have enough

data is stressful. I am all about presenting a business case. I am okay with

that, but when I am asked for more data and it is almost like a stall tactic,

I have a problem with that.

I am doing a workaround to address an (unresolved) equipment problem (that the central supply manager should be addressing). Ultimately, this is a patient care issue that affects the entire hospital. If we are to uphold our mission statement, we will need to fix this problem.

Unexpected things with high value that come out of the blue fall into the factors that increase stress category. The unannounced survey falls in this category, too.

The ability to plan in the nurse manager role is difficult. External forces don't allow for planning. For example, I can come in on Thursday and plan to update the payroll before the Monday deadline, but get informed that the payroll system will be down and I can't get my work done as planned.

Sometimes we get a little too tight on people resources to actually accomplish a task well. Sometimes there are programs and projects where it would make sense to pull in some additional human resources on a short-term basis. We should do that more frequently yet it seems like we look internally within the organization and add that on to what they already do. I would like to see the organization provide some additional help with that especially with special projects. We always have projects like changes in information technology, electronic charting, construction projects all happening at the same time.

Sub-Theme, Factors That Decrease Stress. Factors that decrease stress fall into four categories: focusing on the positives, having support from others, completing work and achieving targets, and incorporating quality down time. All 21 of the nurse managers discussed factors that decrease stress yet only the 18 (86%) experienced nurse managers actively pursued ways to decrease stress. The experienced nurse managers used mind over matter to almost "psyche themselves" into steering away from negativity and seeing the positives in situations. Having support available was important and the co-managers seemed to report a high level of support that not only empowered them in their roles, but also helped to get the sheer volume of work completed. The nurse managers in general were tuned into the capabilities of their colleagues and knew who they would want to seek as mentors in various situations. Use of various mentors was valued. Completing work and achieving targets was important yet nurse managers reported that given the multiple interruptions in their daily work, having the ability to complete a project at work without interruptions was a luxury. Most of the nurse managers (except the co-managers) had difficulty saying "no" to one more thing on their plates. Specific quotes supporting the four factors that decrease stress are as follows:

> Walking away from negativity helps. I think my only sources of stress
> are the negative people. Negativity really stresses me out. I almost have
> to walk out of a room when I experience it especially at very high levels
> of the institution. I have control of it with my staff, but not necessarily
> with others at a higher level in the organization. I have a sense of control,
> happiness, creativity, and empowerment when I don't have to be around
> negativity.

I like bouncing ideas and issues with my co-manager. She holds my

confidences. If I express a negative thought, she will be the first to say

I don't think you should be feeling that way. Have you thought about

this or that?

There's a few nurse managers that I talk to that I feel very comfortable

talking to that I can talk to about situations. It's not that I am always by

myself. There are a few people I can talk to.

Knowing who my mentors are for certain things decreases my stress.

All stress in the nurse manager role has to do with support and

relationships. It all boils down to whether you feel supported and have

good relationships.

Having uninterrupted time to complete a task or a project is helpful.

I can feel good if I can leave at the end of the day and leave on time and

know that I completed something or that I have a to do list and could

scratch three things off the list.

I said not too long ago, maybe if leadership would want to help us learn

and coach us into doing something, it might be something like how to say

no. It is okay to say no and how can we do that without feeling more stressed

or feeling like we have let somebody down. That is not something that is

covered in Management 101 usually. I think that if you were to talk to any

of our leaders, they would say of course, you can say no. All of us get caught

in the process of making this place better and that is in our nature. We also

don't take very good care of ourselves.

Prayer helps. Reflection time helps. Sometimes it's just coming into my

office and being by myself for a few minutes.

Sub-Theme, Emotions Associated With Stress. Emotions in this study

were associated with the difficult situations the nurse managers described.   Nineteen of

21 (91%) nurse managers stated they liked their jobs up to an including saying they loved

their jobs. Three (14%) nurse managers expressed turnover ideation that had to do with

emotions associated with the role's infringement upon their work-life balance and as a

result of their lack of perceived support in their role. Turnover ideation was heard in both

the novice and experienced nurse manager categories. All of the nurse managers

verbalized a combination of both positive and negative emotions associated with the

difficult situations they related.

Emotions fell into three categories: pure positive emotions, pure negative

emotions, and mixed emotions. In the pure positive emotions, nurse managers reported

feeling good, happy, proud, energized, relieved, and having a "can do" spirit. Of the

negative emotions mentioned, these included feeling alone, deflated, challenged to

constantly do the impossible, and feeling frustrated, out of control, sad, bitter, and full of

self-doubt. Mixed emotions included loving all the changes that came with the role yet feeling the scope of the role was too broad. In examining the scope of the role, the nurse managers both novice and experienced (not the co-managers) described frequent feelings of inadequacy and acknowledged a "fear of losing it." The following nurse manager comments reflect the breadth of emotions described:

> I felt good that I was supported by other managers in that this was a
>
> problem that needed to be addressed.

> I felt proud of the performance of our staff and every department and
>
> physician that was interviewed.

> I felt relieved after saying no.

> Initially following the situation, I had a can do feeling that was almost
>
> like mind over matter.

> I feel not defeated by any means, but deflated.

> The challenge is not what bothers me. It is that the unrealistic is expected
>
> and you are made to feel inadequate if you cannot produce at an unrealistic
>
> level. It creates that next level of stress.

It was frustrating and it was distracting to anything else that I had to do that day. It kept coming to my mind that somebody else needed this information and wants this done. It was a constant pushing that aside so that I could stay focused on what I needed to do for the day. I guess it is kind of like that whole interruption theory and how long it takes you to get refocused on your work.

Most nurses want to feel they are in control. This has been a time when you feel you are not in control. Other than thinking about the evaluations that need to be done, in the back of your mind you have to think of everything else you are doing.

There are times when I do not feel I am doing the job as well as I could.

If unable to fix the situation, this would consume my every thought. It would make me sad and unpleasant. In the last week, I have been snapping at my husband. When I go home, I am too mentally spent and not excited about spending time with friends. Normally, I am bubbly and upbeat so this is different for me. I don't even want to talk to my best friend. I don't want to think anymore.

I would say that this job probably more than anything rules my life. Today is a good day so I feel like I am doing what I am being paid to

do. Most days, I feel that I do not get paid nearly enough to be married

to my job the way I am married to my job. It makes me bitter because

I think in the business world, people would make twice what I'm being

paid for this type of accountability.

I worry that they might push my buttons and that I might not say the

things I am supposed to say in that situation.

Research Question 2: What coping strategies do nurse managers utilize to deal with

stressful situations in their nurse manager role?

Theme 2, Coping Strategies. The second major theme identified across cases was

coping strategies that directly address the second research question. Three sub-themes

for coping strategies were identified to include using a combination of strategies,

experience and differences in coping strategies, and co-manager model and differences in

coping (Tables 10 and 11).

Sub-Theme, Using A Combination Of Strategies. Fourteen of 21 (67%) nurse

managers used a combination of both emotion-focused and problem-focused coping

strategies. Six of 21 (29%) nurse managers inclusive of two novices used predominantly

emotion-focused coping strategies while one (5%) experienced nurse manager used

mostly problem-focused coping strategies. When examining the differences in coping

strategies between the more novice nurse managers (3 years or less as a nurse manager)

and the experienced ones (greater than 3 years as a nurse manager), the more novice

nurse managers demonstrated a predominant use of emotion-focused coping strategies along with a narrow repertoire of self-care strategies.

Sub-Theme, Experience and Differences in Coping Strategies. In this study, coping responses varied based on the extent of the nurse manager's experience and whether or not they were employed in a co-manager model. The co-managers coped most effectively (reported no health consequences of stress, were able to use mostly problem-focused coping strategies, indicated using a wide repertoire of self-care strategies), followed by the experienced nurse managers, and then by the novice nurse managers who coped the least effectively (reported many psychological and physiological health consequences of stress, used mostly emotion-focused coping strategies, indicated using a limited repertoire of self-care strategies). Narrative from the novice and experienced nurse managers is provided in the next two paragraphs. Findings of the experience sub-theme are also reported as these relate to organizational culture and its effect on nurse manager coping. Differences in coping based on the experienced nurse managers in the co-manager model are reported in a separate sub-theme.

Of the novice nurse managers, two used mostly venting with others as a primary coping strategy. Each of the novice nurse managers reported realization that they needed to invest more efforts into their personal self-care practices. Coping-related comments from novice nurse managers are as follows:

Other than venting, I am learning different ways to cope as I gain more experience in this job.

I find friends to count on and to be able to vent to, my supervisor being one of them. She is a very good listener without feeling she has to do something about everything.

I need to take more time off is what I need to do. I know what my next plan of action will be which is to consciously release myself and make myself removed from a situation and allow myself to come to the conclusion that this place will survive without me for a time.

Last Monday night, my husband and I went on a bike ride. Exercise is something I have always valued, but I have not had time to devote to it as I would want. It was a very strenuous ride and that really helped me anyway because you are so focused on what you are doing and breathing so hard that everything else just leaves. I am sure that helped.

Of the experienced nurse managers (n=18 inclusive of 2 co-managers and 16 non-co-managers), 15 of 18 used a broad repertoire of problem-focused strategies. These strategies included seeking validation and new direction from colleagues, surrounding themselves with resources that could lead to issue resolution, focusing on positive self-talk, and developing allies to solve problems. The experienced nurse managers blocked their calendars to carve out time for planning and project completion, were adept at letting go, and actively confronted the sources of their problems. Experienced nurse managers invested in self-awareness, engaged in more frequent reflection (prayer, taking

80

short breaks for self-reflection), and incorporated renewal practices into their daily routines (not missing meals, incorporating exercise into daily activities, self-regulating their work hours, taking vacation time). Experienced nurse managers compartmentalized aspects of their multiple roles focusing on work while at work and focusing on family when at home.

> My self-talk is that it is not worth getting upset about this, and that in the big picture, it is a very small piece and not a big deal. I try to see the good in everyone. It is definitely positive self-talk. If you want to make your life more enjoyable, you learn how to cope. Thinking positively to me is the way to do it.

> I have surrounded myself with great practice facilitators and I know I don't have to do it all.

> You get used to dealing with situations like that. I just dig in and do what I need to do. Sometimes I get supported and others I do not. That might be because you made a poor choice that you are not supposed to. I go with my 'gut' instinct and it's usually right. I can't explain that gut instinct. You just know when there's more to it than meets the eye. That's probably from being burned one too many times. You know, I have been doing this for 16 years. I am sure I fell for it quite a bit in the beginning.

I do know that when I start feeling guilty or worrying about all the things that I have to get done, I tap into that reflective side, take a deep breath, talk myself down, and just say it will be there tomorrow. Whereas I used to stay up all night long working on it, now I just work on it tomorrow when I come in.

I do block out time on my calendar to do the planning things and projects.

I deliberately do not get on the computer at night. I try to leave work at work, if I can. I do carry my pager on me all the time. I know that once I start thinking of work, it is hard for me to let it go. I used to get on the computer at 10:00 PM and then I couldn't sleep because I was in that work mode thinking about work issues.

Now I have learned that staff is not always expecting you to resolve things. I realize now that they know that there are always going to be issues. What they are looking for is support and that you are there for them. I don't have to fret as much now because I realize I can't fix it all and I did try to do that initially. I always try to remind myself that I want to be a manager who likes to manage the way she wants to be managed.

My coping skills are to do a lot of reflection. If I am uneasy or feel stressful,

I have to take time away to think rather than reacting right away. I don't

generally trust my initial reaction. I need to reflect.

I physically make myself find a quiet place. I remove myself from the

situation and talk myself into almost a form of prayer. The song Jesus Loves

Me is like prayer. It is a song of comfort from my childhood and I find it

helpful.

I always take spring break with the kids and then I do a late summer vacation with

my husband, just us two.

Of the experienced nurse managers who used mostly emotion-focused coping

strategies (4 of the 18), three of these nurse managers worked in what was reported to be

a negative organizational culture. In these three nurse managers, a common strategy

reported was avoidance. Their strategies suggest that after repeated attempts at

addressing the root causes of their issues, their senior nursing leaders remained

unresponsive to their concerns. This lack of perceived support and senior leader

responsiveness discouraged the nurse managers from returning to seek permanent

solutions. Emotion-focused coping strategies associated with difficult situations in which

the nurse managers felt they did not get senior leadership support include the following:

I cope with difficult situations (referring to the abusive physician situation

previously mentioned) by wanting to sleep and eating a large amount of sugar.

I am still coping. I have been directly avoiding this person and waiting for

the right time to approach her regarding this matter. I don't like this,

but I am waiting to see how things go here.

What I find myself doing is gravitating to people on the unit who I feel

very comfortable talking with and avoid this group over here where he

(referring to a problem employee transferred by senior management to

the nurse manager's unit for 'another chance') is that I don't want to

deal with. So I have to make myself interact with both groups because

it is easier to go to the comfort group because this group is ready to do

battle for me.

Sub-Theme, Co-Manager Model and Differences in Coping. Of the co-managers

in the study (n=2), there was evidence of cognitive reframing that helped put issues into

perspective. Because the co-managers felt much support in their roles and felt

empowerment from their CNO and each other, the co-managers were not easily frazzled

even under situations of extreme duress (situations that would maybe cause others to lose

it).

I would say that my strongest strategy is to talk it over with my colleague

(co-manager). Here is how I was reading it. What were you thinking?

That type of thing and validating with her.

I go to lunch everyday with my co-manager colleague who does not miss a meal.

I exercise every morning before I come in. I try not to put in more than a 10 hour day.

The difference now is that I can talk to myself and effectively change my course. It comes from experience to know that it is not going to help worrying all night long. It will be there in the morning and I probably did not have that knowledge before to have been able to say it's okay. I think I can cope just fine now. No matter what job you have, there will be stressors. We are never going to get away from that. It's about how you handle the stressors. I realize that there is an appropriate amount of energy that you put to each of those.

I have had some tragedy in my life as recently as 2001. I think that when you experience that, there is nothing at work that can be so sad. I think that could have been the beginning of a change for me in looking at a very painful experience for months and months and months and was still functional at work. Maybe when you go that much on the extreme and probably getting older, maybe life is not that tough. It could be a lot worse. We could allow ourselves to go down the negative path, but

I just don't allow myself to do that. It is a strength of mine to be able to act this way and it is also a weakness of mine.

I can say I don't think I can do this right now even in a nursing leadership meeting with my CNO there. Give me a month and I can do it. Right now, I have a lot of work around my pharmacy committee and my technology upgrades. I know that is very consuming. I am also doing a lot of recruiting and hiring. Every person who has walked through the door, I have interviewed and hired and we are almost completely staffed. I am not going to go back to working 14 hours a day.

There is a level of confidence that comes with time. I have reached a certain level where I can say what are you going to do if I say no, fire me. I don't think so. I can't do it. I have done a lot for this organization and in this role, but you are not going to fire me because I said no to one project. If it is important, I am okay with someone sitting down with me one-on-one and saying I need you to do this. I don't think that I am going to be fired. My yearly evaluation has so many projects and so many things that my work speaks for itself.

With maturity in the nurse manager role (not just with co-managers) comes development of greater sensing abilities (as compared to just feeling abilities) that help with coping and can be magnified through coaching, mentoring, and personal awareness.

This observation derives from the nurse manager's understanding of going with gut instinct and may also be noted in the statements that follow.

I will relive a conversation or situation and play it out in my mind. I make mental and physical notes to make sure I capture my thoughts on opportunities so that I don't lose the thought and so that I can share with the team.

I have always relived moments and trusted my gut. It might relate to how I feel about the situation or about myself. I probably have been more tuned in to my ability to sense things. As I have gotten older and gotten more leadership experience, I have learned to be more aware of gut feelings, to trust it (my gut) more, and not to blow it off.

You know, it is funny because we talk about nursing at a higher level. There is a group that has been identified as normally functioning at that level and then there's the group that needs to be brought there. When you talk about those people (that have the sensing ability), the characteristic difference is that they are willing to pay attention to how they feel in a situation and be less threatened with a need to react or to have an answer. I remember when I was a brand new leader in my career, I needed to have all the answers. I needed to know everything. I needed to be involved in everything. Today, that's not a threat. As I help new managers, and I have a new manager I am working with, I spend time discussing with her that she does not have to have all the answers, but that she can empower her people and trust them.

This is not an age thing. This person is older than I am. I think it is a

combination of aging in a certain role.

Research Question 3: What health outcomes do nurse managers report as a result

of frequent exposure to stressful situations in their nurse manager role?

Theme 3, Health Outcomes. The third major theme identified across cases was

health outcomes that directly address the third research question. Three sub-themes

emerged to include three categories of health outcomes: psychological, physiological,

and functional ability (Tables 10 and 11).

Sub-Theme, Psychological Outcomes. Nurse managers (3 novices, 11

experienced nurse managers, and 0 co-managers= 14 managers or 67% of the sample)

reported psychological health outcomes associated with frequent exposure to stressful

situations.   There were differences in the psychological health outcomes reported based

on nurse manager experience, span of control, and whether or not the nurse manager was

employed in a co-manager arrangement. Three of 21 (14%) nurse managers reported

feeling overwhelmed in the role. Of these individuals, two were novice nurse managers

and one was an experienced nurse manager who had the largest number of FTE direct

reports in the sample (FTE of 251 with 325 employees). Although the experienced nurse

manager had six other assistant managers and three administrative assistants, she was not

involved in a co-manager arrangement. Narrative from the novice nurse managers and

the one experienced nurse manager regarding psychological outcomes follows.

I don't know specifically, but I will talk. I feel that I am on a heightened

sense of awareness all the time. I don't ever feel relaxed because there is

truly always something on my mind or something I am trying to figure or

something I am trying to improve or someone I need to just call. I hope

that will improve with more time in my role and more help. I have been in

this role for three years and I have plenty to learn. I am absolutely always

thinking which takes away from the attention I put to other areas such as

my family.

I think the 24/7 thing is a major contributor to that (psychological effects).

I don't think that is recognized. I don't know if people who are not

accountable 24/7 recognize the difference. Lying in bed knowing that you

are kind of short staffed tonight waiting to be called to come in or calling

the unit at 11:00 o'clock at night and saying did you find someone. There

really isn't any downtime.

I just have a sense of being overwhelmed. It feels like having a weight on

you and it could be immobilizing if I really dwelled on it. I try not to think

about it. Laughter. I try to think about all the things that I need to get done

and I start getting a feeling of getting overwhelmed so I try to just pick

something that I can get accomplished and get accomplished very quickly

so that I can have a sense of satisfaction. It's like that quote that you cannot

eat a whole elephant, you have to do it a piece at a time. So I refocus in

that way and get through that overwhelming feeling.

Experienced nurse managers not in the co-manager role reported numerous psychological outcomes associated with stress in the role. Eleven of the 18 experienced nurse managers (does not include the two co-managers) reported psychological health outcomes such as changes in mental acuity, irritability, anxiety, personality changes, loss of confidence, restless mind, and emotional exhaustion associated with social withdrawal. Narratives follow to illustrate the psychological outcomes reported in the experienced group of nurse managers (excluding the co-managers), especially those who reported mostly emotion-focused coping strategies.

> I'm not the life of the party, but I will bring fun to any situation. I am not a gloom and doom, oh my gosh person at all. When I shut down, the fun in my personality is gone and this affects my team because they know me well enough to know that something is wrong.

> When I shut down, I become very focused and direct. I am less flexible especially when I feel abused.

> I am pre-occupied and work is on my mind continuously. This reduces my interactions to how many evaluations can I have completed in the time that I have been doing XYZ. My pre-occupation makes me not really be there for people and causes me to constantly check my watch, rush people, and not give them quality time.

When I am really stressed, I definitely have a shorter attention span. I snap more easily at 'safe' people such as my husband, my best friend, and random people. It is also much easier to cry and get angry at inanimate objects.

This thing happened on Thursday or Friday. It ruined my weekend. All weekend long, I was reliving this incident. Was I the problem? Was the charge nurse the problem? Was this person the problem? I did not do anything that weekend. I was asked to do things and I said no. People knew I was bearing the brunt of this and they checked on me.

To be very honest, it has really affected me. I did not realize how it had affected me. It has affected me because I have trouble sleeping. While I lie down at night, I am going through all of these things in my mind. I am trying at night to go to sleep, but I am also trying to formulate how I am going to handle this tomorrow. There are times when I get up and I feel I just can't do it emotionally.

In general, I have periods of insecurity. There are periods of lack of confidence. It is hard to keep up that confidence level all the time.

Because I just got in there and did what I had to do, I really didn't have time for it to negatively impact me psychologically. I guess I could have stewed

around about it and said why are they dumping on me again today, but I

didn't go there with it. I'm not going to allow this to happen if I can

prevent it.

Experienced nurse managers who were also involved in a co-manager

arrangement reported the most positive psychological outcomes and personal

engagement. Two of the 21 (10%) nurse managers, those in the co-manager

arrangement, reported no psychological outcomes and predominantly used problem-

focused coping strategies. They perceived their jobs not to be very stressful, reported

loving their work, and indicated a high level functioning in their roles. One of the co-

managers suggested the co-manager model had an important stress-insulating effect in

her position. The narrative from the co-managers follows.

> I do feel very empowered. Under any other CNO other than my CNO,
>
> we really couldn't do this (co-manager arrangement). My CNO makes me
>
> feel like she appreciates everything I do. It's not as if she always sees me.
>
> In fact, she rarely sees me, but she will send me an email telling me you are
>
> doing a great job. Thanks.

> I have now started to leave work at work instead of thinking about it 24
>
> hours a day. I am just a happier person. I am very much an optimist.
>
> I probably wasn't feeling very happy there for a while, but I am a lot
>
> happier now. Over the last three years, I have gotten smarter.

I may initially spend a lot of time thinking and mulling the situation, but I trust my thinking and I trust time. I can go to bed angry one night and get up okay the following morning. Time does change our thinking. I trust that. Given enough time, I will resolve it. One way or the other, I will resolve it. It won't hang over my head forever. Every decision I make, time will give me the answers. Enough time thinking about it will give me the answers.

I am happy in my job and I do not feel a lot of stress in my job.

The other wonderful thing about being around my co-manager colleague is that she is an extremely positive person. I do not like to be around negative people. I like to be around positive energy and she is a very positive energy person. So we spend a lot of time together brainstorming. We never make a decision unless we have agreed on it. We are very respectful that way with each other about this. We will say what do you think of this and what do you think of that. We both come up with the ideas on the day-to-day management.

Sub-Theme, Physiological Outcomes. Eighteen of 21 (86%) nurse managers reported physiological health outcomes as a result of their coping efforts. Two novice nurse managers reported experiencing physical exhaustion and having high blood pressure requiring medication. Sleep pattern disturbance (difficulty either falling asleep

or staying asleep) was the most common negative physiological outcome reported by 11 of the 21 (52%) nurse managers (all the experienced ones, but not the co-managers). The co-managers reported the most positive physiological outcomes. Comments made by the experienced nurse managers not in the co-manager model follow.

I do have some trouble sleeping. I will wake up at 2:00 in the morning and can't get back to sleep. I am not sleepy.

It is not unusual to wake up in the middle of the night and try to get back to sleep and then start thinking about what I have not done. I would say on a few occasions, I give up and just get up. I do email. I read for a while until I start falling asleep again. I am lucky enough to have one of my practice facilitators who works nights. On the nights that I know she is at work, I will call her (laughs). She'll say what are you doing up. It's funny because we see that in emails from peers. We can't help but to notice the time they are sending you something at pretty strange hours. They say, if I had known you (too) weren't sleeping, I would have just called you. I would say that happens frequently.

I get physically tired, overwhelmingly tired at the end of the day. I hit the wall and it sucks the energy out of me.

On occasion, I have experienced that horrible feeling in the pit of my stomach. It has only been if it changes my plans when everyone

can say no, but I can't and it would revolve around my grandkids.
For example, if in October I had to work during my son's wedding,
that would be horrible.

If I am stressed, I will not eat at work. I drink too much coffee. At
home, then I will over eat.

I weigh more than I have in my entire life. I don't have resolution of
my issues and I also can't wear my old pants so I wind up with double
duty.

I normally work 12 to 15 hours a day. My days have been longer and
longer causing me not to be able to run on a daily basis for the past four
weeks. I am sleep deprived sleeping four hours per night. Last week,
I had a cold and bronchitis that forced me to stay home. Despite being
sick from work, I still worked at home trying to make a dent on my employee
evaluation workload.

I made an appointment to go to the doctor. I discovered I had walking
pneumonia and had had it for a while and just did not know it. This
explained some of why I was feeling funny.

My stress has caused me to not only gain weight, but also to be out of cardiac shape. I have been experiencing shortness of breath when carrying my items to my car. Everyone that's a nurse manager here has put on weight in the job. I have seen everyone age.

Overall, the total situation has allowed me not to take care of me very well. I know that because I feel it within myself. I go to bed early, but I don't sleep. My weight is fluctuating up and down. Even though I am eating, what I eat is not good stuff. I am spending a lot of time here and this is not allowing me to go exercise and release the stress that I am under. That is something I need to do for me.

The two experienced nurse managers in the co-manager arrangement reported no physiological health outcomes related to their coping efforts. The co-managers reported being in good shape, exercising regularly, eating well, and having no difficulty sleeping. The co-manager narratives support this finding.

I am in good shape. I exercise routinely. I eat well and I feel good.

I sleep no less than eight hours though my body prefers nine. I can fall asleep right away and stay asleep.

I never miss a meal even if I have a big day. I find time to eat. I usually go to the cafeteria and eat. I always eat breakfast before I come in.

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I normally walk three or four times per week. I do think that exercise

including cleaning house is good.

Sub-Theme, Functional Ability Outcomes. Fourteen of 21 (67%) nurse managers

reported high levels of functioning despite experiencing daily difficult situations at work.

Seven of the 21 (33%) nurse managers reported changes in their functional ability related

to decreased personal productivity, increased procrastination, and extremes in vigilance

(either decreased attentiveness or excessive attention to details predisposing to

exhaustion). At least one novice nurse manager reported her mind feeling scattered

despite high functioning in her role. The co-managers reported high levels of functional

ability and also indicated high levels of creativity. Of the following quotes, the first one

is from a novice nurse manager and the other three are from the experienced nurse

managers who are also co-managers.

I remain high functioning. I would say that I do often feel scattered

which is a reflection of a job that is scattered. I can leave this office

to walk out to the nurses' station with a task to do and five people have

asked me something before I get there. This job is so multidimensional

everything from is the floor clean to did that code go well, to helping

someone get their green card. All aspects of the unit fall on our shoulders.

Scattered is the name of the game.

I don't think it affects me very negatively in my functional ability

because if I am uncomfortable, I can keep that separate from all the

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work that I need to do. I can still move forward. That has never

been a problem for me. I can detach.

I actually function better now because I am not getting bogged down

in the things I cannot fix. I have learned to delegate better. I think

that because I am more comfortable in my role, I can work through

issues faster. I am more creative in my thinking too now and that

probably comes from competence and experience in this role. Having

been in the role, now I know who to go to and get things done. Going

back to the experience thing, I am a stronger manager. I am quicker to

get to resolution of things rather than trying to get through them. Most

situations are similar to me anymore.

Co-managing with my colleague definitely plays a part in the creativity

piece. You tend to think more out of the box when you have someone

to bounce off ideas. There is rarely a decision made in what we do on

our units without us talking about it with each other. Sitting and

brainstorming with each other just makes it even better. I tended to

think out of the box anyway, but alone I was more careful. I am not

concerned about making a mistake any more. If I make a mistake now,

it is for the right reasons and not for lack of knowledge. You always

feel more empowered to be assertive when you have someone working

with you who you respect and who can challenge your ideas. Definitely

working with my co-manager colleague plays a big role in that. On the

flip side, it is great to work with someone that you trust who can tell you,

I think we need to re-think that and cause you to step back and say oh,

yeah, you are right. I had not thought about it that way.

The experienced nurse managers not in the co-manager model reported mostly
high functioning yet some occasional cognitive deficits. These deficits included having a
foggy mind and worrying about making errors that they may not have known happened.
Narrative from the experienced nurse managers who were not co-managers follows.

I believe I can function even though I have stress. At times, I am not

as productive.

Functionally, it has taken a lot of my time because I have had to be out

on the unit even more so. I am even more visible now than I normally

am because I feel like I need to see and feel what is going on. I am kind

of just out there making rounds all the time seeing where people are and

what they are doing and I hear and see things. The more I am out there,

the more people let me know what is going on. This has taken me a lot

of time because in order for me to be in control of the situation, I have

to stay on top of it. It is almost as if you cannot let your guard down.

This takes a lot of energy because there are many other things that

I should be doing. I have a lot of people who need me yet I am

spending a great deal of time on one person (the problem employee).

I am sleep deprived and I feel less attentive. My mind is foggy.

This situation and my one-hour commute one way has my family

concerned about my driving. I have not noticed any deficits, but

my family is worried.

I work even when I am sick. Lately, I have not been able to complete

things more fully as I typically would. I feel I may have made errors

in reports or memos that I may not have been aware of at the time.

Research Question 4: What factors influence nurse manager decision-making related to stressful situations?

Theme 4, Decision-Making. The fourth and last major theme identified across cases was decision-making that directly addresses the fourth research question. Two sub-themes surfaced and these included 10 questions that guide decision-making along with effects of stress on decision-making (Tables 10 and 11).

Sub-Theme, Ten Questions That Guide Decision-Making. Synthesis of the comments made by the 21 nurse managers produced a cognitive model in the form of 10 questions (used alone or in combination) that guided their decision-making process related to stressful situations. The 10 questions are presented along with supporting narrative.

1. Who is asking?

I did not anticipate negative consequences because it was my finance person who was asking. Maybe if the President or my VP had been requesting the information, I would have felt more difficulty in pushing back on that.

When the system President and CEO said we were to complete all employee evaluations at the same time and each entity was competing for best performance recognition, I began pulling all nighters to finish the goal. When I saw that I was not meeting the goal despite pulling the all nighters, I started looking at other strategies. I have 10 evaluations left before I go on vacation and this is weighing on my mind. I do not want to be the only person not to meet the team goal.

2. What worked before and what will likely be supported now?

Because she gave me permission to say no, I just started doing it. I was asked to join another HR committee and I said I could not participate in it at this time.

It was at that point in time that I thought, you know, my relationship with him is never going to be what I had with my previous boss and I just need to set it aside, leave it, get over it, and just try to move forward.

I have said no a few times and it's worked out okay … Nobody has told me that I couldn't, so I am doing it until someone tells me that I can't.

His supervisor is an MD and is quite busy and not physically available to be

seen to talk to and to discuss concerns. My pathway is present here, but I

don't always know that I can go to that pathway. I am sure it is that I have

gone before and not gotten what I felt needed to be done or saw no follow

through with this. After a while, you just get frustrated and you just don't

go anymore. In essence, my pathway is physically here, but it really is not.

I am getting older and am not asking permission to do things. I would

rather apologize than to ask permission.

If I feel it is the right thing to do and I can justify it, I will do it. My bosses

respect this and trust me. They do not make me feel irresponsible.

3. What are the norms within the organizational culture?

I am used to having predictable staff meetings and communication with my

staff. The culture here does not encourage that. I have been so involved in

staffing and just can't pull people out of staffing to have unit meetings. The

lack of communication at the top affects my own communication with my staff.

I do not always feel safe saying no. It would be looked on as a weakness if you

said no, I can't do anymore. Your peers would judge you and so would my

director and the executive team because it would be seen as not doing more.

Even if you weren't judged now, you would be judged later.

I had an incident with equipment not being sterilized properly. After I discovered the problem, I asked my supervisor if we wanted to report this and address it. She told me oh, no, we don't want to report this. That really changed my perception of my boss. Senior administration does not know what they don't know. If you choose not to look at it, then you don't have to deal with it.

There is a fear of disciplining here because what is rewarded here is smooth waters at all costs. Doing what is right is important to me. This involves not staying silent.

I cannot go to my CNO and say I need more FTE to staff this unit without data to support that recommendation.

4. What is the effort-reward ratio associated with the decision?

There really comes a point when you have to not fix everything just for your own survival.

My associate satisfaction scores are out of this world. They are unbelievably good, but maybe they are too high for my survival. I spoke at a staff meeting last month about how I absolutely want to be here for someone who needs me 24 hours a day, 7 days a week, but I also did ask them to think about it before they pick up the phone and call. It did not go over incredibly well, but I feel

that was a small piece of my life I was able to get back. Will my associate

satisfaction score be as high next quarter, probably not. While I want to do

absolutely everything I can for the nurses and the patients on this unit, the

toll it is taking on me to be able to do this job the way I want to do it is not

possible for me long-term.

I tell myself, I love my job. At which point it is not worth it, I won't do it

anymore.

I have seen many nurse managers go back to staffing roles because the nurse

manager role just isn't worth it. The elements not making the role worth it

include pay, how it consumes you, the 24/7 responsibility, and the inability to

lead in your preferred style. I have thought of this (returning to a staff nurse

role) myself.

In situations in which I know the decisions are already pre-made and discussions

or meetings to talk about resolving issues are a joke, I decline to attend those

meetings. Instead, I have taken the time to work on my associate performance

evaluations. There is stigma associated with not attending meetings, but if I

do not see the value in attending a meeting, I do not attend and I do not let it

bother me.

I can't do anything about my director so I focus on the success of the unit.

If I disciplined people the way they should be disciplined, it would be a real battle, a battle not worth fighting.

I am not a yes person. I will support the facility, but I also have a right to say how I feel about something. Now, I am going to still support the facility because this is what I have to do, but I have to be able to say how I feel. Now there are some things that they will go on about that I will not take a stance on because it is not important enough to address. It is just one of those things that I can live with. So, I have to pick my battles.

5. What is the level of urgency in this situation?

When I do get a lot of stimulation from staff and families, THAT is what I focus on. I don't focus on the paperwork that needs to be done although I know it needs to be done.

The essential things get done. It is the above and beyond things that don't get done (like rounding on patients). Everything I want to do can't get done. My assistant managers are in staffing so there are things I need to get done. I used to also be in staffing when I had one unit, but now (that I have more than one unit) I just can't do that. That is why I don't staff.

A lot of times, I end up doing my projects and priority things at home, on the weekends, or at night when I can have uninterrupted time.

With all the evaluations (time sensitive) that needed to be done, I finally just closed my door and put a sign up that I was completing evaluations and asked not to be disturbed unless it was an emergency. No one interrupted me and I had one and a half hours of uninterrupted time.

What makes dealing with the evaluations difficult are all of the other fires that come up every day. I can set up my work for the week. I can write down the three things I am going to do all week, but who is going to take care of the fires? Some of them (the fires) are priority. They are not little fires that are smoke. I am really good at delegating, but if somebody needs to do something that only I can do, then I need to do it.

6. What is the right thing to do?

If it is the right thing to do, can't is not a word that comes out of my mouth very easily. If it is the right thing to do, the statement that will come out of my mouth is how do you make it happen.

It is hard from the management perspective because I know and the Executive Director knows that in the grand scheme of things this is the right decision, preserving the entire agency by identifying two positions for reduction. It has

been a few weeks and I still feel somewhat remorseful we had to make that decision, but I know it was the right decision. I know that if we had not made that decision, someone else at the big house would have done so. I would rather be the one to make these kinds of decisions. It was hurtful and unfortunately I know there are others we are going to have to let go. Psychologically, it is still there, maybe not quite as profound.

If you don't feel settled with a situation, even if I have to be on the other side of the fence and I am here and everybody is there, I have to feel secure that being in that side of the fence and being a lone ranger on this is really driven by my values. The right thing for me is important even if I have to walk it alone.

I am not afraid to walk away. I like that phrase. I am not afraid. They do pay me enough now that I could never make what I make here somewhere else, but I am not afraid to take a pay cut. It is not about the money. It's the work and the mission.

I want to do the right thing. I want to be ethical. Trust is important to me. My CEO trusts me to get this done. The word trust is right up there along with my integrity. If my CEO trusts me to do the right thing, then I must make sure that I am trustworthy. In the end, I have nothing but my integrity.

7. What are the potential personal consequences of my actions?

I feel the nurse manager role is expendable. This is not said, but if I were

seen as someone who couldn't do the job, they just would hire somebody else.

If you buck the system, you will never move within this organization.

You just don't have the time to take time off. The time is there from my

available vacation days, but the ability to take time off is just not there.

There is work that needs to be done and I just will not take the time, I

guess I could, but I won't.

There is a fear factor here. Everybody has told me not to cross her. Don't

let anyone cross the CNO.

8. What will be the impact of my decisions or that of others on my staff and our

patients?

The way decisions are made around here, you are not often involved in the

decision. We are told this is the way it's going to be from now on. The people

making the decisions have no clue on the impact of their decisions on the staff.

I don't think our input is considered.

This kind of senior management decision (top-down, without input, and via

email notification) is made all the time. From the nurse manager perspective,

this change in policy has significant implications for me. I have to make sure I have the necessary resources to live with the policy. It affects how I run my unit and how I monitor the new initiative. Sending out an email is fine and dandy, but how do you ensure that everyone knows about the change. I have staff members who never read their email. Senior management thinks that just sending an email just covers it.

The inability to discipline in this environment has potential implications for patient safety. Absolutely, it does.

The consequences are for both my staff member and for me. The important thing is for the evaluations to be done and submitted in a timely manner so that people get their raises in a timely manner. I don't want to be part of the problem.

9. Is there a deadline? If so, when?

In this organization, it has become a requirement over the last few years that evaluations be completed on time. I have found that when things become a requirement, they get done. People work toward a deadline.

10. What is within my control?

Nothing precludes me from doing the things that are within my control. The problem is I have a lot of things that are beyond my control. What I need to do is make sure that people understand the efforts that we are making and

what our barriers are and what we are doing to address those barriers. I also

share this information with the staff so they understand.

I can't do anything about my director, so I am focusing on the success of the

unit. I am working on building my team and decreasing our errors.

Sub-Theme, Effects of Stress On Decision-Making. Nurse managers reported on the

negative effects of stress on their decision-making. These negative effects on the quality

of decision-making and priority setting were primarily related to the consequences of

dealing with multiple simultaneous competing priorities as well as frequent interruptions.

Chronic stress was reported to decrease the quality of nurse manager decision-making.

Further, having to work under duress and making multiple decisions at work negatively

affected the nurse managers when they returned home after a long workday. The nurse

managers reported coming home after work both physically and mentally exhausted and

not having much energy left to make any more decisions. From a career perspective, the

overwhelming nature of the nurse manager role also negatively affected the nurse

manager's ability to make decisions about future professional growth. From a personal

perspective, the nurse manager role heavily weighed on the nurse manager's decisions

about family. Narrative related to these findings follows.

> I think interruptions can have a negative impact sometimes because if you
>
> work on somebody else's commitments, your own work suffers. If I think
>
> of my own situation, this on call project I am working on, THAT is important
>
> to my staff. It is important to me and I am making it not so important (by

being distracted with the interruptions of another person's request). I do not think that is the right decision to make.

It was frustrating and it was distracting to anything else that I had to do that day. It kept coming to my mind that somebody else needed this information and wants it done. It was a constant pushing that aside so that I could stay focused on what I needed to do for the day. I guess it is kind of that whole interruption theory and how long it takes you to get refocused on your work.

I remain high functioning. I would say that I do often feel scattered which is a reflection of a job that is scattered.

Sometimes when I am in that moment and do feel that I am getting all worked up, I can't even think straight.

Lately, I have not been able to complete things more fully as I typically would. I feel I may have made errors in reports or memos that I may not have been aware of at the time.

When I go home, I am too mentally spent and not excited about spending time with friends. Normally, I am bubbly and upbeat so this is different for me. I don't even want to talk to my best friend. I don't want to think anymore.

I am making decisions all day long. When I get home, I do not want to make

a decision even if it is as simple as deciding what to eat for dinner or where

we are going for dinner. I don't want to think about anything stressful. I

don't even want to pay my bills. Not that there is not the money to pay them,

but I don't want to get back on the computer. I pay my bills online. I just

want something that is mind numbing to do.

In the evening when I get home, I feel like a noodle. I do not want to talk

about anything important and I just want to watch a mindless movie

preferably something funny.

The 24-hour accountability causes me to stop and deal with how I will ever

have a family and be a nurse manager, too. My husband and I have been

talking about starting a family, but how will I ever have a family and be a

nurse manager, too? It's upsetting because I love my job, but how can I be both?

I worry about it (the nature of the role) when (and if) I re-enroll in school.

It's very important for me to finish my master's degree, but I don't know

how I'm going to do it with this job.

Summary

Frequency and descriptive statistics were calculated to describe the demographic

characteristics of the nurse manager sample. In general, the nurse managers were mostly

middle-aged, married, Caucasian females with extensive experience in nursing. Most

nurse managers were experienced and few were novice nurse managers. Although most all of the nurse managers held the role alone, two were involved in a co-manager arrangement.

The educational preparation of the nurse managers was mostly at the baccalaureate level with few holding advanced degrees. Certification was held mostly in a clinical specialty, but was non-existent in nursing administration practice. Span of control varied widely for the nurse managers in this sample as did the number of units the nurse managers supervised. Assistant nurse manager support was lacking as was APN support for nurse managers. Nurse managers reported long and intense workdays followed by additional work completed at home. Involvement in hospital committees was extensive, so much so, that most nurse managers could not remember the actual number of committees in which they participated. Although nurse managers did not take patient assignments, they still assisted with completing patient care tasks on their units.

The difficult situations the nurse managers described involved feeling pressure to perform, interpersonal conflicts associated with organizational communication deficits, and issues of human resources and staffing. Data analysis produced agreement on four major themes (sources of stress, coping strategies, health outcomes, and decision-making). Twelve sub-themes were identified and these along with the major themes are listed in Tables 10 and 11.

The twelve sub-themes related to situations in general that are sources of stress (people and resources, tasks and work, performance outcomes), factors that increase stress (issues related to actual nurse manager work, issues surrounding nurse manager

work), factors that decrease stress (focusing on the positives, having support from others, completing work and achieving targets, incorporating quality time), and emotions associated with stress (pure positive, pure negative, mixed). Other sub-themes included using a combination of coping strategies (emotion-focused and problem-focused strategies, narrow versus extensive repertoire of self-care strategies), experience and differences in coping strategies (co-managers coped most effectively followed by the experienced nurse managers and then by the novice nurse managers who coped the least effectively), and differences related to the co-manager model (most effective coping, little or no health consequences related to stress, high levels of performance inclusive of innovation capabilities). Working in a positive organizational culture enhanced the nurse managers' coping abilities as well as their feelings of support in their role.

The sub-themes related to health outcomes suggested changes in psychological (most evident in the novice nurse managers and the experienced managers with a large span of control and not in the co-managers), physiological (sleep disturbances in most except for the co-managers), and functional ability (few limitations despite exposure to frequent difficult situations, high levels of functioning in co-managers). The final sub-themes related to decision-making produced a cognitive model in the form of 10 questions that nurse managers used to guide their decision-making in difficult situations. These questions primarily focused on who, what, and when of situations pertinent to the nurse manager role. This sub-theme also identified the negative effects of stress on decision-making particularly as this relates to dealing with frequent interruptions and multiple competing priorities. Both frequent interruptions and competing priorities interfered with focus in the cognitive work of nurse managers. The negative effects of

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work-related stress also had a negative effect on nurse manager decision-making relative to career development and family life when away from work. Nurse managers reported being too exhausted after work to pursue additional formal education. After a long and intense workday, nurse managers sought to do the bare minimum once they got home.

The demographic and descriptive findings provided answers to the research questions in the study and supported the proposed conceptual model of stress-related variables and outcomes associated with nurse manager role demands (Figure 2). The findings reported in Chapter IV serve to inform and underscore the major points of the discussion, conclusions, implications, and recommendations that follow in Chapter V.

Chapter V

Conclusions and Recommendations

The purpose of the research design was to generate an understanding of stress and coping as perceived by today's nurse manager incumbents. The author administered a demographic questionnaire and conducted face-to-face interviews with 21 nurse manager participants. Focusing the interview on a recent (within the last week) self-identified difficult situation, the author used 14 open-ended questions and frequent cognitive probes to elicit rich details regarding each nurse manager's stress and coping experience. Themes were developed from factors that nurse managers identified when recalling details surrounding stressful situations. Although each nurse manager's specific stressful situation provided the focus for interview data collection, analysis also included details preceding and surrounding the situation to capture factors influencing decision-making during the situation.

This research was informed by a critical review of the literature, the findings of an earlier pilot study, and an understanding and application of both stress theory and complexity science to the research. Synthesis of these concepts produces a more holistic understanding of both individual and organizational factors that in optimal balance are necessary for sustainability in complex adaptive systems. Findings from this study suggest that nurse manager performance has much to do with individual factors (experience) yet also a lot to do with organizational context (perceptions of organizational culture) and supportive structures and systems (structural empowerment from the co-manager model). It is evident from the voices of the nurse managers in this study that when it comes to coping with difficult situations, experience matters,

organizational culture matters, structural empowerment matters, and span of control

matters. These synergistic factors play an important role in facilitating the pivotal

contributions nurse managers make toward building the healthy work environments that

are necessary for retaining nurses in the workforce and for producing positive decision-

making and health outcomes for both individuals and institutions. Understanding the

supportive structures that are needed to fortify individuals in today's nurse manager role

is key not only for retaining staff nurses and nurse managers in the workplace, but also

for ensuring a nursing leadership pipeline and patient safety cultures for the future.

<div align="center">Discussion of Findings</div>

Four themes (sources of stress, coping strategies, health outcomes, and decision-

making) were identified in this study and all themes were present in the 21 cases. In

every case except in the co-managers, the nurse managers alluded to the overwhelming

nature of nurse manager work, suggesting that the role may be currently misunderstood

and unrealistically configured. From the descriptions of the nurse managers, it was

evident that the invisible work associated with the role is not adequately captured. Based

on the hours worked, the span of control reported, the responsibilities of the position, the

extent of committee involvement, and the complexities of the day-to-day work, the

question arises: Is it reasonable to expect that the nurse manager role should be a one

FTE position? Previous research demonstrates the effectiveness of innovative

co-manager models (two FTEs for one unit) over traditional manager models (one FTE

for one or more units) as a way to decrease employee turnover (Carroll, Lacey & Cox,

2004) and increase personal empowerment for nurse managers (Suominen et al., 2005).

The current study further expands the evidence to support the co-manager model as a

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vehicle for increasing nurse manager personal empowerment, increasing satisfaction in the role, facilitating more effective coping, and enhancing individual health outcomes.

From a succession planning standpoint, innovative co-manager models may create real or perceived improvements in the ability to execute the role and may contribute toward enhancing the role's desirability. With the aging workforce (something that was reinforced in the ages of this nurse manager sample) and the impending retirement of many nurse leaders, it is of great concern that younger nurses currently do not view the nurse manager role as an attractive proposition (Sherman, 2005). The novice nurse managers in this study were few and they were particularly at risk for turnover in the role. If improvements are not made to better support, mentor, and recognize individuals in this crucial position, this could further interfere with the role's desirability for the next generation of leaders.

As a part of support for the nurse manager, more formal education beyond the baccalaureate degree is needed as well as additional ongoing development strategies. In order to succeed beyond their clinical level of expertise, nurse managers need to learn a more complex skill set that goes beyond on-the-job training. This observation, however, does not assume that teaching more and doing it better are substitutes for organizational support structures that realistically configure the nurse manager role, provide release time for personal and professional enrichment, and help nurse managers to not only survive, but thrive in their roles. In a health care environment where producing outcomes is the operative word, investing now in support structures to enhance nurse manager peak performance is something that will pay its dividends later.

Despite mostly loving their work, nurse managers not in the co-manager model reported significant work-life imbalance, dealing with difficult situations on a daily or 24/7 basis, having little support in the workplace (especially when working in a negative organizational culture), experiencing sleep pattern disturbances, and demonstrating signs of emotional and physical exhaustion. Although the nurse managers seemed to be using a combination of coping strategies, most strategies reported were emotion-focused and less than optimal for sustainable health and well-being. As for coping, the novice nurse managers and the experienced nurse managers with the largest span of control (over 140 FTE) were particularly at risk for burnout. These findings are consistent with recent research involving nurse managers that raises concerns about chronic stress and the vulnerability of this crucial segment of the nursing workforce (Shirey, 2006a; Shirey et al., 2008; Laschinger et al., 2004). Given the overwhelming demands of the nurse manager role and the nurse manager's pivotal contributions to organizational outcomes, the findings of this study support the need to re-examine and potentially reconfigure the role. Chief nursing officers may begin by conducting a job analysis of the nurse manager role in their institutions. Studying the impact that span of control has on the nurse manager's ability to execute the role while remaining engaged, healthy, effective, and retained may provide necessary data to justify reconfiguration of the role. Research is available to document the inverse relationship between large span of control and outcomes such as employee engagement (Doran et al., 2004). What is currently not known, however, is the *exact* point at which large span of control produces a tipping point that pushes nurse managers toward role ineffectiveness and personal decompensation.

Implications and Recommendations

The findings of the study raise important implications for nursing education, practice, research, and health policy. Taking the findings and implications into consideration, the following recommendations are offered:

1. Role design. Chief nursing officers should direct efforts in their institutions to conduct a job analysis of the nurse manager role. Based on the job analysis, the needs and strategic plans of the institution, and the best available evidence, the nurse manager role should be reconfigured such that the role and its related expectations are realistic for individuals assuming this responsibility. Factors such as extent of committee work requirements and multi-unit supervision (especially with disparate geographies) should be taken into consideration when determining the desired complexity of the nurse manager role.

2. Span of control. Chief nursing officers should examine the span of control of nurse managers in their institutions and develop institutional guidelines to systematically assign responsibility with consideration for span of control limits. Researchers should conduct additional studies to further examine the relationships between span of control and individual and organizational outcomes. Findings from these studies should be used to affect health policy up to and including regulation of managerial span of control in the health care industry.

3. Co-manager model. Although the co-managers in this study reported superior outcomes, the sampling techniques and modest sample size used limit generalizability of the findings. Further national studies to document the benefits, disadvantages, and outcomes associated with co-manager practice models are

warranted. Research is also indicated using other models beyond the co-manager model to determine the organizational structures that are necessary to better achieve nurse manager peak performance. Given that most of the nurse managers knew little about the benefits of APNs, research should explore nurse manager/APN collaborative models that could maximize the contributions of these important professionals.

4. Succession planning. Chief nursing officers should establish formal succession planning models in the acute care hospital setting. Although historically succession planning models have mostly targeted senior executives, the importance of the nurse manager in executing organizational strategy, keeping staff nurses engaged, and positively affecting patient outcomes should not be underestimated.

5. Work-life balance. Employers have a moral and legal duty to reduce the effects of work-related stress. There are a number of resources available to employees and employers to learn about stress management and personal renewal practices that minimize stress, enhance personal resilience, and facilitate work-life balance. Organizational interventions such as confidential counseling or personal coaching should be made available as a way of maintaining employee mental, physical, and emotional health. Other interventions include periodic monitoring of nurse manager workload, measurement of employee engagement, and measurement of work life quality. A concerted effort should be made by the organization's board of trustees to not only measure these important parameters, but also to insist that senior leaders make the ongoing changes needed to remain consistent with

expectations. Additionally, nurse managers should take personal responsibility for setting reasonable limits to their work hours and building a full repertoire of self-care strategies. Learning to say no when appropriate may be a skill set to develop yet one that may require training in conflict resolution and negotiation. Literature is increasingly surfacing to support work-life balance as a desirable leadership quality (Lyness & Judiesch, 2008).

6. Support structures and systems. Implementation of positive organizational structures such as the Magnet Recognition Program (ANCC, 2008) and the American Association of Critical-Care Nurses Healthy Work Environment Standards (AACN 2005) and Beacon Units (AACN, 2008) is crucial in order to build desirable work environments for nurses and other health care professionals. Both the ANCC and AACN programs rely heavily on the importance of strong nursing leadership to facilitate cultures of respect, open communication, and collaboration that enhance professional nursing practice and produce desirable patient care quality and safety outcomes. Research demonstrates that these positive cultures contribute toward supporting nurses in their important work (Aiken, Havens & Sloane, 2000; Aiken, Clarke, Sloane, Lake & Cheney, 2008; Ulrich et al., 2007; Kramer & Schmalenberg, 2007; Upenieks, 2003). Having a culture of communication and civility is so important to quality and patient safety that the Joint Commission recently released an alert to stop bad behavior among health care professionals (JCAH, 2008).

7. Health outcomes. Sleep pattern disturbances associated with chronic work-related stress represent a major health threat to nurse managers. Longitudinal

epidemiologic studies have shown that a history of insomnia increases future risk for psychiatric and medical disorders (Neubauer, 2008). Specifically, baseline insomnia has been shown to be associated with increased risk for hypertension, cardiovascular disease, diabetes, major depression, and anxiety disorders (Neubauer, 2008). Importantly, the association between sleep quality and increased risk for the metabolic syndrome is greatest in women (Parry et al., 2006) as is mortality in women reporting routinely sleeping five hours or less per night (Patel et al., 2004). Understanding this strong evidence is important for minimizing nurse manager disability and employee health care costs. Accordingly, nurse managers given their importance and value to organizations, should be included in executive health physical examinations that first address precursors of negative health outcomes and then recommend treatment once these outcomes become evident.

8. Education. Chief nursing officers should establish programs that support and fund nurse manager career development including developing formal nurse manager orientation programs to facilitate role socialization (Mackoff & Triolo, 2008; Shirey & Fisher, 2008) and supplementing this programming with flexible e-learning modalities. Partnerships between acute care hospitals and schools of nursing and business should be made available to provide either on-site or distance instruction to nurse managers seeking graduate level education. Release time should be made possible such that nurse managers may pursue these endeavors. Support for specialty certification in nursing administration should be a requirement of the nurse manager job description. On-site preparation and

certification review courses should be made available. In order to cultivate

professional practice environments grounded in certified nursing practice, chief

nursing officers should model the requisite behaviors and be board certified

themselves.

9. Research and health policy. Establishing a program of research to further study

nurse manager work is a pertinent priority in today's complex health care

systems. Partnerships between researchers, nurse leaders in the practice setting,

and key funding sources (Robert Wood Johnson Foundation, Agency for

Healthcare Research and Quality) can collectively build the science and generate

the necessary quantitative metrics that make the business case for better nurse

manager support structures in the acute care hospital setting. Findings from the

current and future studies should be broadly disseminated to advocate on behalf of

nurse managers, staff nurses, and the patients for whom they provide care.

Summary

This is the first research study in the nursing and health services research

literature that uses a stress, coping, and complexity lens to provide an in-depth qualitative

description of nurse manager work and the related health outcomes associated with that

work. The exploratory nature of this study offers groundbreaking insights into what

structures are necessary to empower today's nurse managers so they can more

successfully execute their complex roles within dynamic health care systems in the

United States of America. Addressing both individual and organizational structures and

processes is crucial toward producing a more manageable and long-term solution to stress

in the health care workplace.

Creating a healthy work environment for nursing practice represents a priority for not only maintaining an adequate nurse workforce, but also for promoting patient care quality and safety. Nurse managers play a pivotal role in creating the health care work environment and their actions are known to be essential precursors for building a safe and healthy workplace. It follows that minimizing nurse manager stress, enhancing nurse manager coping behaviors, and facilitating desirable nurse-manager decision-making are all strategies consistent with retaining both nurse managers and staff nurses in the profession. These same strategies are also vital for promoting cultures of patient safety that under the best of circumstances demand the collaborative efforts of nurse managers and the organizations in which they work.

APPENDIX A

INTERDEPARTMENTAL COMMUNICATION
Research Compliance Administration
Indiana University - Purdue University Indianapolis

DATE: May 16, 2006

TO: Anna M. McDaniel
               Environments for Health
               NU 483
               IUPUI

FROM: Tara Bateman
               Research Compliance Administration

SUBJECT: Final Approval

Study Number: 0603-78B
Study Title: Stress and Coping in Nurse Managers: A Pilot Study
Sponsor: N/A

The study listed above has received final approval from the Institutional Review Board (IRB-01). IMPORTANT NOTICE: The Institutional Review Board (IRB) requires that the consent statement given to subjects have the IRB approval stamp on the last page – OR – include information regarding granting of waivers.

Please note that although this study has been granted final approval by the IRB, special requirements apply if the principal investigator becomes aware that an individual enrolled on the study either is a prisoner or has become a prisoner during the course of his/her study participation (and the study has not been previously granted approval for the enrollment of prisoners as a subject population). In such cases, all research interactions and interventions with the prisoner-participant must cease and if it is wished to have the prisoner-participant continue to participate in the research, Research Compliance Administration (RCA) must be notified immediately. In most cases, the IRB will be required to re-review the protocol at a convened meeting before any further research interaction or intervention may continue with the prisoner-participant. Refer to the IUPUI/Clarian Standard Operating Procedure (SOP) on *Involving Prisoners in Research* for further information.

As the principal investigator of this study, you assume the responsibilities as outlined in the SOP on *Responsibilities of Principal Investigators,* some of which include (but are not limited to):

1. CONTINUING REVIEW - A status report must be filed with the Board. The Research Compliance Administration (RCA) staff will generate these reports for your completion. This study is approved from May 12, 2006 to May 12, 2007.

2. STUDY AMENDMENTS - You are required to report on these forms ANY changes to the research study including protocol design, dosages, timing or type of test performed, population of the study, and informed consent statement. An amendment form can be obtained on our website. See link http://www.iupui.edu/~resgrad/spon/amendment-irb.htm.

3. UNANTICIPATED PROBLEMS INVOLVING RISKS TO SUBJECTS OR OTHERS AND NONCOMPLIANCE - You must report to the IRB any event that appears on the List of Events that Require Prompt Reporting to the IRB. Refer to the SOP on "Unanticipated Problems Involving Risks to Subjects or Others and Noncompliance" for more information and other reporting requirements. The SOP can be found at: http://www.iupui.edu/~respolv/human-sop/human-sop-index.htm. NOTE: If the study involves gene therapy and an adverse event occurs which requires prompt reporting to the IRB, it must also be reported to the Institutional Biosafety Committee (IBC).

4. UPDATED INVESTIGATIONAL BROCHURES, PROGRESS REPORTS and FINAL REPORTS - If this is an investigational drug or device study, updated clinical investigational brochures must be submitted as they occur. See link http://www.iupui.edu/%7Eresgrad/spon/cibrequire.htm for requirements. Three copies of progress or final reports must be provided to the Board with your written assessment of the report, briefly summarizing any changes and their significance to the study.

5. ADVERTISEMENTS - If you will be advertising to recruit study participants for a drug or device study regulated under FDA requirements, i.e., investigational drugs or devices will be used, and the advertisement was not submitted to the Board at the time your study was reviewed, a copy of the information contained in the advertisement and the mode of its communication must be submitted to the reviewing board as an amendment to the study. These advertisements must be reviewed and approved by the Board PRIOR to their use.

6. STUDY COMPLETION – You are responsible for promptly notifying the IRB when the study has been completed. This is done by contacting RCA staff to request that a continuing review report be generated for your completion within 90 days after termination or completion of the investigation or the investigator's part of the investigation.

7. LEAVING THE INSTITUTION - If the principal investigator leaves the Institution, the Board must be notified as to the disposition of EACH study.

PLEASE REFER TO THE ASSIGNED STUDY NUMBER AND THE EXACT TITLE IN ANY FUTURE CORRESPONDENCE WITH OUR OFFICE. In addition, SOPs exist which cover a variety of topics that may be relevant to the conduct of your research. See link http://www.iupui.edu/~respolv/human-sop/human-sop-index.htm. All documentation related to this study must be neatly typed and must also be maintained in your files for audit purposes for at least three years after termination of the research; however, please note that research studies subject to HIPAA may have different requirements regarding file storage after termination. If you have any questions, please call RCA at 274-8289.

Enclosures: ☒ Documentation of Review and Approval   ☐ Advertisement(s)
                    ☐ Expedited Review Checklist   ☐ Authorization form(s)
                    ☐ Informed Consent Statement(s)   ☐ Other:

APPENDIX B

IUPUI AND CLARIAN INSTITUTIONAL REVIEW BOARDS & SUBCOMMITTEES REVIEWS
STUDY AMENDMENT

**** FOR OFFICE USE ONLY **** ☒IRB-01; ☐IRB-02; ☐IRB-03; ☐IRB-04; ☐IRB-05	IRB STUDY NUMBER: 0603-78B AMENDMENT NUMBER: 1

SECTION I: INVESTIGATOR INFORMATION

Principal Investigator: McDaniel, Anna M. _____ Department: Nursing _____
(Last, First, Middle Initial)
Building/Room No.: School of Nursing/Room NU 481 ____ Phone: 317-274-8095 ____ E-Mail: amcdanie@iupui.edu ____
Contact Information:
Name: Anna M. McDaniel, DNS, RN, FAAN ___ Address: 1111 Middle Drive, NU 481 ___ Phone: 317-274-8095
                                         Fax: 317-274-2411 _____ E-Mail: amcdanie@iupui.edu _____
Project Title: Stress & Coping in Nurse Mangers: A Pilot Study
Sponsor/Funding Agency: None _____ Sponsor Amendment No. _____

SECTION II: AMENDMENT DESCRIPTION

This form must be typed and returned to Research Compliance Administration, 620 Union Drive, Union Building, Room 618, Indianapolis, IN 46202-5167 for submission to IUPUI IRBs or to the Methodist IRB Office at Methodist Hospital, Academic Affairs, 1630 N. Capitol, B Building, Room 349 for submission to the Methodist IRB. Note: To check a box on this form, double-click the box and select "Checked" under "Default Value."

1. Describe the proposed change(s) and rationale for the change(s):
The study amendment proposes adding two additional sites in Indianapolis, Indiana (St. Vincent's Hospital and Clarian North Hospital). The additional sites will enlarge the sample and allow for comparisons of themes emerging from three different facilities each possessing varying contextual factors.

The study amendment modifies the protocol to add follow-up interviews with a small portion of the participants. These interviews will add to the richness of the nurse manager's qualitative description of stress and coping in the role.

2. Is the study sponsored?
☒ No.
☐ Yes. Check the appropriate line below and provide with this amendment, as applicable:
   ☐ a copy of the sponsor's amendment, if the amendment came from the sponsor.
   ☐ a copy of your notice to the sponsor of this change, if you initiated the amendment.
   ☐ a copy of the approved amendment will be sent to the sponsor.

3. Describe how the amendment will affect the risk:benefit ratio for subjects:
The amendment will not change the risk:benefit ratio for subjects. For this study, the risks to participants will continue to be minimal.

4. Do the proposed changes affect any of the following documents?
☒ Summary Safeguard Statement   ☐ Authorization
☐ Advertisement   ☒ Protocol
☐ Clinical Investigator's Brochure (CIB) ☐ Other, Please describe:

5. Do the proposed changes affect the informed consent statement?
☐ Informed consent or written documentation of informed consent has been waived for this study.
☐ No. Skip to item 6 below.
☒ Yes. Answer items A. and B. below.

   A. Check the appropriate line below. One approved copy will be returned for your files.
      ☒ The new informed consent statement is in addition to the current one.
      ☐ The new informed consent statement is to replace the current one. If there are multiple consents associated with the study, please indicate which informed consent statement is being replaced.

   B. Do the changes to the new informed consent statement require reconsenting of existing subjects?
      ☒ No. Please explain why not: Data collection from existing subjects has been completed.
      ☐ Yes. If this study involves the use of health information, is a revised Authorization needed?

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☐ No. Authorization form was not altered.
　　　　　　　☐ Yes. A revised Authorization form is attached.

6.　Amendment includes:　☒ Informed Consent,* dated:　　　　　　　☐ Authorization,* dated:
　　　　　　　　　　　　☒ Summary Safeguard Statement,* dated:　　☒ Protocol,* dated:
　　　　　　　　　　　　☐ Sponsor's Amendment, dated:　　　　　　　☐ Notice to Sponsor, dated:
　　　　　　　　　　　　☐ Clinical Investigator's Brochure,* dated:　☐ Advertisement,* dated:
　　　　　　　　　　　　☐ Other,* dated:

* Only include these documents if they were checked in items 4. or 5. above (as being changed because of the amendment).

Note: listing document dates are optional and only necessary if required by the investigator or sponsor.

NOTE TO INVESTIGATORS: Study amendments *may not* be instituted until written approval from the IUPUI/Clarian Institutional Review Board is given. **Unless changes to previously approved research are minor, all amendments must be reviewed at a full IRB meeting.** See Guidelines for Determining an Amendment Type for additional information.

Do you consider these changes to be:
☒ Minor (minimal risk).
　　Submit (2) copies of the following documents with all changes highlighted if they were checked in items 4. or 5. above: informed consent statement(s), authorization, clinical investigator's brochure, and advertisement(s). Submit (1) copy of the following documents with all changes highlighted if they were checked in item 5. above: summary safeguard statement, protocol, and other documents.
☐ Major (substantive).
　　Submit (2) copies of documents with all changes highlighted if they were checked in items 4. or 5. above.

Signature of Investigator:_____Date:_____

SECTION III: IRB APPROVAL

The amendment of this protocol, including other documentation noted in item 6 above, for use of human subjects has been reviewed and approved by the IUPUI or Clarian Institutional Review Board.

Authorized IRB Signature:_____IRB Approval Date: 2/9/07

Rev. 11.05

APPENDIX C

IUPUI AND CLARIAN INSTITUTIONAL REVIEW BOARDS & SUBCOMMITTEES REVIEWS
STUDY AMENDMENT

**** FOR OFFICE USE ONLY ****	IRB STUDY NUMBER: 0603-78B
☐IRB-01; ☐IRB-02; ☐IRB-03; ☐IRB-04; ☐IRB-05	AMENDMENT NUMBER: 2

SECTION I: INVESTIGATOR INFORMATION

Principal Investigator: McDaniel, Anna M. _____ Department: Nursing _____

(Last, First, Middle Initial)

Building/Room No.: School of Nursing/Room NU 481 ____ Phone: 317-274-8095 _____ E-Mail: amcdanie@iupui.edu

Contact Information:

Name: Anna M. McDaniel, DNS, RN, FAAN ___ Address: 1111 Middle Drive, NU 481 ____ Phone: 317-274-8095

Fax: 317-274-2411 _____ E-Mail: amcdanie@iupui.edu

Project Title: Stress & Coping in Nurse Mangers: A Pilot Study

Sponsor/Funding Agency: None _____ Sponsor Amendment No. _____

SECTION II: AMENDMENT DESCRIPTION

This form must be typed and returned to Research Compliance Administration, 620 Union Drive, Union Building, Room 618, Indianapolis, IN 46202-5167 for submission to IUPUI IRBs or to the Methodist IRB Office at Methodist Hospital, Academic Affairs, 1630 N. Capitol, B Building, Room 349 for submission to the Methodist IRB. **Note: To check a box on this form, double-click the box and select "Checked" under "Default Value."**

1. Describe the proposed change(s) and rationale for the change(s):

The study amendment proposes adding one additional sites in Indianapolis, Indiana (Richard L. Roudebush VA Medical Center). The additional sites will enlarge the sample and allow for comparisons of themes emerging from four different facilities each possessing varying contextual factors.

·CS(2) looking okay @ 3/6/07

2. Is the study sponsored?

   ☒ No.

   ☐ Yes. Check the appropriate line below and provide with this amendment, as applicable:

       ☐ a copy of the sponsor's amendment, if the amendment came from the sponsor.

       ☐ a copy of your notice to the sponsor of this change, if you initiated the amendment.

       ☐ a copy of the approved amendment will be sent to the sponsor.

3. Describe how the amendment will affect the risk:benefit ratio for subjects:

   The amendment will not change the risk:benefit ratio for subjects. For this study, the risks to participants will continue to be minimal.

4. Do the proposed changes affect any of the following documents?

   ☒ Summary Safeguard Statement   ☐ Authorization

   ☐ Advertisement   ☒ Protocol

   ☐ Clinical Investigator's Brochure (CIB)   ☐ Other, Please describe:

5. Do the proposed changes affect the informed consent statement?

   ☐ Informed consent or written documentation of informed consent has been waived for this study.

   ☐ No. Skip to item 6 below.

   ☒ Yes. Answer items A. and B. below.

   A. Check the appropriate line below. One approved copy will be returned for your files.

       ☐ The new informed consent statement is _in addition_ to the current one.

       ☒ The new informed consent statement is _to replace_ the current one. If there are multiple consents associated with the study, please indicate which informed consent statement is being replaced.

   B. Do the changes to the new informed consent statement require reconsenting of _existing_ subjects?

       ☒ No. Please explain why not: Data collection from existing subjects has been completed.

       ☐ Yes. If this study involves the use of health information, is a revised Authorization needed?

           ☐ No. Authorization form was not altered.

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☐ Yes. A revised Authorization form is attached.

6. Amendment includes:
    ☒ Informed Consent,* dated: ☐ Authorization,* dated:
    ☒ Summary Safeguard Statement,* dated: ☒ Protocol,* dated:
    ☐ Sponsor's Amendment, dated: ☐ Notice to Sponsor, dated:
    ☐ Clinical Investigator's Brochure,* dated: ☐ Advertisement,* dated:
    ☐ Other,* dated:

* Only include these documents if they were checked in items 4. or 5. above (as being changed because of the amendment).

Note: listing document dates are optional and only necessary if required by the investigator or sponsor.

NOTE TO INVESTIGATORS: Study amendments _may not_ be instituted until written approval from the IUPUI/Clarian Institutional Review Board is given. Unless changes to previously approved research are minor, all amendments must be reviewed at a full IRB meeting. See Guidelines for Determining an Amendment Type for additional information.

Do you consider these changes to be:
☒ Minor (minimal risk).
    Submit (2) copies of the following documents with all changes highlighted if they were checked in items 4. or 5. above: informed consent statement(s), authorization, clinical investigator's brochure, and advertisement(s). Submit (1) copy of the following documents with all changes highlighted if they were checked in item 5. above: summary safeguard statement, protocol, and other documents.
☐ Major (substantive).
    Submit (2) copies of documents with all changes highlighted if they were checked in items 4. or 5. above.

Signature of Investigator:_____E-MAILED MAR 0 5 2007_____Date:_____

SECTION III: IRB APPROVAL

The amendment of this protocol, including other documentation noted in item 6 above, for use of human subjects has been reviewed and approved by the IUPUI or Clarian Institutional Review Board.

Authorized IRB Signature:_____IRB Approval Date: 3-9-07_____

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APPENDIX D

IUPUI and CLARIAN INFORMED CONSENT STATEMENT FOR

Stress and Coping in Nurse Managers: A Pilot Study

STUDY PURPOSE:

You are invited to participate in a research study designed to explore the stress and coping patterns of nurse managers in the health care work environment. The purpose of this study is to obtain a first hand qualitative description of stress and coping experiences of nurse managers working in the acute care hospital setting.

NUMBER OF PEOPLE TAKING PART IN THE STUDY:

If you agree to participate, you will be one of 30 nurse managers in this three hospital study that will include local participants.

PROCEDURE FOR THE STUDY:

If you agree to be in the study, you will complete a one time demographic questionnaire and one face-to-face interview. Six participants from the original group of 30 will be selected to participate in a second face-to-face interview. Each of the interviews inclusive of completion of the demographic questionnaire will take two hours to complete and will be audio recorded.

RISKS OF TAKING PART IN THE STUDY:

For this study, the risks to you are minimal. You may experience discomfort answering some of the questions in the study. While completing the demographic questionnaire and the face-to-face interview(s), you may opt not to answer a particular question. Personal identifiers will be removed from the data and only the research team will have access to the data. Although every effort will be made to ensure privacy, the risks could include possible loss of confidentiality.

BENEFITS OF TAKING PART IN THE STUDY:

Personal benefits from this study may include increasing your self-awareness about stress and coping in your work environment. Professional benefits to be gained may include knowledge contribution to improve the future health care work environment.   The proposed benefits of the study outweigh the potential minimal risk to participants.

_____
Participant Initials

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ALTERNATIVES TO TAKING PART IN THE STUDY:

Participation in this study is voluntary. Instead of being in the study, you have the option to refuse to participate.

CONFIDENTIALITY:

Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published. Study results will be reported in group form. Demographic questionnaires will be destroyed by shredding and audiotapes will be erased once results have been analyzed and the required time for record keeping has ended. Administrators in your institution will not know whether or not you have participated in the study.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the investigator and his/her research associates, the study sponsor, and the IUPUI/Clarian Institutional Review Board or its designees.

COSTS/COMPENSATION:

There are no costs to participate in the study. You will not receive payment for taking part in this study.

CONTACTS FOR QUESTIONS OR PROBLEMS:

For questions about the study, contact the researcher Maria Shirey at 812-457-2203 or her faculty advisor, Dr. Anna McDaniel at 317-274-8095.

In the event of an emergency, you may contact Dr. Anna McDaniel at 317-274-8095 (business hours) or 317-727-2991 (after hours).

For questions about your rights as a research participant or complaints about a research study, contact the IUPUI/Clarian Research Compliance Administration office at 317-278-3458 or 800-696-2949.

VOLUNTARY NATURE OF STUDY:

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled.

SUBJECT'S CONSENT:

In consideration of all of the above, I give my consent to participate in this research study. I acknowledge receipt of a copy of this informed consent statement.

_____
Participant Initials   Rev. 06/05

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SUBJECT'S SIGNATURE: _____

Date: _____
(must be dated by the subject)

SIGNATURE OF PERSON OBTAINING CONSENT: _____

Date: _____

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APPENDIX E

Questionnaire and Interview Guide

<div>

<u>Demographic Data</u>

Participant: ____ Age: ____ Gender: _____ Race/Ethnicity: _____

Years experience (1) in Nursing: _____ (2) as Nurse Manager: _____

Education:

Basic education in nursing (circle): Diploma   Associate Degree   BSN

Highest degree in nursing: _____

Highest degree not in nursing: _____

Current certification in nursing: Yes   No
            If yes, specify type and credentialing body:

            _____

            _____

Current responsibilities/resources:

Number of FTE   _____ (Include # of employees)

Number of units supervised   _____ (Include # of beds)

Number of assistants/type   _____

Number of advanced practice nurses _____

Other responsibilities beyond nurse
manager role   _____

Work hours:

Usual hours per day   _____

Usual hours per week   _____

Additional hours at home per week   _____

</div>

A. **Structured Interview**

1. **In the past week, have you experienced stress in any situation in your role as a nurse manager? If yes, please describe the situation to me. If no, proceed to question # 8.**

2. **What makes the situation difficult?**

3. **Did you anticipate any negative consequences or did you view the difficult situation as a challenge? Please expand upon your answer.**

4. **What emotions did you experience following this difficult situation?**

5. **How did you cope with this difficult situation?**

6. **Was your strategy effective for you in this difficult situation?**

7. **If your strategy was not effective, what could you have done differently?**

8. **What was the result of your coping efforts in terms of their effect on your psychological, physiological, and functional ability?**

9. **As a nurse manager, what situations, in general, are sources of stress for you in your role?**

10. **What factors increase or decrease stress for you in the nurse manager role?**

11. **What does support in the nurse manager role mean to you? What does it look like?**

12. What activities do you generally engage in to decrease stress?

13. What strategies can your organization institute that can be helpful in decreasing stress in your role?

B. <u>Additional Comments</u>

14. Are there any other comments regarding this subject that you may want to add?   Please elaborate.

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    commitment: The result of leadership. *Journal of Nursing Administration*, 25(9),

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    hospital, nursing leadership, and nursing job satisfaction. *Health Care*

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    responsibilities. *Healthcare Management Forum*, 13(1), 29-35.

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    science for health care leaders. Dallas, TX: VHA, Inc.

CURRICULUM VITAE

Maria R. Shirey

EDUCATION

Institution	Dates	Degree	Major
Indiana University School of Nursing Indianapolis, Indiana	1/ 2009	Ph.D.	Nursing Science; Health Systems/Leadership focus
Tulane University A.B. Freeman School of Business New Orleans, Louisiana	12/ 1991	MBA	Business; Executive Administration Practice focus
Texas Woman's University School of Nursing Houston, Texas	8/ 1986	MS	Nursing; Medical-Surgical Nursing Administration focus
Florida State University School of Nursing Tallahassee, Florida	5 / 1977	BSN	Nursing

LICENSURE

Licensed as Registered Professional Nurse in the States of Indiana, Texas, and Florida

CERTIFICATIONS

Alumnus Critical Care Nurse (CCRN). Board Certification, Critical Care Nursing, American Association of Critical-Care Nurses, 2002-present

Nurse Executive, Advanced Practice (NEA-BC). Board Certification, Nursing Administration, American Nurses Credentialing Center, 2000-present

Health Care Executive (CHE). Board Certification, Health Care Administration, American College of Healthcare Executives, 2000-present

Critical Care Nurse (CCRN). Board Certification, Critical Care Nursing, American Association of Critical-Care Nurses, 1980-1993

FELLOWSHIPS

Fellow, American College of Healthcare Executives, (FACHE), 2004-present

LEADERSHIP APPOINTMENTS

2003-present Principal Consultant & Founder, Shirey & Associates, Evansville, Indiana

2000-2003   Director, Patient Care Services, Cardiovascular Service Line
              Director, Magnet Program for Excellence in Nursing Services, Deaconess
              Hospital, Evansville, Indiana

1993-2000   Administrator & Founder, American Cancercare, Evansville, Indiana

1992-1993   Vice President, Professional Services, Opelousas General Hospital,
              Opelousas, Louisiana

1988-1992   Administrator & Founder, Acadiana Cancer Specialists, Opelousas,
              Lousiana

1984-1985   Assistant Head Nurse, The Methodist Hospital, Texas Medical Center,
              Houston, Texas

ACADEMIC APPOINTMENTS

2004-present Adjunct Associate Professor, Graduate Program in Leadership and
              Management, University of Southern Indiana, College of Nursing and
              Health Professions, Evansville, Indiana

2000-2003   Clinical Teaching Associate, Baccalaureate program in Leadership and
              Management, University of Southern Indiana, College of Nursing and
              Health Professions, Evansville, Indiana

1992-1993   Adjunct Assistant Professor, Baccalaureate program in Leadership and
              Management, University of Southwestern Louisiana, Lafayette, Louisiana

1987   Instructor, Associate degree program, Medical-Surgical nursing, Lamar
              University School of Nursing, Beaumont, Texas

1980-1981   Instructor, Hospital-based diploma program, Critical care nursing, Jackson
              Memorial Hospital School of Nursing, Miami, Florida

CLINICAL APPOINTMENTS

1985-1986   Staff Nurse, Coronary Care Unit, Hermann Hospital, The Texas Medical
              Center, Houston, Texas

1982-1984	Staff Nurse, Fondren-Brown Cardiovascular Surgical Intensive Care Unit, The Methodist Hospital, Texas Medical Center, Houston, Texas
1981-1982	Cardiac Surgery Nurse Clinician and Clinical Nurse Specialist, American Hospital, Miami, Florida
1977-1980	Staff Nurse & Senior Primary Nurse, Medical-Surgical Intensive Care Unit, Baptist Hospital, Miami, Florida

PUBLICATIONS

<u>Journal Articles</u>

Shirey, M.R. (2008). Innovative practice models for acute and critical care: Preface. *Critical Care Clinics of North America*, 20(4), xi-xii.

Shirey, M.R. (2008). Nursing practice models for acute and critical care: Overview of care delivery models. *Critical Care Clinics of North America,* 20(4), 365-373.

Shirey, M.R. & Fisher, M.L. (2008). Leadership agenda for change: Toward healthy work environments in acute and critical care. *Critical Care Nurse*, 28(5), 66-79.

Shirey, M.R. (2008). Building the leadership pipeline: A 5-step succession planning model. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 22(5), 214-217.

Shirey, M.R. (2008). Project management tools for leaders and entrepreneurs. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 22(3), 129-131.

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Shirey, M.R. (2008). Influencers among us: A practical approach for leading change. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 22(2), 63-66.

Shirey, M.R. (2008). Endurance and inspiration for the entrepreneur. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 22(1), 9-11.

Shirey, M.R. (2007). Stress and anger in nursing students. *Journal of Nursing Education*, 46(12), 568-571.

Shirey, M.R. (2007). An evidence-based understanding of entrepreneurship in nursing. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 21(5), 234-240.

Shirey, M.R. (2007). Leadership and organizational strategies to increase innovative thinking. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 21(4), 191-194.

Shirey, M.R. (2007). The entrepreneur and the business plan. *Clinical Nurse Specialist: The Journal for Advance Nursing Practice*. 21(3), 142-144.

Shirey, M.R. (2007). Competencies and tips for effective leadership: From novice to expert. *Journal of Nursing Administration*, 37(4), 167-170.

Shirey, M.R. (2007). Moral intelligence for the leader and entrepreneur. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 21(2), 71-73.

Shirey, M.R. (2007). Innovation and entrepreneurship: Shaping your professional horizon. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 21(1), 16-21.

Shirey, M.R. (2007). Knowledge management: An innovative strategy for the future. *Journal of Nursing Administration*, 37(1), 5-9.

Shirey, M.R. (2006). Building authentic leadership and enhancing entrepreneurial performance. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 20(6), 280-282.

Shirey, M.R. (2006). Authentic leadership: Foundation of a healthy work environment. *Reflections on Nursing Leadership*, 32(3), e5-e7.

Shirey, M.R. (2006). On intrapreneurship: From silos to collaboration. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 20(5), 229-232.

Shirey, M.R. (2006). Ethical health care. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 20(5), 256-257.

Shirey, M.R. (2006). Stress and coping in nurse managers: Two decades of research. *Nursing Economics*, 24(4), 193-203, 211.

Shirey, M.R. (2006). Evidence-based practice: How nurse leaders can facilitate innovation. *Nursing Administration Quarterly*, 30(3), 251-265.

Shirey, M.R. (2006). Entrepreneurship: Turning your intellectual capital into tangible results. *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 20(4), 179-182.

Shirey, M.R. (2006). Stress and burnout in nursing faculty. *Nurse Educator*, 31(3), 95-97.

Shirey, M.R. (2006). Authentic leaders creating healthy work environments for nursing practice. *American Journal of Critical Care*, 15(3), 256-267.

Shirey, M.R. (2006). Entrepreneurship: Is it in your DNA? *Clinical Nurse Specialist: The Journal for Advanced Nursing Practice*, 20(3), 130-133.

Shirey, M.R. (2005). Personal renewal for nurse leaders in the workplace. *Voice of Nursing Leadership*, 3(6), 8-9.

Shirey, M.R. (2005). 2005 AONE award winner profiles: Nurse executive scholarship. *Nurse Leader*, 3(4), e1-e3.

Shirey, M.R. (2005). Nurturance: Concept clarification and theory in nursing administration practice. *International Journal for Human Caring*, 9(3), 65-72.

Shirey, M.R. (2005). The leader's role in promoting certification in nursing practice. *Voice of Nursing Leadership*, 3(3), 3, 14.

Shirey, M.R. (2005). Celebrating certification in nursing: Forces of magnetism in action. *Nursing Administration Quarterly*, 29(3), 244-252.

Shirey, M.R. (2005). Ethical climate in nursing practice: The leader's role. *Journal of Nursing Administration Healthcare Law, Ethics, and Regulation*, 7(2), 1-9.

Shirey, M.R. (2004). 2004 AONE award winner profiles: Organizational innovation in nursing leadership. *Nurse Leader*, 2(6), 14, 23.

Shirey, M.R. (2004). Social support in the workplace: Nurse leader implications. *Nursing Economics*, 22(6), 313-319.

Shirey, M.R., Farmer, B.S. & Schnautz, L.S. (2004). One hospital's experience with a CCRN drive: A successful approach. *Critical Care Nurse*, 24(1), 46-52.

Chapters in Books

Shirey, M.R. (in press). *Entrepreneurship and intrapreneurship in advanced nursing practice.* In J. Fulton, B. Lyon & K. Goudreau (Eds.), Essentials of Clinical Nurse Specialist Practice. New York: Springer Publishing Company.

Shirey, M.R. (2008). Organizational behavior and Magnet hospitals. In P. Kelly (Ed.), *Nursing Leadership and Management* (2nd ed, pp. 64-81). Clifton Park, NY: Delmar Learning.

Invited Guest Editorships

Shirey, M.R. (2008, December). Innovative practice models for acute and critical care. *Critical Care Clinics of North America*.

Technical Publications of Limited Circulation

Shirey, M.R. (2004). Development of a strategic initiative to enhance physician satisfaction in a not-for-profit hospital. (2004 Fellow project available from The American College of Healthcare Executives, 1 N. Franklin Street, Suite 1700, Chicago, IL 60606).

Shirey, M.R. (2004). Preparing an organization for achieving Magnet designation. (2004 Fellow project available from The American College of Healthcare Executives, 1 N. Franklin Street, Suite 1700, Chicago, IL 60606).

Shirey, M.R. (2004). Expansion of the heart product line through growth of peripheral vascular services. (2004 Fellow project available from The American College of Healthcare Executives, Suite 1700, Chicago, IL 60606).

Shirey, M.R. (2004). Performance improvement successes in the cardiac catheterization laboratory. (2004 Fellow project available from The American College of Healthcare Executives, 1 N. Franklin Street, Suite 1700, Chicago, IL 60606).

Shirey, M.R. (1986). Knowledge of coronary heart disease in the work setting. Unpublished master's thesis, Texas Woman's University, Houston, Texas

Instructional Manuals

Shirey, M.R. (1989). Oncology nursing course manual and OCN certification primer. [Instructional manual]. Opelousas, Lousiana: Opelousas General Hospital.

Rodriguez, M. (1981). Antiarrhythmic and hemodynamic drips: A reference manual for critical care nurses. [Instructional manual]. Miami, Florida: American Hospital of Miami.

SELECTED AWARDS AND GRANTS

2005   Recipient, American Organization of Nurse Executives Scholarship Award for Nurse Executives to pursue doctoral dissertation entitled Stress and Coping in Nurse Managers: A Qualitative Description ($2,500)

2004   Recipient, Nursing Economics Foundation Scholarship for graduate level students ($5,000)

2004   Recipient, Jesse I. Cross Scholarship Award, Indiana University School of Nursing, Indianapolis ($2,500)

2004   Recipient, Indiana University School of Nursing Travel Fellowship ($800)

2003-2008 Grant writer, Deaconess Hospital Nursing Scholarship Program, Deaconess Hospital Foundation, 07/2003 – 07/2008 ($245,000)

2003-2004 Grant writer, Medical-Surgical Nurse Certification Drive, Deaconess Hospital Foundation, 07/2003 – 07/2004 ($15,000)

2000-2001 Grant writer, CCRN Certification Drive, Deaconess Hospital Foundation, 10/2000 – 10/2001 ($15,000), renewable yearly through 10/2004 in 5 year demonstration project

1992   Grant writer, Opelousas General Hospital (OGH) Nursing Scholarship Program at the University of Southwestern Louisiana at Lafayette, OGH Hospital Foundation, 09/2002 ($50,000)

HONORS

2007   Indiana University School of Nursing, Outstanding PhD Graduate Award

2006   Indiana University School of Nursing Alumni Association, Emily Holmquist Award

2005   American Association of Critical-Care Nurses and the AACN Certification Corporation, The Circle of Excellence Value of Certification Award

2005   Marita Titler Conduct of Research Award for Best Poster at the 12th annual National Conference on Evidence-Based Practice, University of Iowa Hospitals & Clinics, Iowa City

2004   American Organization of Nurse Executives, Organizational Innovation Award

2004   Who's Who Among Students in American Universities and Colleges, inductee, Indiana University School of Nursing, PhD student

2003   American Association of Critical-Care Nurses, The Circle of Excellence Multidisciplinary Team Award for The Code Blue Team at Deaconess Hospital

2002   American Association of Critical-Care Nurses, The Circle of Excellence Leadership Award

2001   Texas Woman's University, The Great 100 Nursing Alumni Award

1990   Who's Who in Nursing

1980   Sigma Theta Tau International Honor Society of Nursing, University of Miami School of Nursing chapter, Nurse of the Year Award

1976   Florida Student Nurses Association, Florida State University School of Nursing chapter, Student Nurse of the Year

SELECTED PROFESSIONAL ACTIVITIES

<u>Service to Organizations</u>

2004-present Midwest Nursing Research Society
                  Member, Stress & Coping, Health Systems & Policy, and Ethics research sections,
                  Chair Elect, Health Systems & Policy Research section, 2008
                  Chair, Health Systems & Policy Research Section, 2009

2000-present American Organization of Nurse Executives
                  Member, AONE National Diversity Taskforce, 2002-2003
                  Member, AONE National Publications Committee, 2005, 2006, and 2007
                  Member, AONE Work Environment Special Interest Group, 2004-present
                  Member, Indiana Organization of Nurse Executives, 2000-present
                  Member, IONE Board of Directors, 2005-2008
                  Chair, IONE Public Relations Committee, 2006-2008
                  Editor, IONE Biannual Newsletter, 2006-2007
                  Member, IONE Board of Directors representative to ISNA Taskforce on Maintaining Nurse's Knowledge and Skills, 2005
                  Member, IONE Southwest District, 2000-present
                  President, IONE Southwest District, 2005-2006
                  Chair, IONE Southwest District Membership Committee, 2005-2006
                  Secretary, IONE Southwest District, 2003-2005
                  Founding Member, IONE Southwest District Leadership and Management Annual Conference Planning Committee, 2003-present

1993-present American College of Healthcare Executives
Board certified in 2000 with advancement to Fellow in 2004
Member, Indiana Healthcare Executives Network, 2004-present
Resume reviewer, ACHE Annual Congress, 2005
Member, Indiana Regent's Advisory Council (RAC), 2006-2008
Chair, Indiana RAC Subcommittee on Advancement, 2006-2007

1990-present American Nurses Association
Member, Florida Nurses Association, 1980-1982
Student member, Florida Student Nurses Association, 1975-1977
Student delegate and speaker, convention of the Florida Student Nurses Association, 1977
Member, Louisiana State Nurses Association, 1990-1993
Member, Indiana State Nurses Association, 1993-present
Member, District 4, southwest region, ISNA, 1993-present
Member, ISNA Taskforce on Maintaining Nurses' Knowledge and Skills, 2005
Member, Membership Task Force, 2006

1977-present American Association of Critical-Care Nurses
Member, Greater Evansville Chapter, 2000-present
Member, Planning Committee, Heart of Cardiovascular Nursing annual seminar, 2000-2003
Member, National, Board of Directors, AACN Certification Corporation, 2006-2010
Chair Elect, National Board of Directors, AACN Certification Corporation, 2008-2009
Chair, National Board of Directors, AACN Certification Corporation, 2009-2010
Board Liaison Member, National Consumer Representative Nominating Committee, 2006-2007
Board Liaison Member, Certified Acute Care Nurse Practitioner (ACNP-C) Exam Development Committee, 2006-2007
National Nominating Committee, AACN, 2007-2008
Board Liaison Member and Member Research Committee, American Board of Nursing Specialties, 2008-2009
Member, National Speaker's Bureau on Healthy Work Environments, 2007-present

1977-present Sigma Theta Tau International, Honor Society of Nursing
Member, Inducted at Florida State University, Beta Pi Chapter, 1977
Member, Research Program Planning Committee, Delta Eta Chapter, 1990-1992
Co-chairperson, Research Program Planning Committee, Delta Eta Chapter, 1992
President-Elect, Delta Eta Chapter, 1991-1993

Member, Omicron Psi Chapter, 1995-present
Member, Alpha Chapter, 2004-present

Editorial Board Activities

2008-2011   Editorial Board Member, Frontiers of Health Services Management, American College of Healthcare Executives/Health Administration Press

2008-present Consulting manuscript reviewer, American Journal of Critical Care, Journal of the American Association of Critical-Care Nurses

2007-present Peer reviewer, Journal of Continuing Education in Nursing, Continuing Competence for the Future, Slack Incorporated Publications

2007-present Peer reviewer, Nursing Management Journal, Lippincott, Williams & Wilkins

2007   Peer reviewer, Research Issue, Journal of Nursing Administration, Lippincott, Williams & Wilkins

2006-present Editorial Board Member and Column Editor (Entrepreneurship), Clinical Nurse Specialist: The Journal for Advanced Nursing Practice, Lippincott, Williams & Wilkins

2005-present Consulting manuscript reviewer, Clinical Nurse Specialist: The Journal for Advanced Nursing Practice, Lippincott, Williams & Wilkins

2005-present Consulting manuscript reviewer, Worldviews on Evidence-Based Nursing, Blackwell Publishing Inc

2005-2006   Consulting manuscript reviewer, Nursing Leadership Forum, Springer Publishing Company

2005-2007   Manuscript reviewer and consulting editor, Voice of Nursing Leadership, as member of the AONE Publications Committee

2006   Expert peer reviewer for book chapter entitled "The Work Environment and Working Conditions for Nurses: Stress and Burnout" in textbook Patient Safety and Quality: An Evidence-Based Handbook for Nurses published by the Agency for Healthcare Research & Quality in collaboration with The Robert Wood Johnson Foundation

2006   Book reviewer for Ethical Health Care by Patricia Illingsworth and Wendy Parmet published by Pearson Prentice Hall

2005   Book reviewer for Introduction to Evidence-Based Practice in Nursing and Health Care by Kathy Malloch and Tim Porter O'Grady published by Jones & Bartlett Publishers.

SELECTED PROFESSIONAL PRESENTATIONS

Paper Presentations

Shirey, M.R. (2008, April). Nurse manager work complexity: Implications for personal and organizational nurturance. Podium presentation at the 30th International Association for Human Caring Conference, Chapel Hill, North Carolina.

Shirey, M.R. (2007, November). Entrepreneurship and the advanced practice nurse. Podium presentation at the Oncology Nursing Society Advanced Practice Institute, Chicago, Illinois.

Shirey, M.R. (2007, October). A qualitative description of nurse manager stress and coping experiences. Podium presentation at the International Nursing Administration Research Conference, Indianapolis, Indiana.

Shirey, M.R. (2007, July). Stress and coping in nurse managers: Translating research into practice. Podium presentation at the 18th International Nursing Research Congress Focusing on Evidence-Based Practice, Vienna, Austria.

Shirey, M.R., Schnautz, L.S. & Farmer, B.S. (2007, May). Sharing best practices: The circle of excellence experience. Podium presentation at the 2007 National Teaching Institute and Critical Care Exposition, annual meeting of the American Association of Critical-Care Nurses, Atlanta, Georgia.

Shirey, M.R. (2007, May). Leadership and organizational strategies to increase innovative thinking. Podium presentation at the 2007 National Nurse Entrepreneur Conference, Indianapolis, Indiana.

Shirey, M. R. (2007, April). Stress and coping in nurse managers: A qualitative description. Podium presentation at the 11th annual Research and Health Care Issues Conference, University of Southern Indiana, Evansville, Indiana.

Shirey, M.R. (2007, March). Stress and coping in nurse managers: A qualitative description. Podium presentation at the 31st annual research conference of the Midwest Nursing Research Society, Omaha, Nebraska.

Shirey, M.R. (2006, November). Authentic leaders creating and sustaining healthy work environments for nursing practice. Podium presentation at the 6th International Conference, Healthy Workplaces in Action 2006, annual conference of the Registered Nurses' Association of Ontario (RNAO), Ontario, Canada.

Shirey, M.R. & Valadares, K. (2006, November). Performance transformation methodologies: Human capital management in complex adaptive systems. Panel presentation at the Indiana Health Executive Network of the American College of Healthcare Executives, Evansville, Indiana.

Shirey, M.R. (2006, October). Creating cultures of retention: Evidence-based leadership strategies. Concurrent session presented at the annual fall meeting of The Indiana Organization of Nurse Executives, Nashville, Indiana.

Shirey, M.R. (2006, May). Authentic leaders creating healthy work environments. Podium presentation at the 2006 National Teaching Institute and Critical Care Exposition, annual meeting of the American Association of Critical-Care Nurses, Anaheim, California.

Shirey, M.R. (2006, April). Stress and coping in nurse managers: What is the evidence? Podium presentation at the 10th annual Research and Health Care Issues Conference, University of Southern Indiana, Evansville, Indiana.

Shirey, M.R. (2006, April). Creating cultures of retention: Renewal strategies in the workplace. Workshop conducted at the annual spring conference of the Kansas Organization of Nurse Leaders, Wichita, Kansas.

Shirey, M.R. (2006, April). Authentic nurse leaders promoting values and healthy work environments. Paper presentation at the Ethics Symposium of the 30th annual research conference of the Midwest Nursing Research Society, Milwaukee, Wisconsin.

Shirey, M.R. (2005, November). Creating Magnet cultures: Renewal strategies in the workplace. Paper presentation at the Leadership Sessions of the Sigma Theta Tau International 38th Biennial Convention, Indianapolis, Indiana.

Shirey, M.R. (2005, October). Stress and coping in the nurse manager role: An integrative review of the literature. Paper presentation at the Management and Leadership Session of the 11th Biennial National Nursing Administration Research Conference (NARC), Tucson, Arizona.

Shirey, M.R. (2005, October). Nurturance: A concept of promise for nursing administration practice. Paper presentation at the Theory and Methods Session of the 11th Biennial National Nursing Administration Research Conference (NARC), Tucson, Arizona.

Shirey, M.R. (2005, August). Ethical climate in nursing practice: The leader's role in promoting quality outcomes. In R. Cameron (Chair), Clinical Practice on the Edge. Paper presentation at the 3rd annual international health conference, University of the Witwatersrand, Department of Nursing, Johannesburg, South Africa.

Schnautz, L.S., Farmer, B. & Shirey, M.R. (2005, May). One hospital's experience with a CCRN certification drive: Three year results. Podium presentation at the 2005 National Teaching Institute and Critical Care Exposition, annual meeting of the American Association of Critical-Care Nurses, New Orleans, Louisiana.

Shirey, M.R. (2005, March). Building a career in nursing: A nurse executive's perspective. Address at the 2005 annual convention of the Indiana Association of Nursing Students, Indianapolis, Indiana.

Shirey, M.R. (2004, April). Stress in the healthcare work environment. In P. Graul (Chair), Linking research to education, service, and patient care outcomes. Symposia conducted at the meeting of the 8th annual Research and Health Care Issues Conference, University of Southern Indiana, Evansville, Indiana.

Shirey, M.R. & Arnold, M. (2003, October). Taking the voodoo out of validity: Use of a creative teaching exercise to supplement nursing research class content. In P. Graul (Chair), The academic performance of students: Legal and ethical issues. Paper presented at the meeting of the 8th annual Nursing and Health Professions Educator Conference, University of Southern Indiana, Evansville, Indiana.

Shirey, M.R. (2003, April). Journey to Magnet: The Deaconess Hospital experience. In J. Kirsch (Chair), Creating a magnet workplace culture. Workshops conducted at the meetings of the VHA Central Magnet Collaborative, Indianapolis, Indiana and Columbus, Ohio.

Shirey, M.R. (2003, Spring). Magnet designation: A vehicle to showcase professional nursing practice. Paper presented at the spring meeting of the Omicron Psi Chapter of Sigma Theta Tau International, University of Southern Indiana, Evansville, Indiana.

Shirey, M.R. (2002, December). The Deaconess Hospital journey to Magnet. Paper presented at the meeting of the first annual Deaconess Hospital Nursing Magnet Conference, Evansville, Indiana.

Poster Presentations

Shirey, M.R. (2007, April). Stress and coping in nurse managers: A qualitative description. Poster presentation at the 14th annual conference on Evidence Based Practice: Implementation Strategies, Making it Happen held at the University of Iowa Hospitals & Clinics, Iowa City, Iowa

Shirey, M.R. (2006, April). Stress and coping in nurse managers: What is the evidence? Poster presentation at the 13th national conference on Evidence Based Practice: Implementation of Evidence-Based Practice in Diverse Settings and with Diverse Populations held at the University of Iowa Hospitals & Clinics, Iowa City, Iowa.

Shirey, M.R. (2005, November). Stress and coping in the nurse manager role. Poster presentation at the 32nd annual meeting of the American Academy of Nursing, Scottsdale, Arizona.

Shirey, M. R. (2005, October). Social support and stress in the work environment: Evidence based nursing management practice and related strategies. Invited poster presentation at the American Psychiatric Nurses Association (Oregon Chapter) national conference on Violence in the Workplace, Portland, Oregon.

Shirey, M.R. (2005, April). Social support and stress in the work environment: Evidence based nursing management practice and related strategies. Poster presentation at the 12th national conference on Evidence Based Practice: Pursuing Excellence held at the University of Iowa Hospitals & Clinics, Iowa City, Iowa. Winner, Marita Titler Conduct of Research Award for Best Poster.

Shirey, M.R. (2004, November). The leader's role in promoting professional certification in nursing practice. Poster presentation at the 31st annual meeting of the American Academy of Nursing, Washington, DC. Participated in AAN conference as an Emerging National Leader sponsored by mentor, Anna McDaniel, DNS, RN, FAAN.

Shirey, M.R. (2004, November). Social support and stress in the work environment: Evidence based nursing management practice. Poster presentation at the 8th annual Instituto de Salud Carlos III Nursing Research Conference, Seville, Spain.

Shirey, M.R. (2004, August). Celebrating certification in nursing: Forces of magnetism in action. Poster presentation at The Forum on Health Care Leadership Conference, Nashville, Tennessee.

Shirey, M.R. (2004, March). A strategic initiative to increase physician satisfaction in a not-for-profit hospital. Poster presentation at the Management Innovations Poster Session of the 2004 American College of Healthcare Executives, Congress on Healthcare Management, Chicago, Illinois.

Clark, S.H., Farmer, B.S., Vaught, K. & Shirey, M.R. (2003, March). Beyond the cardiovascular bedside: Implementation of a community peripheral vascular screening program. Poster presentation at the Greater Evansville AACN Chapter's Heart of Cardiovascular Nursing Symposium held at the University of Southern Indiana, Evansville, Indiana. First place winner.

Shirey, M.R., Farmer, B.S. & Schnautz, L.S. (2002, March). The CCRN drive at Deaconess Hospital. Poster presentation at the Greater Evansville AACN Chapter's Heart of Cardiovascular Nursing Symposium held at the University of Southern Indiana, Evansville, Indiana. Second place winner.

Johnson, S., Shirey, M.R., Schnautz, L.S., Hunt, J. & Duvall, S. (2002, March). Restructuring of a Code Blue Team with emphasis on outcomes. Poster presentation at the Greater Evansville AACN Chapter's Heart of Cardiovascular Nursing Symposium held at the University of Southern Indiana, Evansville, Indiana. First place winner.