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CHRONICLING RESIDENT AND STAFF OUTCOMES THROUGHOUT THE IMPLEMENTATION OF A PROFESSIONAL NURSING PRACTICE MODEL IN ONE MIDWEST CONTINUING CARE RETIREMENT COMMUNITY: A LONGITUDINAL ANALYSIS

by

Kimberly Michele Bergen-Jackson

A thesis submitted in partial fulfillment of the
requirements for the Doctor of
Philosophy degree in Nursing
in the Graduate College of
The University of Iowa

August 2013

Thesis Supervisor: Professor Janet K. Specht

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CERTIFICATE OF APPROVAL

PH.D. THESIS

This is to certify that the Ph.D. thesis of

Kimberly Michele Bergen-Jackson

has been approved by the Examining Committee
for the thesis requirement for the Doctor of Philosophy
degree in Nursing at the August 2013 graduation.

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To my wife, Sheryl, and our
precious daughters, Hailey and Sophie.

Just don’t give up trying to do what you really want to do.
Where there is love and inspiration, I don’t think you can go wrong.

Ella Fitzgerald, 1917–1996

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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

The quality of care (QoC) provided to people in nursing homes has been the subject of national criticism for decades. Despite evidence suggesting this quality can be improved by strengthening the role of the Registered Nurse (RN) (Harrington et al., 2006; Rantz et al., 2013; Tellis-Nayak, 2007; Spilsbury, Hewitt, Stirk, & Bowman, 2011; Mueller, Anderson, McConnell, & Corazzini, 2012), there are no national standards for staffing or education and training of licensed staff in our nursing homes.

There are simply not enough RNs employed in most nursing homes and, as a result, most residents receive very little care either delivered or directed by professional nurses (Institute of Medicine [IOM] reports; 1985, 1996, and 2010). On average, a resident receives 30 minutes a day of RN time – compared to 6 to 8 hours for patients in hospitals (Maas & Specht, 2008). However, RN staffing is not the only factor affecting the quality of care for NH residents. Most direct care is given by Licensed Practical Nurses (LPNs) and unlicensed direct care staff or Certified Nursing Assistants (CNAs).

The QoC for residents in nursing homes is also associated with the competencies (knowledge, skills, values) of RNs to function effectively as leaders and geriatric nursing experts. Two-thirds of RNs in nursing homes have associate degrees (2-year degree) or diplomas (3-year program) in nursing, and their average age is 46 years (Federal Division of Nursing, 2010; Buerhaus, Straiger, & Auerbach, 2009). Consequently, the majority of these nurses had limited training in Gerontologic nursing and leadership in their basic education programs.

Clearly, RNs are accountable for the nursing care provided by practical nurses and unlicensed nursing staff. RNs are accountable for the supervision, direction, and coaching of assisting staff and are especially critical for quality of care in the nursing home setting. Thus, RNs in nursing homes have significant professional development needs to provide the clinical leadership and to be accountable for ensuring that complex nursing needs of residents are met (Maas & Specht, 2008; Scherb, Specht, Loes, & Reed, 2011; Flynn, Liang, Dickson, & Aiken, 2010).

Focusing on the care delivery system and the professional development of nursing staff needs as well as the practice environment in nursing homes has the potential to address other issues plaguing nursing homes, specifically, recruitment and retention of qualified staff.

When RNs are able to practice in an environment that supports professional nursing practice, turnover of all nursing staff decreases, retention increases, and recruitment of RNs to nursing home practice settings is positively impacted (Castle, 2006; Mueller et al., 2012; Castle & Anderson, 2011). The literature also notes that when RN turnover is high, quality of care for nursing home residents is lower and performance at survey is poorer (Castle & Engberg, 2006; Castle & Anderson, 2011; Bowblist, 2011; Harrington, Choiniere, Goldmann, Jacobsen, Lloyd, McGregor, Stamatopoulos, & Szebehely, 2012). If nursing home care is to be improved, it is imperative to strengthen the RN practice environment and role in nursing homes.

Our efforts to improve quality need to focus on ensuring that the limited number of professional nurses in nursing homes will provide crucial assessment and care management of residents, best gerontological nursing practices, leadership, and

supervision of the large number of unlicensed staff providing the majority of direct care. This requires attention to the care delivery systems that guide the organization and delivery of professional nursing care.

Components of a professional nurse practice model (PNPM) may include: professional development, peer review, quality improvement, research, care management, standards and scope of practice, consultation, task force development, job enrichment, standard qualifications (Maas & Specht, 2008), collaboration, accountability, decision-making, formal and informal continuity of information, and continuity of care provider (Mueller et al., 2010). There is also a need to ensure that RNs have leadership competencies to influence care and change practice environment to ensure the quality of care and quality of life for residents (Maas & Specht, 2008; Mueller, 2010). Utilizing this approach increases retention of qualified nurses and improves the quality of life and quality of care for residents in nursing homes. The Iowa Veteran's Home implemented a PNPM approximately 30 years ago and was able to show positive effects on both residents and staff (Maas, 1989). Unfortunately, there has been little movement in this area since then, thus limiting the literature on professional practice in nursing homes.

In contrast, acute care hospitals has been emphasizing higher RN job satisfaction and improved patient outcomes for over 15 years (Hess, Desroches, Donelan & Buerhaus, 2011; Ulrich, Buerhaus, Donelan, & Dittus, 2007; Lashinger, 2009; Lake, Shange, Klaus, & Funton, 2010). The basis for the American Nurse Credentialing Center's (ANCC) Magnet program in hospitals includes five components: transformational leadership, structural empowerment, exemplary professional practice,

new knowledge, innovations and improvements, and empirical quality results (Kelly, McHugh, & Aiken, 2011).

In an effort to increase the presence of qualified, well-educated RNs in the nursing home, and establish criteria or practice standards for a professional practice environment, the ANCC followed the path of their Magnet program and recently developed the Pathway to Excellence in Long-Term Care^{TM} designation (PTE-LTC). This is the first designation program in the country specifically designed for nursing homes. It focuses on the nursing environment, professional nursing practice, and improved quality of resident care. According to the PTE-LTC Program, the direct nursing benefits may include: improved autonomy and authority, improved job satisfaction, and increased retention. The direct resident benefits are: improved quality of life and quality of care. They also posit the direct organizational benefits of PTE-LTC status may be: increased visibility and prestige, reduced costs of nursing recruitment and hiring through improved staff retention, and increased education levels and specialty certification of nurses. An organization which recognizes the above factors shows a commitment to quality and ensures the development of a collaborative environment, strong nursing leadership, and supported career development. This study describes the implementation of a PNPM while seeking to obtain this designation. A discussion of the effects on staff retention and quality of resident care in one nursing home are included.

Purpose of the Study

The purpose of this study was to chronicle the process of seeking the PTE-LTC designation. The practice standards for the designation serve as the model to implement professional practice focused on decision-making, accountability for resident care, and

the leadership development of nursing staff in a single study site. The study includes a description of structures and processes which were in place prior to the implementation, and those developed during the process to operationalize the model. The methods which were used to accomplish these organizational changes are identified as well. In addition, the study reports on the effects of the model implementation on organizational, nursing, and resident measures. In this study, the Pathway to Excellence standards serves as the proxy for the Professional Practice Model.

The implementation of, and support for, a professional nursing practice role and environment in a nursing home was expected to improve both the quality of care and quality of life for older adults who live in the nursing home, as well as staff job satisfaction and retention of nursing staff.

Specific Aims

1. Describe the structures and processes in place both before and after implementing a PNPM.
2. Compare nursing staff and resident outcomes before, during, and after implementation of the PNPM.
3. Describe the individual and organizational barriers and facilitators encountered during the process of seeking PTE-LTC designation.

Research Questions

The aims of the study will answer the following research questions:

1 How do organizational structures and processes vary over time relative to the implementation of a PNPM?

2 What are the changes over time for resident and staff outcomes in implementing a PNPM in the nursing home?
3 What are the tangible and intangible benefits and drawbacks, to the organization, staff, and residents, of seeking the PTE-LTC designation?

Significance of the Study

Nursing home quality has been a national concern for decades. There are multiple barriers to providing high quality care and includes; staffing, training, and turnover. The implementation of a professional nurse practice model and support for this type of environment is a logical way to address these concerns. This environment provides opportunity for RNs to specialize in their chosen field, increasing confidence and autonomy while assuming accountability as an expert professional Gerontologic nurse. Additional components include leadership, skill development, and a focus on a building a foundation of Gerontological nursing best practices.

Shared governance with shared and distributed decision making develops cohesion within the nursing team and facilitates the implementation of evidence based practices. By developing a strong team of nursing leaders, the accountability of nursing practice is shared by the group and the isolation of the Director of Nursing role is significantly reduced. Nurses can enhance quality of care, lead the direct care staff and inform the management of what is needed to provide exceptional care.

In addition, this study may yield valuable results due to the research design. The need for both qualitative and quantitative research to determine the extent to which the variables can predict quality improvement in nursing homes is important. This study will make a step forward by combining both quantitative and qualitative approaches within

one study (Creswell, 2002; Tashakkori & Teddie, 1998). This integration will provide a deeper insight into the impact of professional practice models in nursing homes.

The results chronicle how a professional nurse practice model can be implemented in a nursing home environment, discusses the benefits and drawbacks of such a project, evaluates outcomes, and shares what was learned.

Table 1. Key Terms and Definitions

Key Terms	Operational Definition
Shared Governance	Structures and processes which provide for active participation of nursing staff in making decisions about their practice, their work environment, and resident care.
Structures	The professional and organizational resources associated with the provision of healthcare services (environment) which may include: • Clinical Ladder Development • Performance Evaluations • Orientation and Training Plans • Scope of Practice • Learning Environment
Processes	The method by which healthcare services are provided, which may include: • Application Process for the Clinical Ladder • Criteria for Salary Increase • Needs Assessment for Orientation • Skills Fair • Computer Access
Outcomes	The desired states resulting from certain processes, which may include: • For all staff: improved job satisfaction • For nursing staff: increased specialty certifications, decreased turnover, increased tenure, increased committee involvement, participation in decision making • For all residents: improved overall satisfaction • For nursing home residents: decreased falls with injury, decreased pain, decreased urinary tract infections, less unintentional weight loss
Professional Nurse Practice Model (PNPM)	A Professional Nurse Practice Model provides the structure for RNs, LPNs, and CNAs that capitalizes on the unique qualities of each without making them all the same. • RNs have the responsibility and authority for the organization and provision of direct care and the supervision of nursing care provided by LPNs, CNAs, and other unlicensed direct care staff. • RNs are accountable for their own practice, and for the collective practice of nursing in the organization, for coordinating care, and for promoting continuity across the spectrum of care.
Pathway to Excellence in Long-Term Care (PTE-LTC)	The Pathway to Excellence® Program recognizes the essential elements of an optimal nursing practice environment. The designation is earned by healthcare organizations that create work environments where nurses can flourish. The award substantiates the professional satisfaction of nurses and identifies best places to work. The structure of this designation is the framework for this study.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The demographics of aging continue to change dramatically. The older population is growing rapidly and the aging of the "Baby Boomers", born between 1946 and 1964 (who began turning age 65 in 2011), are accelerating this growth. There are currently 40 million Americans aged 65 and over, or 13 percent of the entire United States population (US Census Bureau, 2010; Older Americans, 2012). The most rapidly growing segment being the ages of 90-94. As the baby boomer generation reaches retirement age the number of people residing in nursing homes may well exceed 3 million over the next 20 years.

In addition to growing numbers of older persons in nursing homes, the needs of the population are increasingly complex as well. Many have multiple health conditions such as high blood pressure, congrestive heart failure, chronic obstructive pulmonary disease, diabetes, pain, and electrolyte imbalance. In addition to physical health conditions, there are concomitant conditions within the mental health spectrum, such as depression, anxiety, schizophrenia, bipolar disorder, and dementia. The complexities and frailities present in the aging population today require specialized training and monitoring by well educated and competent RNs.

Nursing homes are not places where people want to live or work. Yet many people have no choice: approximately 40% of Americans will need nursing home care in their lifetimes, whether for short-stay rehabilitation, care when chronically cognitively impaired, or at the end of life (Oregon Health Care Association, 2008). Currently, there

are approximately 16,000 nursing homes in the U.S., providing care to 1.4 million people over the age of 65, and roughly 50 percent of those residents have some form of dementia (OSCAR, 2012). While the care needs of these residents are increasing, the number of staff available is decreasing.

Indicators of poor quality of care that are prevalent in nursing homes include: poor management of pain; high rates of pressure ulcers, dehydration, and malnutrition; persistent problems with urinary incontinence; inappropriate care approaches for persons with dementia; re-hospitalization; inadequate levels of direct care staffing; and lax supervisory practices that can endanger residents (CMS, 2012; GAO, 2010; Rantz, et al., 2009; Harrington, 2006; Hyer, Thomas, Branch, Harman, Johnson, Weech-Maldonado, 2011; Rantz et al., 2013, Harrington, et al., 2012; Bowblist, 2011).

More than 1.6 million people are working as caregivers in nursing homes; yet they are dissatisfied with their places of employment, leading to high turnover rates, ranging from 34.7 to 42.6 percent and vacancy rates as high as 7.0%, showing difficulty recruiting and retaining caregivers in the field (AHCA, 2010). The lack of qualified staff contributes to poorer quality of care and quality of life issues for nursing home residents. Further, in a report by the Government Accountability Office (GAO, 2009), it was documented that one in five nursing homes nationwide had serious deficiencies which caused residents actual harm or placed them in immediate jeopardy (GAO, 2009). The actual number may be even higher given the evidence of significant underreporting of care problems. These deficiencies exist despite considerable spending and government oversight.

Nursing homes face significant obstacles that make it difficult for them to provide high-quality care for older persons. There is a lack of RN presence in nursing homes with the majority of direct care being performed by certified nursing assistants (CNAs) and supervised by licensed practical nurses (LPNs) (AHCA, 2010; GAO, 2009). To clarify, a CNA is a person, with or without a high school diploma, who has completed a basic 75 hour training course. An LPN is a person who has completed a 12 month program in nursing and is licensed to provide basic care under the supervision of a physician or registered nurse. A registered nurse is a person who has completed a 2-year associate degree program in nursing, a 3-year diploma program in nursing, a 4-year baccalaureate program in nursing, or a higher degree program in graduate school. The registered nurses (RNs) who are working in long-term care have less than baccalaureate preparation (64%) and a lack of gerontological expertise (Collier & Harrington, 2008).

There is also an insufficient understanding of how to sustain quality improvement in nursing homes (Adams-Wendling & Lee, 2005; Rantz et al., 2012; Dellefield, Kelly, & Schnelle, 2013). The main focus being placed on medication administration with a lack of accountability and leadership (Brownlee, 2006; Arling, Kaen, Mueller, Bershadsy, & Degenholtz, 2007; Zinn, Mor & Feng, 2007; Scherb, Specht, Loes, & Reed, 2011).

Nursing Homes

Nursing Homes (NHs) vary by size, tax status, staffing levels, resident acuity, and organizational systems. The corporate structure can be for profit, not for profit, or governmental. There are multi-site corporations, single site corporations, and private not for profit. They can be very small (15-20 beds) to very large (+700 beds).

Within NHs, there may be specialized units based on resident care needs or specific diagnosis. For instance, some include a unit for individuals with Alzheimer's, Parkinson's, Huntington's, head trauma, or renal dialysis. Other nursing homes may have skilled units specializing in post-acute care or ventilator dependent units specializing in long-term artificial breathing.

Staffing and Leadership Issues

Issues of staffing levels and quality in nursing homes (NHs) have been well documented (Dyck 2004, Reilly et al. 2006, Zhang et al., 2006, Park & Stearns, 2009; Bowblist, 2011; Harrington et al., 2012; Hyer et al., 2011; Rantz et al., 2013). NHs are not staffed adequately to care for the older adults (residents, elders) who live there (Maas et al., 2008). Staffing levels are positively associated with improved quality (Castle, 2007; Bowblist, 2011; Harrington et al., 2012). Given this information, it is surprising that most states do not require minimum staffing recommendations for NHs (Harrington 2006, Castle & Anderson, 2011; Flynn et al., 2010).

As the care needs of the residents become increasingly more complex and person-centered or individualized, it will not just matter how many people are completing the work, but also how the work is completed, by whom, and in what manner (Bowers et al, 2000; Kane-Urrabazo, 2006; Arling et al. 2007; Siegel & Young, 2010; Mueller et al., 2012). It is the quality of the work and how the team functions that determines resident satisfaction (Harrington, 2012; Siegel & Young, 2010). Examining only staffing levels is insufficient and fails to look at the bigger picture. There are a few studies that look at job function and various models of care. Harrington, 2012; Castle & Anderson, 2011; Flynn et al., 2010) identified RN staffing levels associated with quality; Castle & Engberg

(2005) identified RN turnover was associated with CNA and LPN turnover and quality. The team function is driven by the team leader and this position is typically the Director of Nursing (DON) (Tellis-Nayak, 2007; Sieloff, 2003; Shirey, 2007; Rantz et al., 2012; Rantz et al., 2013; Dellefield et al., 2013; Toles & Anderson, 2011).

An effective leader is someone who can motivate people to do their jobs well and give them the support and resources to be successful (Adams-Wendling & Lee 2005, Anderson, Issel, & McDaniel 2003, & Dahlen 2002; Toles & Anderson, 2011; Dellefield et al., 2013; Siegel, Mueller, Anderson, & Dellefield, 2010). There is a growing body of research supporting the role of the DON and how they contribute to creating a culture of excellence or quality.

Two studies address the educational needs of NH directors (Arojan, Patsdaughter, & Wyszynski, 2000; and Heine-Mueller 1998). Both studies showed the majority (67%), of DONs have an associate degree in nursing. This is a two-year program with little content on leadership, team development or sustaining quality improvements. Additionally, DONs are not required to have formal leadership training or education in gerontological studies (Arojan et al. 2000; Siegel et al., 2010). For many advertised DON positions, there are also no prerequisites for the job except that the applicant must hold a current RN license.

Most DONs practice in hierarchical structures; alternative models are needed both for DON and for nurses to advantage residents. The multiple demands on this position and variety of responsibilities required, nursing care, supervision, regulations, administration, scheduling, etc., coupled with the lack of appropriate training, contribute to a feeling of isolation, burnout, and high turnover of the DON position (Anthony,

Standing, Glick, Duffy, Paschall, & Sauer, 2005; Tellis-Nayak & Duss, 2005; Upenicks, 2002; Wagner, 2003; AHCA, 2010).

The Importance of Professional Nursing Practice Models

PNPMs provide a framework for the delivery of nursing care to residents in NHs. The components may include nursing accountability, professional development, shared governance or shared decision-making, continuity of care, utilization of evidence-based practices (EBP) and team work (Maas & Specht, 2008; Mueller et al, 2010). Each of these components are related to the RN's role as leader, coordinator, and provider of clinical care and to the important characteristics of a professional practice model (Mueller, 2010; Maas, Specht, & Buckwalter, 2002).

RNs in administrative roles have been shown to be vital in supporting the changes necessary to improve resident outcomes (Mueller, 2010). Yet most nursing homes do not have the infrastructure in place to educate RNs in the QI roles listed above or the accountability structures of a professional practice environment so that they can effectively support sustained QI. They are often dictated by others and do not reflect the priorities of the staff or residents at the facility so there is less investment. As a result, nursing home QI initiatives are often dictated by others and do not reflect the priorities of the staff or residents; there is less investment and little sustainable success (Rantz, et al., 2009, 2010, 2012, 2013; Mueller 2002, 2006; Mueller et al., 2006; Harrington, 2006, 2012; Specht, Mobily, & Russell, 2010).

This framework promotes professional collaboration in an effort to ensure resident care is coordinated by a RN, communicated to the direct care staff, supervised, and evaluated (Bellot, 2007; Maas & Specht, 2008). By creating a cohesive nursing

group, the accountability for nursing practice is shared among the group and the DON is less isolated (Maas & Jacox, 1977).

Maas and Jacox (1977) reported findings from a case study describing the implementation of such a model at the Iowa Veteran's Home (IVH). The DON worked in collaboration with the RNs to create a nursing collective using shared governance, primary care, accountability, and professional development. A number of positive outcomes for staff and residents resulted from the implementation of the PNPM. Staff outcomes included an increase in the education preparation and credentialing of the RNs, higher job satisfaction, and lower turnover. Residents had fewer pressure ulcers, greater urinary continence, a reduction in the number of indwelling catheters, greater perceived well-being and satisfaction with care (Maas, 1989). The critical leadership role of the DON in creating the environment and expectations to implement the model and the importance of nursing shared governance are emphasized in the results of this study.

Researchers have looked at multiple variables in an effort to understand and recommend interventions to improve and sustain quality in NHs. A few studies have attempted to define management's role in quality improvement (Kane-Urrabaso 2006, Anderson et al. 2003; Dellefield, Kelly & Schnelle, 2013) or organizational processes (Forbes-Thompson et al. 2006; Bishop, Weinberg, Leutz, et. al., 2008; Scherb, Specht, Loes, & Reed, 2011) in the creation of environments, which promote excellence. Others have explored the charge nurse's role in leadership (Adams-Wendling 2005; Cherry et al. 2007) and frontline staff perceptions of leadership (Scott, Schenkman, Moore, et. al., 2005; Specht & Mobily, 2010). Still others have looked for ways to increase nurse retention (Anthony, et. al., 2005; Park & Sterns, 2009) in an effort to improve quality,

and sought out the causes of burnout and turnover in nursing (Olson 2001, Greco et al. 2006, and Scott et al. 2005, and Wagner 2003; Bowblist, 2011; Harrington & Green, 2009; Hyer et al., 2011; Harrington et al., 2012).

These studies provide valuable information on the complex nature of providing high quality care in the nursing home (Anderson, Issel, & McDaniel, 1997; Anderson, Corazzini, & McDaniel, 2004; Mueller, Anderson, McConnell, & Corazzini, 2012).

While recognizing the benefits of quality improvement studies, the quality of care provided in nursing homes continues to be less than ideal. There seems to be a disconnect between environment and nursing home culture where there are not enough supports in place to provide the highest level of care. In order for quality improvements to be continuous and sustainable, there needs to be a focus on creating an environment that supports shared governance and evidence-based practices in an effort to enhance nursing practice (Maas & Specht, 2008; Mueller, 2010; Scherb et. al., 2011) and therefore improve quality of care.

Nursing Leadership

Traditional nursing home structure is hierarchical with a licensed nursing home administrator at the top. The qualifications vary from state to state, but in every state they must complete an accredited, state-approved training program and internship, as well as pass a state licensing exam. For license renewal, continuing professional education is also required. The DON usually reports directly to the Administrator.

The Director is defined as a nurse who is responsible for the supervision of all nursing staff, the organization and delivery of resident care, and the compliance with state and federal regulations (Arojan, 2000; Carney 2003, 2004, 2006; Anthony et al.,

2005, Upenicks, 2002). The duties for this position are many and varied, and may include: organizational management, human resources, health service management, professional nursing and long-term care leadership, and nursing care (Lodge, 1985; Wagner, 2003) depending on the facility size, profit or non-profit status, location, and organizational structure. The functions of leadership also vary, from complete autonomous nursing practice decision making capabilities to decisions being handed down from a "corporate office" with the DON and nursing staff unable to make changes to their nursing practice due to corporate policies or budgetary restrictions.

In addition to the Director, nursing leadership in the form of mentoring, supervision, and oversight is provided by RNs and LPNs as well. The bulk of supervisory functions are delegated to the floor nurses, who are responsible for resident care as well. The personal care of the resident is delegated to the unlicensed, certified nursing assistant staff.

Leadership Practices and Resident Outcomes

In a systematic review, Wong & Cummings (2007) found that seven studies published between 1999-2004 had direct associations between resident outcomes and leadership practices while only one study (Anderson et al., 2003) was in long-term care, each study used a leadership theory and utilized patient outcome data. The Anderson study did show leadership practices, such as open communication and relationship-oriented behavior increased the flow of work, and facilitated interpersonal connections with staff. The increase in connectedness showed a positive impact on outcomes.

The results of the Multi-level Translation Research Application in Nursing Homes (M-TRAIN) Study Funded by NIH; NINR 009678-01A2 (Specht & Mobily, 2010)

suggest there is a disconnect between nursing home leadership and employees that may lead to problems with innovation and the adoption of new practices. The study also showed when staff perceptions of nursing leadership were lower than the self-perceptions of the leader, there was less innovation. The closer the gap scores were between the two perceptions, the better the quality outcomes, survey results, and adoption of evidence-based practices (Specht & Mobily, 2010).

Leadership and communication can also help shape organizational culture and enhance relationships between leaders and staff. Vogelsmeier and Scott-Cawiezell (2011) found that nursing leaders who were accountable and advocated for transparent communication created an environment of openness and honesty, where front line employees are not afraid to be heard. Carney (2004, 2006) found that strong organizational culture predicted higher strategic involvement and ability to communicate the vision. The communication of accurate, trustworthy, and well-timed information is a key element to improving performance (Scott, et al., 2005; IOM, 1986, 2000, 2001, 2004, 2008).

Ferlie and Shortell (2001) suggest that people need information to improve care practices, and systems should be in place to provide that information at the bedside. This includes providing access to evidence-based practices and scientific journals to improve care practices and again, resident outcomes. It also includes regular evaluations regarding care practices, both positive and negative, and asking for feedback from the staff on your leadership practices (Ferlie & Shortell, 2001).

The Impact of Nursing Home Regulations

In 1961, the Public Health Service (as part of the U.S. Department of Health, Education, and Welfare) began studying nursing home state licensures after problems were being reported by the Commission on Chronic Illness and by a number of states (IOM, 1986). The report included recommendations for basic minimum standards for all nursing homes, which consisted of 77 health and safety standards. Over the years, regulations have been added to further regulate minimum care practices. By 1985, there were 136 health and safety standards. Despite changes to the regulations, public concern for poor quality nursing home care persisted. An expert committee was commissioned to examine nursing home regulations due to increasing and persistent concerns from the public claiming NHs were providing substandard care. The report found the care to be deficient in all areas (IOM, 1986); the results were confirmed by a second report the following year (GAO, 1987). Both the IOM and the GAO reports recommended stronger government oversight to protect nursing home residents; the IOM and GAO recommendations were incorporated into Subtitle C of the Omnibus Budget Reconciliation Act of 1987 (OBRA '87).

OBRA '87 included 47 major reforms for the NH industry to improve the quality of long-term care and mandated that each facility with more than 60 beds have a full-time DON who is a RN (IOM, 1986). Facilities with less than 60 beds were still required to name a director, but that person could be an RN or an LPN with RN consultation 4 hours/week; in the smaller homes, the director can work as a charge nurse as well. Despite the Federal mandate for this position, the importance of the DON and their potential influence on quality is remarkably absent in the long-term care literature.

OBRA ’87 also mandated a survey (inspection) process that included the use of individualized care plans developed according to standardized resident assessment instruments (RAIs). Data from the minimum data set (MDS) produced documentation for individualized care plans and review process in an effort to improve living conditions in NHs. The MDS data is gathered in a national databank and provides the source of information on quality indicators.

The number of nursing homes receiving a citation for any code violation was greater than 93% (Kaiser, 2010; CMS, 2012). The average number of deficiencies per facility in 2010 was 9.4 in the United States and 7.9 in Iowa. The top ten most cited deficiencies cited in the United States and Iowa according to the Kaiser Family Foundation (Kaiser, 2010) are shown in Figures 1 and 2 respectively. Citations nationally include: infection control, hazardous environment and accident prevention, sanitary food preparation/service, quality of care, professional standards of practice, comprehensive care plans, unnecessary drugs, clinical records, dignity, and housekeeping. Citations at the state level include: hazardous environment and accident prevention, infection control, sanitary food prep/service, quality of care, housekeeping, dignity, comprehensive care plans, unnecessary drugs, and clinical records. It is interesting to note that all but two of these deficiencies, food sanitation and housekeeping, are related to direct resident care and the role of the registered nurse.

The recently released Nursing Home Compendium (CMS, 2012) found that surveyors regularly overlooked major code violations in the care facilities. In reviews conducted from 2003 to 2009, federal surveyors found that their state-level counterparts missed violations of the gravest nature, those that could put a nursing home resident in

immediate jeopardy and inflict actual harm, 15% of the time. The report also noted a potential for less serious harm in 70% of the federal reviews, demonstrating persistently poor care and failed regulatory processes (CMS, 2012).

Currently, there are over 500 health and safety standards for minimum care practices (CMS, 2011). While they have played a part in improvements to nursing home quality, the evidence shows that regulations alone do not adequately address the problem of providing sustainable high quality care in the NH environment (IOM, 2001, 2004; CMS, 2004; Adams-Wendling & Lee, 2005; Brownlee, 2006; Rantz, et al., 1996; and Rantz et al., 2001).

Cleary, significant room for improvement exists in both quality of care and quality of life in the extremely complex and challenging nursing home environment. Until sustainable improvements do occur, the result will be persistent system failure and poor quality care provision (Harrington et al, 2006; GAO, 2011). Competent RN leadership and stability are a significant part of the solution.

Quality Indicators

OBRA '87 also required the development of a quality assurance team that included the Director of Nursing and implementation of a quality assurance program and assessment process to improve the quality of care (Grabowski & Castle, 2004). An assessment on each resident is completed and MDS data gathered at admission, quarterly, annually, and as necessary due to a significant condition change. The data are recorded and electronically transmitted to a centralized data bank (US Department of Health and Human Services, 1989). Since the MDS was implemented, efforts to measure, monitor,

and improve the quality of care in NHs have included the development of quality indicators and measures to be used by regulators and the public.

The quality indicators include: incidence of new fractures, prevalence of falls, residents who have become more anxious or depressed, prevalence of behavioral symptoms affecting others, prevalence of symptoms of depression with anti-depressant therapy, incidence of cognitive impairment, use of nine or more different medications, low-risk residents who lost control of their bowels or bladder, residents who have/had a catheter inserted and left in their bladder, prevalence of occasional or frequent bladder or bowel incontinence without a toileting plan, prevalence of fecal impaction, residents with a urinary tract infection, residents who lose too much weight, prevalence of tube feeding, prevalence of dehydration, moderate to severe pain, residents whose need for help with daily activities has increased, residents who spend most of their time in a bed or in a chair, residents whose ability to move in and around their rooms got worse, incidence of decline in range of motion, prevalence of antipsychotic use in the absence of psychotic conditions, prevalence of antianxiety/hypnotic drug use, prevalence of hypnotic use more than two times in the last week, residents who were physically restrained, and prevalence of little or no activity (CMS, 2012).

The data are collected at the NH from nursing assessments on each resident. The assessments are completed at admission, quarterly, and as necessary due to significant condition change. The data are recorded and electronically transmitted to a centralized data bank (US Department of Health and Human Services, 1989). CMS uses the data entered for the MDS to produce a quarterly quality indicator (QI) report which summarizes facility and state level data. The QI reports are intended to help facility staff

identify potential resident complications or problems that may require additional attention. The NH can also use the QI reports as quality improvement tools to benchmark their outcomes with other nursing homes, both at the state and national level. The state surveyors can use the indicator reports to trigger potential problem areas to focus on in each NH.

While there are benchmarks in place for these outcomes, the definition and measure of quality is complicated in nursing homes. Resident quality indicators do not measure actual quality of life, which requires a more qualitative methodology to determine individual resident or staff experiences. Quality of life is the amount of happiness and balance in an individual's life (Robert Wood Johnson Foundation, 2011). Attention to good health will created a better quality of life. Quality of care is a measure of the ability of a nurse or nursing home to provide services for individuals that increase the likelihood of desired health outcomes and are consistent with current professional knowledge (IOM, 2008; RWJF, 2011). Good quality health care means doing the right thing, at the right time, in the right way, for the right person and getting the best possible results. Quality of care is the measure of assistance provided and quality of life is the measure of individual satisfaction (IOM, 1986).

Quality Measures

The quality measures are also drawn from MDS data. Facilities are assigned a score for each measure calculated by the proportion of the number of eligible residents in a facility with a specific condition versus the sum total of residents in the facility. Quality measures are also updated quarterly by CMS and used by facilities to identify areas for quality improvement.

Figure 1. Top Ten Deficiencies of Nursing Homes in the United States

United States	Percent	0%-100%
Infection Control	43%	
Accident Environment	43%	
Food Sanitation	39%	
Quality of Care	34%	
Professional Standards	30%	
Comprehensive Care Plans	28%	
Unnecessary Drugs	23%	
Clinical Records	21%	
Dignity	20%	
Housekeeping	20%	

Source: Kaiser Family Foundation, 2010

Figure 2. Top Ten Deficiencies of Nursing Homes in the State

Iowa	Percent	0%-100%
Accident Environment	50%	
Professional Standards	45%	
Infection Control	44%	
Food Sanitation	44%	
Quality of Care	31%	
Housekeeping	24%	
Dignity	18%	
Comprehensive Care Plans	11%	
Unnecessary Drugs	9%	
Clinical Records	6%	

Source: Kaiser Family Foundation, 2010

Quality measures are broken down into two groups: long stay residents who live in the NH for longer than 100 days, and short stay residents who live in the NH for less than 100 days. The definitions are tied directly to those residents receiving chronic care versus those residents receiving rehabilitative therapies to return to a lesser level of care (AHCA, 2011). Long stay quality measures include: activities of daily living assistance, pain, restraints, residents in bed or chair most of the time, mobility, urinary tract infections, depression and anxiety, incontinence, pressure sores and weight loss. Three additional measures were added for short stay residents and include: delirium, pain, and pressure ulcer (AHCA, 2011)

The definition and measure of quality is complicated in nursing homes because they are complex systems with multiple stakeholders. Each member may have a different interpretation or vision of what quality means. Most quantitative data collected since OBRA '87 is connected to quality of care and measured by resident outcomes (pressure sores, weight loss, falls, urinary tract infections, etc.) (Wiener et al, 2007). Quality of life is much more difficult and requires more qualitative methodology to determine individual resident or staff experiences.

Although research has shown improvements in nursing home quality over the years, the existence of poor quality nursing homes still exist. Almost 30 years after OBRA '87 and much of what was written then is still true. In trying to determine the persistent causes of this national tragedy, the next section will examine potential barriers to quality and discuss recommendations for sustainable improvements.

Barriers to Nursing Home Quality

While regulations have made improvements to NH quality, the evidence shows that regulations alone cannot adequately address the problem of providing sustainable high quality care in the NH environment (IOM, 2008; Harrington et al, 2006; GAO, 2002; 2012). Barriers to the implementation of quality improvement programs include: low staffing levels, significant turnover of staff, sparse training in quality improvement and management, and few organizational resources for nursing lead quality assurance programs (Adams Wendling & Lee, 2005; Armstrong, Laschinger, & Wong, 2009). These challenging conditions are directly related to issues associated with professional nursing care in nursing homes. Table 2 lists some of these challenges and they are each discussed in more detail.

Table 2. Challenging Nursing Home Conditions

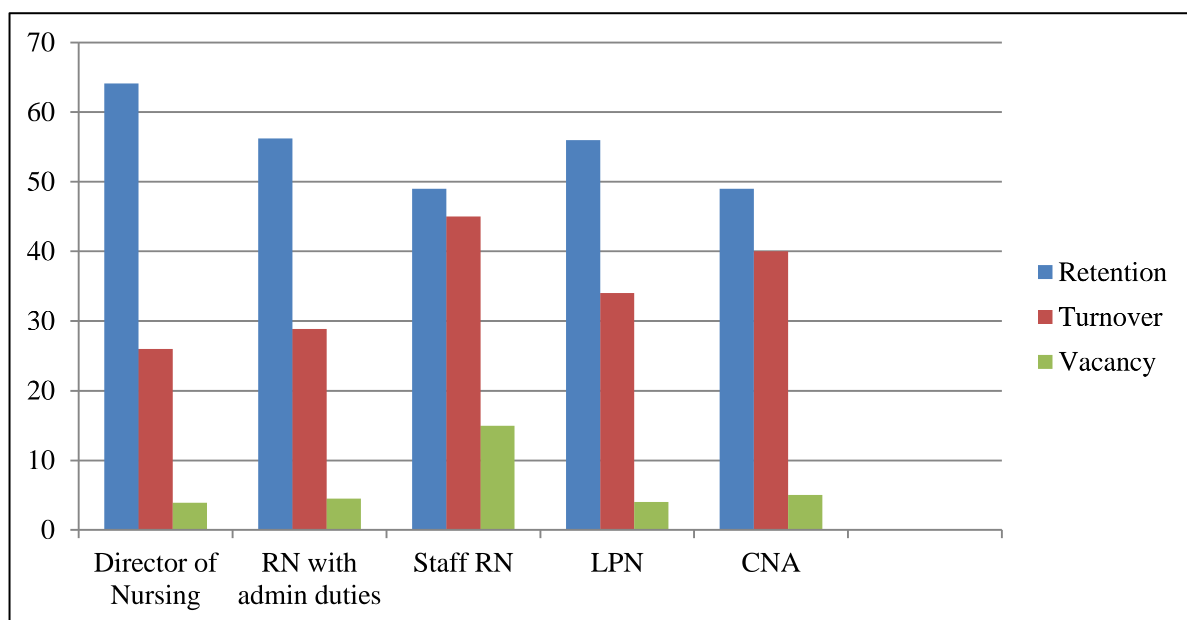
Conditions
Lack of RNs
High Turnover
Insufficient academic preparation
Deficiency in leadership expertise
Lack of gerontological knowledge
Insufficient understanding of how to sustain quality improvements
Lack of accountability
Increasing complexity and acuity of nursing home care
Lack of professional practice environment

Source: Nursing Home Collaborative, 2009

Lack of RNs in Nursing Homes

Currently, nearly 110,000 full-time registered nurses are needed to fill vacant nursing positions in nursing homes (AHCA, 2010). Figure 3 shows the vacancy rates in nursing homes in 2010 for five nursing positions, from director of nursing (requiring the highest level of qualifications) to certified nurse assistant (requiring the lowest level of qualifications).

Figure 3. National Retention, Turnover, and Vacancy Rates in Nursing Homes



Source: AHCA, 2011

Many factors account for the shortage, including an aging nurse workforce, an insufficient supply of new nursing graduates, and high employee turnover. Moreover, the supply of new nurses is insufficient to meet demand. While some improvements have occurred in the rate of new nurses entering the workforce, including an 18% increase in

baccalaureate-level nursing graduates, very few new graduates choose a nursing home as their preferred employment setting.

Inadequate Government-Mandated Staffing Standards

Nursing homes' reliance on Medicare/Medicaid subjects them to a multitude of federal and state regulations, many of which are ineffective in ensuring quality care for nursing home patients/residents (CMS, 2012). The abundance of regulations has not necessarily improved care. Federal law requires nursing homes to provide sufficient staff and services to attain or maintain the highest practicable level of physical, mental, and psychosocial well-being of each resident (OBRA '87). However, this requirement does not provide specific nurse-to-resident staffing ratios for RNs, LPNs, or nurse aides. The fact that a facility of 50 residents has basically the same staffing requirements as a facility of 200 indicates the lack of specificity and adequacy of federal requirements. As noted above, adequate staffing is essential both to nurse job satisfaction and to quality of care. A number of studies have suggested that both RN-to-resident staffing levels and the ratio of professional nurses to other nursing personnel are important predictors of the quality of care in nursing homes (Reilly, Mueller, & Zimmerman, 2006; Decker & Castle, 2009; Dyck, 2004; Forbes-Thompson, et al., 2006; Harrington et al., 2006; Harrington et al, 2012; and Kash & Castle, 2006, 2007).

Because nursing homes operate on tight budgets, where 75% of this country's nursing homes are for profit, they will often adhere only to minimum standards, even if those standards are not optimal. In 2001, the Centers for Medicaid and Medicare Services released recommendations for nurse and nurse aide staffing ratios (in terms of

labor hours per resident day) in nursing homes and found that 97% of nursing homes did not meet the recommendations (CMS, 2012).

Many studies have reported inadequate NH staffing levels and poor quality outcomes (CMS, 2012; Mueller at al., 2006; Rantz et al., 2004; Zhang, Unruh, Liu & Wan, 2006; Harrignton, 2006; & IOM, 1986, 2001). When NH staff are unable to complete their job duties as assigned, it is considered neglect of the residents (Maas et al., 2008). According to the National Citizens' for Nursing Home Reform (2007), neglect of a resident includes: failure to take the resident to the bathroom when requested; failure to provide food, water, hygiene, medicine, and safety; incorrect body positioning; and lack of assistance with walking. Inadequate staffing levels contribute to every aspect of a resident's day and impact a potential for falls, social isolation, improper use of physical and chemical restraints, nutrition and weight loss, dignity and privacy, pain assessment and treatment, depression, urinary incontinence, pressure ulcers, inactivity, abuse and neglect (Maas et al., 2008).

In 1990, the Secretary of Health and Human Services completed a study and reported to congress recommendations on staffing thresholds in NHs (Public Law 101-508) (Feuerberg, 2001). The study examined the relationship between staffing levels and quality and reported their recommendation to improve quality was a total staffing threshold of 4.85 total staff hours per resident day (HPRD) (Feuerberg, 2001). The CNA range was 2.4-2.8 HPRD, RN and LPN range combined was 1.15-1.3 HPRD, and RN alone was 0.55-0.75 HRPD (Feuerberg, 2001). Harrington et at. (2006) completed a comprehensive study on staffing levels and determined minimum staffing standards for NHs to be 4.55 total HPRD. Thirty-nine states have developed their own minimum

staffing guidelines ranging from 1.76 HPRD in Oregon to 3.6 HPRD in Florida (Mueller, 2010). All states would fail to meet the thresh in the Harrington or Feuerberg studies.

In a review of the literature, Nicholas Castle (2008) looked at staffing levels and quality indicators. He found that 78% of the quality indicators; 40% of the process measures, and 38% of the outcome measures were positively and significantly associated with staffing levels. He did go on to discuss limitations to his study regarding the various methods of reporting NH staffing and questioned the validity of an administrative databank (such as OSCAR). The quality indicator data is also pulled from a large databank (MDS); both contain self-report data or a "snapshot" of data that is not obtained via 24 hour observation (Castle, Men, & Engeberg, 2007). There are state to state variations in the data which is a concern when using citation or indicator data. Castle also eluminated the absence of effect size in any of the study discussion. The studies contained an enormous range of sample sizes; from very few nursing homes or very few residents, to those studies that included almost all nursing homes.

Castle tried to address the limitations of the study by eliminating studies that didn't meet criteria. He ended up with 15 "good" studies that tried to address at least one of the concerns listed above. The additional data analysis showed 52% of quality indicators associated with staffing Limitations aside, the review was able to show a strong concordance between staffing levels and quality.

The need to adhere to strict regulations has also influenced nursing home cultures. Since nursing homes will be fined or shut down if they violate regulations, nursing home managers are extremely concerned about adhering to the regulations, and this traditionally has resulted in an authoritarian, top-down management approach. This

approach creates job dissatisfaction and is not supportive of a professional practice environment for RNs. Further, RNs who take on management roles do not have education in the intricacies of these regulations or how to ensure compliance with them; as a result they may be more focused on meeting the regulatory requirements than on ensuring that they are at the same time addressing the resident's needs. They lose sight of the accountability inherent in their scope of practice. Evidence suggests that an authoritative management style is not the most effective way to produce positive patient outcomes (Lyons, Specht, Karlman, & Maas, 2008).

In summary, these barriers have a serious impact on the quality of care for nursing home residents and the recruitment and retention of professional nurses in these facilities. This project takes a new approach in addressing many of the barriers to quality. By focusing on the professional practice environment for RNs, developing structures and processes in support of formal leadership education, specific gerontological nursing education, and quality improvement knowledge, this study posits an improvement of quality of care and quality of life for the residents as well as improved turnover and satisfaction of staff will result. There is strong evidence that when nurses practice in environments that support their accountability for patient care, nurse satisfaction and retention is high and there is higher patient care quality (Mueller, 2010).

High Turnover, Job Dissatisfaction, and Quality

As reported by Mentes and Tripp-Reimer (2002), one of the major barriers to effective nursing home intervention research is the instability of nursing home staff. System level problems of lower quality seem to persist and in this case, it may be the

stability of the Director of Nursing which indirectly impacts resident quality outcomes in nursing homes through an effect on nursing performance.

Turnover in the NH is critically high and NHs are finding it challenging and expensive to recruit, train, and retain qualified staff. The annual turnover rates in NHs differ widely, for DONs the annual turnover rates can vary from 36 to 49 percent with an average length of stay at 3 years (AHCA, 2010; and Decker et al, 2003).

The direct costs associated with turnover include: administrative processing, advertising and interviewing for open positions, training, and orientation. Indirect costs may include: lost productivity until a replacement is trained, reduced service quality, and reduction in care hours provided. Several recent reports highlight the relationship between turnover rates, job satisfaction, and quality of care (Bowers, 2003; Castle, 2006; Collier & Harrington, 2008; Castle & Engberg, 2006; Castle, 2008; Specht & Mobily, 2010).

The almost constant training of new staff is exhausting to the staff who stay and it contributes to: poor employee morale and job performance, lower resident and family satisfaction, higher recruitment and training costs, and inferior QOC (Castle, 2007; Kash et al., 2006; Castle & Ferguson-Rome, 2010; Castle & Linn, 2010, Harrington & Swan, 2003; Parsons et al., 2003; Castle & Engberg, 2006; Rantz et al., 2009, 2010, 2012; Wiener et al., 2007). Given the persistent negative impact of turnover on NH QoC and overall satisfaction, it seems imperative that turnover be addressed as an urgent need in any quality improvement program.

The instability caused by persistent shifts in leadership leads to lower staff morale, failure of care systems, higher turnover, and job dissatisfaction among other

formal caregivers, lack of innovation, and lower quality of care (Tellis-Nayak & Duss 2005, Anderson, Corazzini, & McDaniel, 2004). There is a demonstrated relationship among those facilities with higher Director of Nursing stability, better state survey, and, higher resident, family, and employee satisfaction (Tellis-Nayak & Duss 2005, Institute of Medicine [IOM], 1996 & 2001).

Job satisfaction of direct care workers or nursing assistants has been identified as an important determiner of staff turnover and closely linked with quality of care for the residents (Castle, 2007). Employers recognize the need to develop and implement stategies to improve job satisfaction in order to improve the quality of resident care.

There are a number of potential causes for declining job satisfaction among direct care staff in nursing homes including: rotating assignments, lack of recognition at work, staffing levels and workload, teamwork, facility aegis and size, and attitude of supervisor (Tellis-Nyak & Duss, 2005; Castle, 2007). How nursing assistants are treated by the nurses and the DON has an effect on job satisfaction, attendance, and turnover (Castle & Ferguson, 2010).

Moreover, a reciprocal relationship exists between turnover and quality; nursing staff prefer to work in facilities that they perceive as high quality. Importantly, turnover rates among nursing home management, directors of nursing and administrative RNs, are highly associated with the turnover rates of direct-care workers within the nursing home. This finding suggests that the job satisfaction of nursing professionals is an important factor in the job satisfaction of paraprofessionals (Bowers, 2003; Castle, 2007; Collier & Harringotn, 2008; Castle & Engberg, 2006).

Examining turnover alone does not give a complete picture of organizational health. Stability, or tenure of staff, is also critical in examining the impact of such turnover (Barry, Brannon, & Mor, 2008). It is possible to have high numbers of new staff turnover while retaining a core of long-term employees (high turnover, high stability); this could indicate problems with the hiring process or a lack of fit, but not necessarily organizational issues. Additionally, it is possible to have high numbers of new staff and long-term staff turnover (high turnover, low stability), indicating potential organizational issues. Further investigation into the root causes of turnover and retention are warranted.

Insufficient Academic Preparation and Leadership Expertise of RNs

Fewer RNs in nursing homes have baccalaureate degrees than nurses working in other settings (McGilton et al., 2007); this is probably related to several factors. First, the average age of RNs working in nursing homes is higher than in other employment settings. Because a majority of nurses graduated from 3-year hospital-based diploma programs prior to the 1980s, this fact increases the odds that RNs employed in nursing homes have a diploma, rather than a higher degree. Secondly, hospitals are moving toward hiring more nurses with baccalaureate degrees, and thus nurses with Associate Degrees (ADNs) are seeking employment in other settings such as nursing homes. Finally, the large majority of nursing homes do not require a four-year nursing degree for RNs, including RNs in the role of director of nursing. This is a widely accepted industry standard and further evidence of the prevailing idea that it does not take much skill to work in a nursing home.

Additionally, RNs are increasingly responsible for the supervision and delegation of complex care tasks to licensed practical nurses (LPNs) and certified nurse assistants

(CNAs); however, they often lack critical leadership skills and experience (Kerfoot, 2006; Kim, Harrington, & Greene, 2009). Few basic RN nursing programs prepare graduates in leadership, management, or organizational skills. Leadership skills of RNs in nursing homes are generally learned through trial and error. Most nurse managers and supervisors are selected based on their performance in nonsupervisory roles, and few opportunities exist for them to learn essential competencies, whether interpersonal, clinical, managerial, or organizational. These competencies may include motivating staff, budgeting, problem solving and decision making, and/or use of best practices (Anthony, et al., 2005; Arling, et al., 2007).

When RNs lack leadership skills, the impact on nursing homes is costly in terms of productivity, turnover and quality (Castle, 2007; Kerfoot, 2006). Staff nurses identify managerial support as a critical component of the work environment and an important contributor to job satisfaction. Strong RN leadership skills have been shown to contribute to staff productivity, retention and patient/resident and family satisfaction rates (Kerfoot, 2006; Schnelle, Simmons, Harrington, et al., 2004; Castle, 2006; Carney, 2003; Catle &Ferguson-Rome, 2010; & Cherry, Marshal-Gray, Laurence, et al., 2007). Further, research points to lack of leadership education and development for RNs as a significant barrier to nursing home productivity.

Lack of Expertise in Gerontological Nursing

Another challenge to providing high-quality care is a lack of gerontological education and expertise among RNs in nursing homes. RNs play a critical role in nursing homes as planners, coordinators, supervisors, and direct providers of care of residents. Often during the week, an RN may be the sole responsible clinician in a facility, which

requires considerable clinical expertise. Yet many lack the specialized knowledge needed to provide competent care to older nursing home residents. During their basic nursing education, students receive little or no preparation in the principles that underlie gerontological nursing. In 1999, only 4% of more than 670 baccalaureate nursing programs met all the criteria for exemplary gerontological education, including a stand-alone gerontology course, two or more clinical placement sites in gerontology, and at least one full-time faculty member nationally certified in gerontology (Kovner et al., 2002). A follow up study by Berman et al (2004) suggests there has been a fundamental shift in baccalaureate curriculum toward incorporation of a greater amount of gerontological content, integration of gerontological content in a greater number of nursing courses, and more diversity of clinical sites used for gerontological clinical experiences. However, they did not discuss the number of programs meeting all the criteria for exemplary gerontological education. As baccalaureate programs increasingly address the need to enhance gerontological nursing curricula, there continues to be an obligation to address the growing shortage of faculty with qualifications in gerontological nursing (Berman et al., 2004). Interviews with nursing home executives and industry leaders conducted by Sigma Theta Tau International during an assessment process revealed great dissatisfaction with the level of gerontological knowledge of RNs in nursing homes (STTI, 2009).

The recent IOM (2008) report on retooling the geriatric workforce reinforces the need to enhance the gerontological competence of RNs and the entire healthcare workforce to improve the way care is delivered to older persons. As noted in the report, “The geriatric competence of virtually all members of the healthcare workforce needs to

be improved through significant enhancements in educational curricula and training programs and then assessed through career-long demonstrations of this competence" (IOM, 2008; page 2).

Increasing Complexity and Acuity of Nursing Home Care

The nature of care provided in nursing homes has changed dramatically over the past decade—residents are now more acutely ill, are admitted for shorter stays, or need more active rehabilitation (Wiener, 2007 & Rantz, 2009). Persons with fewer illness and frailty needs, typically those with early stage dementia, more often receive care in alternative venues such as assisted living facilities or foster care, rather than in nursing homes. As a result, nursing homes are providing a wide array of services to individuals with an increasing number of chronic conditions and increasing severity of illness and disability as well as late stage dementia. For example, special care units in nursing homes have expanded rapidly in recent years for patients with Alzheimer's disease or other forms of dementia, although many residents with dementia remain integrated with other residents. However the many nursing care intensive challenges that these residents present are often poorly met. Many nursing homes also offer sub-acute care for patients discharged from the hospital; in the past, such patients would have remained in the hospital (AHCA, 2010, CMS, 2012).

Care complexity is illustrated in the cascade of excessive disabilities that occur often when people are admitted to a nursing home. An individual admitted for rehabilitation can develop pressure ulcers, then renal failure, malnutrition, and ultimately the need for tube feeding—a cycle that is often very difficult to reverse (Wunderlich, Sloan, & Davis, 2006). Complications can result from one or a combination of

treatments and/or drug interactions—or even simply from not keeping the patient/resident active. The impact of such issues can be a declining condition and potentially permanent decline in the quality of life.

The increased acuity and disability of individuals who need nursing home care place new types of demands on providers of care. For example, medical technology that was formerly used only in hospitals is being used increasingly in nursing homes. The use of intravenous feedings and medication, ventilators, oxygen, special prosthetic equipment and devices, and other complex technologies has made nursing home care more difficult and challenging. The IOM has called for "greater professional nursing involvement in the direct care of patients and in supervision, more clinical evaluation, and more financial and human resources," (IOM, 2008, page 8) in nursing homes to cope with the complex needs of today's nursing home residents. Thus, the professional development needs for RNs are very significant.

Insufficient RN Knowledge and Skills to Sustain Quality-Improvements

The Centers for Medicaid and Medicare Services (CMS) is responsible for ensuring that nursing homes in the U.S. comply with federal quality standards. CMS uses a variety of sanctions to discourage and correct deficiencies that are cited in periodic surveys. Despite this mechanism, the U.S. Government Accountability Office (GAO) has found that nursing homes often temporarily correct deficiencies, only to cycle back out of compliance within a short period of time (GAO, 2009). This finding is clear evidence that many, if not most, nursing homes do not have the will or ability to sustain the quality improvement (QI) programs they design to correct cited deficiencies.

Several studies have pointed to conditions that can lead to successful QI implementation, and ultimately to demonstrable improvements in patient/resident outcomes (IOM, 1985, 1996, 2001, 2004; CMS, 2012; GAO, 2002; 2009, 2010, 2011, 2012; Adams-Wendling & Lee, 2005; Brownlee, 2006; Rantz, et al., 2009; and Rantz et al., 2013). However, few studies have identified the conditions that ensure those improvements will be sustained.

Lack of RN Accountability

As the recent IOM report stated (2008) an urgent need exists to develop a healthcare workforce that has the size and ability to meet the needs of older adults, but "simply increasing the numbers of gerontological-trained workers will not be sufficient, as it will do nothing to fix the deficiencies in the way care is delivered to older adults or to address the inefficiencies in the current system" (IOM, 2008, page 15). Currently in most nursing homes, RNs are accountable for the completion of specific tasks (Maas, Specht, Gittler, Bechem, & Buckwalker, 2008a; 2008b). Since their performance is judged based on this task-oriented approach, RNs are not driven, as they once were, to look at the big picture of the quality of care for individual residents or the quality of care delivered by the nursing home as a whole. They are no longer held responsible, nor do they have the authority, for the quality of care of residents. Since care is delivered in an environment that does not hold any role responsible for ensuring that residents, individually and collectively, receive optimal quality of care, the well-being of residents suffers. In a PNPM, shared governance means that the nurses and CNAs are partners in meeting the goals of the organization, the staff, and the residents while meeting the mandates of the nursing profession and regulators. The nurses are accountable for quality

of care received by the residents and the ability to make decisions regarding that care (Mark, Hughes, Beyea, et al., 2007; Tolson, Morley, Rolland, et al., 2011).

Lack of a Professional Practice Environment

While nurses widely report that they enjoy caring for nursing home residents and their families, many of them are not happy with the nursing home working environment. Conditions that contribute to poor working environments in nursing homes include insufficient staffing and boring work if all you do is pass medications and do treatments. Nurses often feel they are not given the opportunity to assess and direct care, but are just a cog in the wheel. Nursing students often love the residents but hate how the work is organized so it is difficult to recruit and retain qualified nurses. Additional concerns are present concerning low compensation, unsafe conditions, and the emotional toll due to the nature of the work. These issues have been mitigated, in part, in acute care hospitals by paying attention to the professional practice model for RNs. Professional practice models support "registered nurse control over the delivery of nursing care and the environment in which care is delivered" (Hoffert & Woods, 1996, p. 354). These models support the professional development of RNs, but are rarely implemented in nursing homes and even hospitals for that matter.

Professional Nursing Practice Models

A recent report from the Kaiser Family Foundation included future directions in improving nursing home quality and reviewed the impact OBRA '87 has had over the past twenty years (Kaiser, 2010). The effects have been widespread and include reduced restraint use, increased accuracy of medical records, decreased use of indwelling catheters, improved nutrition, and improved care planning processes. The overarching

recommendations include: 1) changing organizational structure, 2) promoting resident-centered care practices, 3) increasing the public sector responsibility as resident advocates, 4) expanding funding for alternatives to nursing home placement, 5) establishing incentive-based quality initiatives, and 6) stabilizing, compensating, and training NH staff adequately, as these issues related to NH staff are critical to achieving quality (Wiener 2007; Dyck, 2004; Zhang et al., 2006). These recommendations align themselves with the implementation of a PNPM.

As seen in Figure 3, a PNPM strengthens the RN role through: 1) structures and processes of RN accountability and authority for the delivery of quality care to residents, 2) leadership, mentoring and participation with assisting nursing staff in the delivery of resident care, and 3) collaboration with peers and interdisciplinary partners for the delivery of care and assessment of quality outcomes for residents, families, and staff (Maas & Specht, 2008; Mueller, 2010).

These components correspond to the essential components of an optimal nursing practice environment required for the American Nursing Credentialing Center Pathway to Excellence in Long-Term Care® (PTE-LTC) recognition program. Key features of accountability for care delivery to be implemented are that each RN will have increased knowledge in the care of older persons and in leadership of staff, and will be accountable for the care of specific residents (PTE-LTC, 2010). Thus, each resident will have a specific RN to manage his/her care. The RNs will participate with assisting staff (LPN, CNA) in the direct care of their residents, delegate care activities to assisting staff, lead, oversee, and evaluate care provided, and mentor and educate assisting staff for their career development. As care managers of specific residents, each RN will consult with,

and collaborate with, gerontological nurse peers and members of other disciplines to plan and deliver care (PTE-LTC, 2010).

It is not enough, however, to remove barriers; organizations also need to use a deliberate process to empower members, “Enhancing the process of increasing personal, interpersonal or political power allows individuals, families, and communities to take action to improve their situations” (Gutierrez, 1994, p. 202). In NHs, empowerment of both professional and assistive staff has been shown to improve resident quality indicators, job satisfaction, and job retention (Carbigao, 2009; Estryn-Behar, van der Heijden, Fry et al., 2010; Laschinger & Meiter, 2006). Empowerment is defined as a process of enhancing feelings of self-efficacy among organizational members through the identification of conditions that foster powerlessness and through their removal of both formal organizational practices and informal techniques of providing efficacy information (Conger & Kanungo, 1988).

At the individual level, empowerment is related to feelings of mastery, competence, and personal power (Breton, 1994a; Hasenfelt, 1987, Miley, et al., 1998). At the interpersonal level, empowerment focuses on the ability to influence those with whom one interacts (social power) (Campbell, 2003; Gutierrez, 1994; Miley et al., 1998). Thomas & Velthose (1990) expanded Conger & Kangungo’s (1988) framework in a cognitive model of task empowerment and focused on psychological empowerment. They defined empowerment as a task motivation attained by an increase in personal sense of meaning and control (Thomas & Velthouse, 1990). They conceptualize empowerment as a specific type of motivation that supplements self-efficacy with task assessments to enhance the motivation of individuals and bring an interpretive perspective in the way

individuals' social constructions reflect their feelings of empowerment (Thomas & Velthouse, 1990).

Higher levels of meaningfulness result in less detachment and more commitment, involvement, and concentration on energy (Kanter, 1968). Higher levels of competence are related to greater effort and persistence in challenging situations, (Gecas, 1989), better coping, higher goal expectations (Ozer & Bandura, 1990), and higher creativity and performance (Manz & Sims, 1989). Higher levels of self-determination affect greater interest in activity, less pressure and tension, and more maintenance of behavior change and resiliency (Deci, Connell, & Ryan, 1989). Higher levels of empowerment are related to less depression and stress, increased job satisfaction and performance, less tendency to withdraw from difficult situations, fewer sabotage behaviors, and more innovation and creativity (Greenberger & Strasser, 1989).

The expected impact of the PNPM is clearly supported in the literature. When RNs are highly skilled in leadership and use progressive human resource practices such as consistent nursing assignments, costly turnover of licensed and unlicensed staff is unmistakably reduced (Castle, 2010 & Harrington, 2012). Improved clinical outcomes, lower turnover and increased job satisfaction result when RNs have authority and accountability for their practice through a PNPM (Castle, 2010, Harrington, 2012; Mueller, 2010; Maas & Specht, 2008). Strengthening the RN role and practice environment with implementation of the PNPM also distributes the responsibility for the quality of nursing care among all of the RNs and reduces the isolation of the director of nursing (DON) from participation with all RN in professional accountability, increasing the DON's job satisfaction and retention. Thus, it is highly important that nursing

practice environments within nursing homes support such a practice model (Mueller, 2010).

The PNP model requires, promotes, and increases communication and collaboration among nursing staff and other health care professionals. Unlike the typical model of care delivery in NHs that minimizes RN accountability, in the PNPM, RNs are accountable for the care of specific residents over an extended period of time (ANCC PTE, 2010). Because each RN is accountable for the quality of care of specific residents, he/she is motivated to bring as many resources to bear on the care of the residents as possible. This accountability motivates RNs to collaborate and communicate with nurse peers, members of other disciplines, assisting nursing staff, residents, and families (ANCC PTE, 2010; Mueller, 2010; Lyons et al., 2008; & Maas & Specht, 2008).

The PNPM enables full involvement of RNs in the organizational and clinical decision making processes of the organization. Structures and processes will be developed and implemented that empower RNs and operationalize RN authority and accountability for the nursing care provided for residents and their families (ANCC PTE, 2010; Mueller, 2010; Lyons, 2008; Maas & Specht, 2008).

RN peers will be knowledgeable in gerontological nursing and will develop additional specialized gerontological nursing evidence-based expertise in selected areas (e.g., continence management; pain management; pressure ulcer prevention and care). As a result, the RNs will communicate more with one another to use the best practices for the care of their residents. The relationships of RNs with residents and their families are developed in a way that is less likely to result when assignments are shared with several RNs, and possibly LPNs, who are managing their care as is the case in most NHs. The

RNs will be highly motivated to communicate and collaborate with residents and their families to plan, deliver, and evaluate care for which each is accountable. These more stable and stronger relationships are more satisfying to RNs and to their residents and families, increasing the amount and meaningfulness of communication.

RNs will also participate in administrative and interdisciplinary committees and will communicate extensively with peers, assisting staff, and members of other disciplines to develop and sustain the model of professional practice and care delivery. In addition, the relationship of RNs and administrators will require information sharing about the needs of residents and families, assisting staff, and other aspects of the organization to ensure the necessary resources and the participation in decisions to be accountable for quality outcomes (Lyons, 2008; Mueller, 2010).

Each RN will have clinical decision making authority for the care of residents in her/his caseload and will share with peers the collective authority for decisions that affect clinical nursing practice in the organization. This authority as individual RNs and as a collective of RNs is earned by assuming and demonstrating accountability as individuals and as a collective for the nursing care of residents. RNs will also participate in all other decision making or recommending groups within the organization. For example, the RNs' activities of collective accountability for quality outcomes will be integrated with the quality improvement program in the organization with at least one RN serving on the Quality Improvement Committee at all times. At least one RN will also serve on each committee or decision making body within the organization, such as recruitment and selection of staff committees, purchasing committees, and executive committee. One

RN, appointed by the RN group as a whole, will be a member of the Executive Committee with NH administrators

Assisting nursing staff, LPNs and CNAs, will have a great deal of information about residents, their care needs, and responses to care which requires that the RNs communicate with them to be optimally informed about the residents for whom they are accountable. Members of other disciplines (e.g., physicians, social workers, physical therapists, pharmacists, activity therapists) will each have a perspective and knowledge that is important to care for residents optimally that will induce RNs' communication with them.

Pathway to Excellence in Long-Term Care

The evidence-based American Nurse Credentialing Center Magnet Recognition Program® recognizes hospitals which exemplify nursing excellence as evidenced by nurses' autonomy and control of nursing practice, engagement in professional development, care delivery models that support the accountability of the nurse, use of evidence-based nursing practice, and engagement in continuous improvement for patient quality and safety (ANCC Magnet Recognition Program, 2010).

In 2004, the ANCC purchased the Texas Nurse Friendly program and began development of a recognition program for smaller, rural hospitals. Renamed The Pathway to Excellence Program® it focused on excellence in the practice environment leading to quality care (ANCC PTE, 2011). They recognized, rather quickly, an opportunity for further development of a recognition program for long-term care facilities. This program, called Pathway to Excellence in Long-Term Care™ (PTE-

LTC), has been designed specifically for long-term care and seeks to improve the practice environment for geriatric nursing experts in the field of long-term care.

The PTE-LTC program recognizes health care organizations for positive practice environments where nurses excel. Any size or type of health care group where nurses care for patients may apply. A dedicated application and review process exists for long term care institutions (ANCC PTE-LTC, 2010). To qualify, organizations meet 12 practice standards essential to an ideal nursing practice environment. Applicants conduct a review process to fully document the integration of those standards in the organization's practices, policies and culture. Pathway designation can only be achieved if an organization's nurses validate the data and other evidence submitted, via an independent, confidential survey. This critical element exemplifies the theme of empowering and giving nurses a voice.

Nurses trust that Pathway-designated organizations respect nursing contributions, support professional development and nurture optimal practice environments. Communities want satisfied nurses because they are better equipped to deliver higher quality care. Facilities are designated for a period of one to three years and are subject to re-evaluation. Currently, there are only two nursing homes in the country awarded with the PTE-LTC designation (ANCC PTE-LTC, 2012).

The twelve practice standards of the PTE-LTC Designation are as follows:

- *Nurses Control the Practice of Nursing:* A shared governance model centers a healthy work environment for nurses. RNs directly involved in decisions that affect nursing practice with demonstrated autonomy and responsibility experience higher job satisfaction and contribute to improved quality of care and safety for

patients (Kim, Capezuti, Boltz, & Fairchild, 2009; Laschinger, 2008; Manojlovich & Laschinger, 2007).

- *The Work Environment is Safe and Healthy:* An environment where safety is paramount for both nurses and patients is essential to the delivery of quality nursing practice. Studies indicate that work environments with a culture of safety demonstrate a reduction in work-related injuries (Mark, Hughes, Belyea, Chang, Hofmann, Jones, & Bacon, 2007; Vaughn, McCoy, Beekman, Woolson, Tomer, & Doebbeling, 2004). A supportive work environment that encourages the health and well-being of staff is also essential.
- *Systems Are in Place to Address Patient Care & Practice Concerns:* Pathway-designated organizations provide dispute mechanisms to address patient care and practice concerns without retribution. Silence and poor communication lead to patient safety issues and reduced job satisfaction In 2009, the Joint Commission recognized implemented a standard to address conflict-and-dispute resolution in health care (Nadzam, 2009). A study by Siu, Laschinger, and Finegan (2008) demonstrated that positive work environments enhance nurses' conflict-management skills, thus influencing unit effectiveness.
- *Orientation Prepares New Nurses for the Work Environment:* An orientation program for all nurses new to the organization must be in place. Studies show a conscious orientation to the profession for new graduate nurses creates a profound effect on nurse turnover, retention, and satisfaction (Newhouse, Hoffman, Sufilita, & Hairston, 2007; Scott, Engelka, & Swanson, 2008). A comprehensive

orientation can impact a nurse's decision to stay at an organization and can influence the level of quality care delivered.

- *The CNO is Qualified and Participates in All Levels of the Organization:* The Chief Nursing Officer (CNO) is the highest nursing authority within a health care organization with the proper qualifications and a seat at the executive table for decisions about patient care delivery. The influence of CNO leadership on nursing care and patient care quality is identified as a key element for elevating nursing practice (Jones, Havens, & Thompson, 2008).
- *Professional Development is Provided & Used:* Health care organizations that offer professional development opportunities have higher RN job satisfaction and retention rates. Development opportunities may include career ladders, continuing education, certification, involvement in professional nursing organizations, and academic degrees. Fostering nurses' professional development results in increased knowledge and quality (Kendell-Gallagher & Blegen, 2009; Zulkowski, Ayello, & Wexter, 2007).
- *Equitable Compensation is Provided:* Compensation influences a nurse's decision about where to work and where to continue working (Lum, Kervin, Clark, Reid, & Sirola, 1998). Compensation is routinely evaluated in Pathway to Excellence organizations.
- *Nurses are Recognized for Achievements:* Recognition is an important factor in nurse retention and satisfaction and confirms nurse contributions are valued. A study by Tourangeau and Cranley (2006) showed praise and recognition are key

predictors in nurses' intention to continue working in their organization. Nurse achievements are known to colleagues and consumers alike.

- *A Balance Lifestyle is Encouraged:* Nurses who work in an environment that encourages a healthy work–life balance are more likely to be satisfied (Penz, Stewart, D'Arcym, & Morgan, 2006; Wilkins, & Sheilds, 2009). Further, Leiter and Laschinger (2006) discovered a professional practice environment plays a key role in predicting nurse burnout. Nurses must care for themselves so they can provide optimal care to those in need. Programs to enhance work-life balance may include flexible scheduling, childcare, employee assistance, and wellness programs.
- *Collaborative Relationships are Valued & Supported:* A collaborative atmosphere supports a culture of safety that results in better patient outcomes and greater job enjoyment and satisfaction (Manojlovich et al., 2007; Taunton, Boyle, Woods, Hansen, & Bott, 1997; Wade, Osgod, Avino, Bucher, Bucher, Doraker, French, & Sirkowski, 2008). Healthy work environments demonstrate collaboration among health care professionals as a key component for the delivery of safe, quality care, with the added benefit of higher job satisfaction for all disciplines involved.
- *Nurse Managers are Competent & Accountable:* Strong nursing leadership is one of the top reasons nurses stay at an organization. Nurses who trust their leaders and work in an open environment that embraces patient safety are more likely to continue on the job (Taunton et al, 1997; and Wade et al., 2008). Nurse managers must possess the knowledge, skills, and experience to effectively perform their roles and be accountable for outcomes.

- *A Quality Program & Evidence-Based Practice are Used:* Evidence-based practice is an essential component of improved patient outcomes (IOM, 2001). A robust quality program with clinical decisions based on solid evidence translates into better patient outcomes. Nurses play a key role in quality initiatives for patient care improvements, and lead efforts to implement best practices in patient care.

Conceptual Model

The conceptual framework of this study was based on Donabedian's Structure, Process, and Outcomes (SPO) model as a tool for assessing quality of care (Donabedian, 1966; Burns, 1995). Donabedian defined structural measures of quality as the professional and organizational resources associated with the provision of care, such as staff credentials and facility operating capacities. Process measures of quality refer to the tasks done to and for the resident by nurses and direct care workers in the course of treatment, or for the staff by administration (Gustafson & Hundt, 1995). Outcome measures are the desired states resulting from care processes, which may include reduction in falls, less pain, fewer urinary tract infections, and improved quality of life (Kane & Kane, 1988).

Donabedian (1966) asserted that the three categories of quality measures, structure, process and outcome, are not independent of each other, but are linked in an underlying framework. Good structure should promote good process and good process in turn should promote good outcome (Donabedian, 1988).

The PTE-LTC designation structures, which include professional nursing practice, overlay perfectly with the Donabedian model (see Figure 4). When nurses with

specialized training in gerontological nursing manage and are accountable for older persons living in nursing homes, their use of evidence-based practices results in outcomes that are consistent with higher quality of care and life.

Figure 4. PTE-LTC/PNPM/SPO Model

PTE Practice Standards	Structures/Processes	PNPM Components
Nurses Control the Practice of Nursing	Structures: 1. RN leadership exists at all levels Processes: 1. The DON leads and advocates for resident driven professional nursing practice aligned with organizational values and mission	Autonomy/Decision Making (Mueller, 2010; Lyons, Specht, and Maas, 2009; Maas & Specht, 2008)
The Work Environment is Safe and Healthy	Structures: 1. Maintain proper lifting equipment Processes: 1. Training for all staff on lifting	Environment (Mueller, 2010)
Systems Are in Place to Address Patient Care & Practice Concerns	Structures: 1. Person Centered Care Processes: 1. Dispute resolution policy	Continuity of Care (Mueller, 2010; Lyons, Specht, and Maas, 2009; Maas & Specht, 2008)
Collaborative Relationships are Valued & Supported	Structures: 1. Interdisciplinary team open to all staff Processes: 1. Monthly meetings	Interdisciplinary Collaboration (Mueller, 2010; Lyons, Specht, and Maas, 2009; Maas & Specht, 2008)
A Quality Program & Evidence-Based Practice are Used	Structures: 1. Written strategic plan including quality measures Processes: 1. Benchmarking and goal setting	QI Focus and Resident Characteristics (Mueller, 2010; Lyons, Specht, and Maas, 2009; Maas & Specht, 2008)
Nurse Managers are Competent & Accountable	Structures: 1. 24 hour RN coverage 2. Consistent Assignment Processes: 1. Care is organized and delivered within the scope of practice for all nursing staff	Accountability (Mueller, 2010; Lyons, Specht, and Maas, 2009; Maas & Specht, 2008)

Figure 4. continued

PTE Practice Standards	Structures/Processes	PNPM Components
Orientation Prepares New Nurses for the Work Environment	Structures: 1. Self-Directed and Individual Orientation Structure Processes: 1. Individual needs assessment	Nursing Resources (Mueller, 2010; Lyons, Specht, and Maas, 2009; Maas & Specht, 2008)
The CNO is Qualified & Participates in All Levels of the Organization	Structures: 1. BSN or Higher Processes: 1. Visible and Participates at every level	Nursing Leadership (Mueller, 2010; Lyons, Specht, and Maas, 2009; Maas & Specht, 2008)
Professional Development is Provided & Used	Structures: 1. Tuition Reimbursement Processes: 1. Clinical Ladder	Professional Development (Mueller, 2010; Lyons, Specht, and Maas, 2009; Maas & Specht, 2008)
Competitive wages are in place	Structures: 1. Based on local market analysis Processes: 1. Mandatory overtime is not required	Nursing Resources (Mueller, 2010; Lyons, Specht, and Maas, 2009; Maas & Specht, 2008)
Nurses are Recognized for Achievements	Structures: 1. Achievement is recognized Processes: 1. Award nominations at local, state, and national levels	Nursing Resources (Mueller, 2010; Lyons, Specht, and Maas, 2009; Maas & Specht, 2008)
A Balance Lifestyle is Encouraged	Structures: 1. Restorative/Holistic Support Processes: 1. Wellness Coordinator Services	Support Services (Mueller, 2010)

CHAPTER III

METHODOLOGY

Introduction

This chapter presents a discussion of the research design based on the models of both Donabedian's SPO model and the PTE-LTC practice standards model as the conceptual framework for the study and the explanation of the independent and dependent variables. The second section presents a discussion of the research plan, design, setting, sample, and instruments used. The third and final section of the chapter includes a review of the data collection methods and data analysis techniques that were employed, ethical considerations, and underpinnings of the study.

Research Questions

1 How do organizational structures and processes vary over time relative to the implementation of a PNPM?

2 What are the changes over time for resident and staff outcomes in implementing a PNPM in the nursing home?

3 What are the tangible and intangible benefits and drawbacks, to the organization, staff, and residents, of seeking the PTE-LTC designation?

In the analysis of the study, the independent variable is year. The dependent variables are: tenure, voluntary turnover, involuntary turnover, and the subscales of the My InnerView Satisfaction Surveys. The independent variable was operationalized using a 5-year period starting at the initial discussion of exploring specialty designation, 2008-2012. Statistical and thematic analyses were utilized to draw and verify conclusions regarding this case study.

A description of the study variables is provided in the methods section. The research questions and specific aims helped provide evidence for the significance of the study and outline potential future research opportunities.

Case Study Design

A single intrinsic case study design was used to describe the structures and processes of the PTE-LTC designation model implemented at the study site and the methods used to implement the practice standards. Organizational changes over time thought to be influenced by professional nursing practice were also described.

Stake (1994, p. 237) described three types of case studies:

- Intrinsic: One explores a particular case to gain a better understanding of it.
- Instrumental: A particular case is examined to provide information or insight on issues or the refinement of a theory.
- Collective: A number of cases are studied jointly in order to inquire into the phenomenon, population, or general condition.

An intrinsic design was chosen to demonstrate the impact of a positive work environment, professional nursing practice, and shared governance in the nursing home. The study will shed light on successful strategies, challenges, and barriers that may be common to others interested in seeking the designation.

To address the aims of the study, several research strategies were used that support the exploratory and descriptive nature of the research. Both qualitative and quantitative approaches were used to collect data. The data collection strategies included: historical document review, surveys of staff and residents/families, existing

databases, final application for designation, observations, and field notes (see Figure 5 for a schematic of the case study approach).

Quantitative data were collected from selected resident outcomes in the nursing home which research suggests are affected by strengthened RN leadership, shared decision making, and problem-solving communication (falls, injuries from falls, pain management, urinary tract infections, and overall satisfaction) (Anderson & McDaniel, 1999; Castle & Decker, 2011; Gittell, Weinberg, Pfefferle, & Bishop, 2008); and nursing staff outcomes which research suggests are affected by shared governance and professional nursing practice (turnover and tenure [Castle, Engberg, 2005; Castle, Engberg, & Men, 2007; Krause, 2012], increased participation in decision making [Parsons, Simmonds, Penn, & Furlough, 2003], certification, education, and committee involvement [Hunt, Probst, Haddock, Moran, Baker, Anderson & Corazzini, 2012]).

In addition to quantitative data, qualitative data were obtained from historical documents including meeting minutes, emails, policies, procedures, practice standards, budget talks, organizational structure, and the PTE-LTC submission document. These documents were examined to obtain information about the structures and processes utilized to implement the PTE-LTC practice standards throughout the process. The data also included field observations and journal entries made by the researcher over the entire study period.

The case study approach supports the development of a unique case study implementing the structures and processes of professional nursing practice and the results on resident outcomes in the nursing home, nursing professional development, and

organizational costs of such a process. This strategy also results in data sufficient to answer the research questions posed for the study.

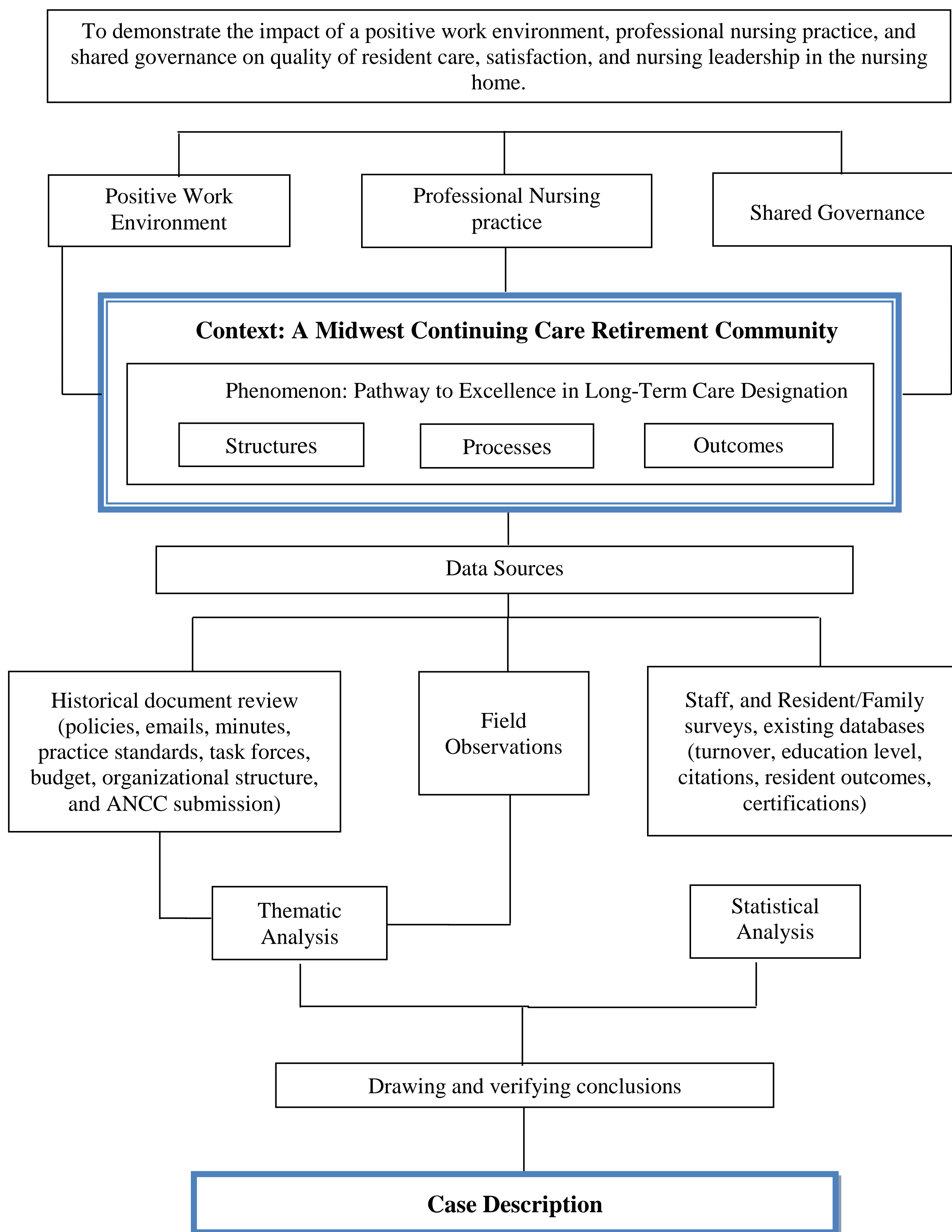
Stake (1994, p. 244) suggests that a case study is useful when "opportunity to learn is of primary importance." A case study approach provides a mode of inquiry for an in-depth examination of a phenomenon or phenomena. Yin (1994, p. 23) characterized case study research as empirical inquiry that:

- Provides a flexible approach focusing on a particular individual, organization, idea, or theme.
- Is an investigation into a phenomenon within a real-life context?
- Can be applied in areas where the phenomenon of interest is complex, highly dependent on context, and affected by a variety of variables that cannot be controlled.

To deal with real-world limitations, case studies are flexible and allow the researcher to select the methods to collect and analyze data, as long as they keep in mind the context of the research questions and the complexity (Rosenberg & Yates, 2007). Thus, in situations where other approaches fail, case studies can offer a detailed and systematic analysis of a boundary-limited, real-life situation (Luck, Jackson, & Usher, 2006).

Since nursing practice is embedded in the real-world, case-study research is commonly employed as a flexible methodology for examining a particular, pertinent issue (e.g., an individual, group, community, or phenomenon of interest). A key element of case study is the rigorous use of multiple methods, both qualitative and quantitative for data collection and analysis (Yin, 2003).

Figure 5. Schematic of Case Study Approach



Source: Rosenberg & Yates, 2007

Yin (1989) argues that a single case design is warranted on the basis that the case is revelatory. A revelatory case is one where there is a belief that the problems discovered in a particular case are common to other cases as well. The PTE-LTC program recognizes long-term care organizations for positive practice environments where nurses excel. This is the first and only recognition program in the country for the long-term care sector. This study is a description of the structures, processes, problems, and strategies for implementation of this program and is not only revelatory, but would make a critical contribution to the literature.

Yin (1989) and Stake (1994) both suggest the importance of setting boundaries of the case, or what is to be considered part of the case. The study period begins from the initial administrative discussions of exploring a certification or designation process in October 2008 through receiving the Pathway to Excellence designation in April 2012, and the following six months to October 2012.

Study Site

This study reflects the experience of one Midwest Continuing Care Retirement Community (CCRC). Leading Age, formerly The American Association of Homes and Services for the Aging (AAHSA), defines a CCRC as an organization that provides individuals a combination of housing options, accommodations, and health care services, depending on the level of care needed. Thus, within a single setting, an individual can move from an independent to a more restrictive housing environment as his or her needs increase. A CCRC organization typically has a formal contract or agreement with an individual or couple entering the community that includes the costs and level of services provided (Sherwood, Ruchlin, Sherwood, Morris, 1997).

As of October 2008, there were 175 independent living apartments, 42 assisted living apartments, and 48 licensed nursing home beds in the study site. The total number of residents in all levels of care was approximately 280. The community is primarily private pay with the capacity and licensing for Medicare and Medicaid funding as well. The site is a non-profit organization with approximately 160 total employees and a 15 member volunteer Board of Directors.

The continuum includes: independent living, assisted living, and nursing home levels of care. There is a Medical Director and a Licensed Nursing Home Administrator who oversee the entire community. Each resident has their own personal physician.

The residents in the independent living level of care are able to complete activities of daily living (ADLs) independently and reside safely in their own apartments. They may need daily medication administration or reminders from the nursing staff, have a temporary dressing change, or need a hearing aid placed. The nurses offer a weekly blood pressure clinic and coordinate weekly lab draws if requested. The independent living level is staffed primarily with one nurse on day shift only. They are on call while they are on duty to handle the occasional clinical emergency. Any needs that arise after the nurse goes home are handled by the nursing home or assisted living nurses. Independent living residents are encouraged to call 911 if they believe they have a true medical emergency.

The Assisted Living level of care is staffed primarily by one RN manager and two certified nursing assistants per shift. The nursing assistants have also become certified to administer medications. There is an additional part-time RN on days. The residents in assisted living need supported living assistance, but can reside safely in their own

apartments with frequent checks and support. Nursing staff may administer medications and/or provide assistance with ADLs.

The Nursing Home level of care provides both skilled and intermediate levels of care. The residents in the nursing home are dependent on nursing staff for some, most, or all ADLs. They require 24 hour nursing care and are not safe to live alone. The nursing home level of care is staffed with two nurses (RN or LPN) on each eight hour shift. There is not 24-hour RN coverage.

The department of nursing consists of a Director of Nursing who oversees all nursing and health services. There is an Assistant Director of Nursing, who helps coordinate the nursing home level of care and functions as the Care Plan Coordinator. There is also an Assisted Living Nurse Manager who coordinates the Assisted Living level of care. The nursing staff for the entire community consists of 18 Registered Nurses (1 Master's Degree, 3 Bachelor Degrees, 1 Diploma, and 13 Associate Degrees), 4 Licensed Practical Nurses, and 45 Certified Nursing Assistants. The Director of Nursing position has turned over six times in six years. No nurse is certified in any specialty. The nursing department is a hierarchical design with the Director responsible for making all practice, budgetary, and scheduling decisions. The staff work eight hour shifts, every other weekend, and may not trade days. There are no guaranteed shifts or hours.

In addition to the nurses, there are CNAs (5 on day shift, 5 on evening shift, and 2 on night shift), a Rehabilitation/Restorative CNA five days per week and a transport CNA to take people to and from appointments 5 days/week on day shift. In addition to

nursing staff, the three levels of care share a social worker, a receptionist, various dining services staff, housekeeping, laundry, and maintenance.

Nursing Sample

The organization began an administrative discussion of exploring specialty designation or certification in the summer of 2008 during the development of a three-year strategic plan. Data collection began in October 2008 following the turnover of the Director of Nursing for the 7th time in 7 years. All staff participated in satisfaction surveys in October 2008, October 2010, and June 2012. The development of the PTE-LTC practice standards focused on long-term care, specifically nursing homes. However, the entire nursing team (RNs, LPNs, and CNAs) was included in the process and survey at the end of the process. The total number of nursing staff varied from 81-98 during the study period.

Resident Sample

The residents included in the study are located in the nursing home because the MDS data is gathered only on residents at that level of care. Additionally the residents in independent living may or may not have any contact with nursing depending on their current health and need for services. Since the PTE-LTC designation program was developed for nursing homes, it made logical sense to only include those residents residing in the nursing home during the study period. The nursing home is licensed for 48 beds. Over the course of the study period, average daily census varied from 32-48 residents, with an average of 42.

Variables and Instruments

Theoretical definitions of the study variables and the instruments used to operationalize the variables are contained in Table 3. Table 4 specifies the instruments that were included in each round of data collection for the nursing staff and Table 5 specifies the instruments that were included in each round of data collection for the residents. As Tables 4 and 5 indicate, the majority of instruments were included in all rounds of data collection.

Surveys

My InnerView is an applied research firm that measures satisfaction among nursing facilities nationwide and other senior care services providers. They offer benchmarking capabilities with the largest database of senior care satisfaction and quality metrics in the country. In 2009, My InnerView published the largest, most comprehensive study ever produced on the satisfaction of residents, their families, and employees in America's nursing homes (Grant &Tellis-Nayak, 2009). The data were collected from 2005-2008 with 2.2 million residents, family members and employees from over 5000 nursing homes represented, approximately one-third of the facilities in the country.

The consumer satisfaction surveys consist of 22 items and two global satisfaction questions. Respondents were asked to rate facilities using a four-point Likert scale (excellent, good, fair, or poor). An additional 8 questions gathered demographic data, but no personally identifiable data was collected. The 24 questions encompass four sub-scales: quality of life, quality of care, quality of service, and global satisfaction. Missing

or skipped items were excluded from the reliability analysis. Table 6 shows the internal consistency for these measures.

The workforce satisfaction surveys consist of 18 content questions and three global satisfaction questions. Respondents were asked to rate facilities using a four point Likert scale (excellent, good, fair, or poor). An additional 8 questions gathered demographic data, but no personally identifiable data were collected. The 21 questions encompass five sub-scales: training, work environment, supervision, management, and global satisfaction. Just like the consumer satisfaction surveys, missing or skipped items were excluded from the analysis. Sample sizes were reduced because the Cronbach's alpha coefficients are calculated by excluding imputed values to avoid spurious correlations. Table 7 shows the internal consistency for these measures.

Cronbach's coefficient alpha is a special application of construct validity. In general, an alpha of .80 or greater is considered excellent. All coefficients for these measures exceed that threshold (Grant & Tellis-Nyak, 2009).

Copies of the survey instruments have been included in the appendices. My InnerView Consumer (resident) Satisfaction Survey, Appendix D, and My InnerView Employee Satisfaction Survey, Appendix E, were delivered to all staff and residents three times during the study. The survey for time one (T1) was completed in October 2008. There was no survey for time two (T2) in October 2009. The survey for time three (T3) was completed in October 2010. There was no survey for time four (T4) in 2011. The survey for time five (T5) was completed in June 2012. The organization moved the time from October to June in hopes of improving the net response rate.

Table 3. Definition of Variables

	Concept	Theoretical Definition	Operational definition
Overall innovation	Shared Governance	Structures and processes that equitably distribute power and authority between nurses and the organization, so that the mandates of the profession are not subordinate to the goals of the organization	Agency shared governance structure
Criterion Variables: Resident/ Family	Overall Satisfaction	Positive emotion associated with the appraisal of one's living arrangement as satisfying	My InnerView Satisfaction Survey
	Pain	According to the International Association for the Study of Pain, pain is an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage. Number of residents with a pain assessment at admission	**National database known as the Minimum Data Set (MDS)** - Data for quality measures come from the MDS Repository. The MDS is an assessment done by the nursing home at regular intervals on every resident. Information is collected about the resident's health, physical functioning, mental status, and general well-being. These data are used by the nursing home to assess each resident's needs and develop a care plan.
	Falls with major injury	An incident when the resident touches the floor, regardless of injury, supervision, or alarm and sustains a major injury such as fracture, laceration, etc.	MDS database
	Urinary Tract Infections	An incident when the resident displays symptoms; increased confusion, burning, frequency, or pain with urination; has a positive dip test for leukocytes, and has a positive culture	MDS database
	Weight loss	An incident when the resident has a greater than 5 percent unintentional weight loss in a month or 10 percent in 6 months	MDS database

Table 3. continued

	Concept	Theoretical Definition	Operational definition
Criterion Variables: Nursing Staff	Job Satisfaction	As determined by individual score on a 0-4 Likert scale	My InnerView Satisfaction Survey
	Tenure	Number of Nurses and CNAs employed over one year	Agency HR Database
	Turnover	Number of Nurses and CNAs who left by resignation or termination	Agency HR Database
	Scholarship	Number of Nurses and CNAs receiving an organizational scholarship	Agency HR Database
	Task Force Involvement	Number of Nurses and CNAs involved in a task force	Agency document review
	Task Force Chair	Number of Nurses who chair a task force	Agency document review
	Specialty Certification	Number of Nurses and CNAs certified in a specialty area	Agency Nursing Database
	Survey Citations	An observed deficiency in state and federal regulations	**CMS's Health Inspection database** - Includes the nursing home characteristics and health deficiencies issued during the three most recent state inspections and recent complaint investigations.
	Staffing	Number of Nurses and CNAs assigned to a specific area during a specific shift	Agency document review

Table 4. Instruments Used for Nursing Staff Data Collection

	10/08	10/09	10/10	10/11	10/12
Job Satisfaction: My InnerView	X		X		X
Tenure	X	X	X	X	X
Turnover	X	X	X	X	X
Scholarships	X	X	X	X	X
Committee Involvement	X	X	X	X	X
Committee Chair	X	X	X	X	X
Specialty Certification	X	X	X	X	X
Demographic Data	X	X	X	X	X

Table 5. Instruments Used for Resident Data Collection

	10/08	10/09	10/10	10/11	10/12
Overall Satisfaction: My InnerView	X		X		X
Pain assessments	X	X	X	X	X
Decreased reports of pain	X	X	X	X	X
Falls with major injury	X	X	X	X	X
Falls without major injury	X	X	X	X	X
Urinary Tract Infections	X	X	X	X	X
Unintended Weight Loss	X	X	X	X	X
Demographic Data	X	X	X	X	X

Table 6. Cronbach's Alpha Coefficients for Consumer Satisfaction Scale and Subscales

	Number of items	Cronbach's Alpha
Quality of life	10	.92
Quality of care	8	.92
Quality of service	4	.79
Global satisfaction	2	.94
Consumer Satisfaction scale	24	.97

Table 7. Cronbach's Alpha Coefficients for Workforce Satisfaction Scale and Subscales

	Number of items	Cronbach's Alpha
Training	4	.86
Work environment	9	.87
Supervision	3	.90
Management	2	.91
Global satisfaction	3	.90
Workforce satisfaction scale	21	.95

Existing Databases

All observations for this organization within the existing databases were included in the study from October 2008-October 2012. They include: Centers for Medicare and Medicaid Services (CMS), My InnerView; Department of Inspections and Appeals (DIA), Nursing Home Compare, and the organization's human resources department.

Predictive Validity

Grant (2009) found strong positive correlations between consumer and workforce satisfaction assessed using My InnerView satisfaction survey instruments. Data from several other sources, including clinical outcomes (CMS quality indicators), workforce performance, and state survey data collected from the federal OSCAR system are predictive of consumer and workforce satisfaction metrics. Because these data are taken from independent sources, there is strong evidence for the predictive validity of these survey tools.

Historical Document Review

Yin (1994, p. 81) states that documentation information "is likely to be relevant to every case study topic." The researcher relied on primary source material for developing an accurate chronology of the PNPM development and implementation, identifying key events, and discovering information related to the context within which the PNPM was developed.

Historical documents from 2008-2012 were reviewed to describe the organizational, nursing, and shared governance structures, processes, and outcomes. During that timeframe, any records that provided supporting evidence for PNP and/or Pathway to Excellence designation were reviewed. These documents included:

application for Pathway to Excellence designation, select policies and procedures, personal memos, newsletters, meeting minutes, practice standards, field notes of observations, scope of practice, clinical ladder, task force minutes, quality assurance minutes, job descriptions, salary reports, abstract submissions, presentations, and human resource reports concerning turnover, level of education, licensure, and specialty certification. The documents were reviewed using content analysis procedures to identify, quantify, and analyze key variables.

Observations

To measure the impact of the Pathway designation, it was important to describe the nursing environment before, during, and after the formal designation. It was also important to set a “before designation” time period to identify which structures, processes, and outcomes were most affected following designation. The decision to apply and pre-application work began in October, 2010. The “before” time period is applied to the two years prior to starting the project, 2008 and 2009 (T1 and T2), the designation period is 2010 (T3), and the “after” time period is applied to the two years after submission 2011 and 2012 (T4 and T5). Actual designation occurred in April 2012.

Data were collected during these times using observations. Participant observation, as a data collection technique, implies an active engagement with individuals in their natural setting. The notes were reviewed using thematic analysis procedures to outline historical context and the evolution of seeking a Pathway designation. The notes were also used to identify key milestones in the development of a Pathway organization.

For this study, the researcher had direct experience with the entire implementation process as the Director of Health Services. The researcher organized and attended meetings, facilitated the document development and submission, and actively participated in the entire process. While leading the implementation process, the researcher was not committee chair. The nurses volunteered to chair committees and the nursing leadership team was instrumental to the implementation of PNP and the submission process. While I acknowledge my participation as researcher and member of the nursing team increased the potential for bias, I maintain my being part of the project was a strength, as part of the lived experience, and provided a much deeper understanding of the phenomenon.

State Survey Results

Licensed nursing homes who utilize Medicare and Medicaid payments are required to comply with state and federal regulations regarding nursing home care. In an effort to monitor such compliance, the state of Iowa Department of Inspections and Appeals conducts annual surveys and as needed complaint investigations. The results of the survey process were collected from October 2008-October 2012. The survey results are a matter of public record and available at www.nursinghomecompare.gov.

Resident Outcomes

Resident variables included fall rates, overall satisfaction, and quality indicators/quality measures (QIQM): percentage of residents on a scheduled pain medication regimen on admission who self-report a decrease in pain intensity or frequency; percent of residents who self-report moderate to severe pain; percent of residents who lose too much weight; percent of residents with a urinary tract infection; and percent of residents experiencing one or more falls with major injury. Falls are

defined as any time a resident touches the floor. The fall rate is calculated by the number of falls in a month divided by the number of residents on the last day of the month. The data was entered into the My InnerView database monthly by an administrative assistant and verified by the Assistant Director of Nursing.

The data were collected from the My InnerView database, organizational incident reports, Nursing Home Compare database, and organizational fall tools. The quality indicators/quality measures (QIQM) are resident Minimum Data Set (MDS) 2.0/MDS 3.0 data that are collected upon admission, quarterly, annually, and with any significant condition change by the MDS RN. MDS 3.0 was implemented in October 2011. There were difficulties accessing QI/QM data from the website due to communication glitches per CMS. Some of the QI/QM data for this study is from MDS 2.0 and some is from MDS 3.0.

The MDS is a set of information that is used for clinical assessment of Medicare and Medicaid residents in long-term care facilities. There is a core set of screening and assessment guidelines which are a part of the Resident Assessment Instrument (RAI). In general, MDS 3.0 has some additional revisions compared to MDS 2.0. The data are submitted electronically to a national database rather than the previous state database system. The submission time is suggested to be shorter and the process for error correction easier to identify (CMS, 2011).

Additionally, MDS 3.0 included antibiotics and anticoagulants to the list of assessed medications. There are also therapy changes and resident interviews which were not present in MDS 2.0. For evaluating mood and depression, MDS 3.0 used a Patient Health Questionnaire to detect signs of depression. Others changes in MDS 3.0

include falling history on admission, swallowing disorder items, and an examination of the oral cavity.

Recruitment and Retention (Staff turnover)

The Human Resource Director at the organization managed and maintained a database with new employee hire dates, departments, job titles, termination dates, and reasons for leaving. Data regarding staff turnover for nurses and CNAs were provided for the study period.

Nurse Education Level and Specialty Certification

The Human Resource Director at the organization also managed and maintained information regarding education levels, licensure, and specialty certifications. Data regarding education, licensure, and certifications of nurses and CNAs were provided for the study period. The data were reviewed using statistical analysis procedures to identify, quantify, and analyze key variables.

Methods to Verify Data Collection

To reduce possible bias and strengthen the validity of the study, all data for the monthly metrics were collected by two people, verified by a third, and entered by a fourth. The data were collected by the Dietician and HC Secretary, verified by the ADON, and entered by the Director of Health Services. MDS data were entered by the MDS RN and verified by ADON. The data regarding nursing turnover, education, and specialty certification were collected and entered by the Director of Human Resources. The data were verified with each individual by the Director of Health Services.

Data Analysis Procedures

Aim 1

The first aim of the study was to describe the structures and processes in place both before and after implementing a PNPM.

The organizational structures and processes that were already in place and those which were implemented in an effort to obtain PTE-LTC designation are described in relation to the 12 practice standards as a proxy for a PNPM. This includes the development of a shared governance model, formalized leadership training for nurses, and interventions intended to develop a positive practice environment. Data to describe the evolution of the practice standards were obtained primarily from historical documents containing information about the purpose, philosophy, and committee structure of the shared governance model. Throughout the study period, several versions of the shared governance model were created and edited in an iterative process. The components of the 12 practice standards were compared to the functions identified as integral to the development of professional nursing practice and shared governance. A brief description of the final shared governance model and task force function is described in chapter four. This structure is then compared to structures described in the literature.

Information about the changes that occurred during the study period regarding nursing practice and opportunities for professional development and leadership training were taken from meeting minutes and emails.

Aim 2

The second aim of the study was to compare nursing staff and resident outcomes before, during, and after implementation of the PNPM. The data for this aim were

obtained from scores obtained on the satisfaction surveys, MDS data for resident outcomes, and HR data for staff outcomes.

Statistical analysis

Descriptive statistics were computed for all variables using means and medians for continuous variables and frequencies for categorical variables. The distributions of the continuous variables were evaluated for normality and appropriate transformations applied to non-normally distributed variables. Outliers were evaluated for accuracy and possible data entry errors.

Originally, inferential statistics were to be computed for tenure, voluntary turnover, involuntary turnover, staff satisfaction, and resident/family satisfaction. Logistic regression was to be used in the three analyses where the dependent variable was dichotomous (Menard, 2002; Pampel, 2000; and Pedhazur, 1997). MANOVA was to be used in the two analyses where the outcome was continuous (Scheiner, 2001). The primary independent variable in these analyses was year. An additional independent variable of interest was type of nurse with the possible values being Registered Nurse (RN), Licensed Practical Nurse (LPN), Certified Nursing Assistant (CNA), or Director of Nursing (DON). Due to the size of the sample, inferential statistics were not used and descriptive statistics were used to analyze the data.

Resident and Staff Outcomes

The resident outcomes of QIs for pain, falls, and infections and QMs for pain, falls, and infections, are included in the analysis, but are descriptive in nature due to resident death over time. Discussion of the overall QIs and QMs results are included.

The staff outcomes of scholarships, committees, chairs, and certifications are also discussed in the descriptive analysis.

Aim 3

The third and final aim of the study was to describe the individual and organizational barriers and facilitators encountered during the process of seeking PTE-LTC designation using qualitative analyses.

Thematic Analysis

In the qualitative analysis, data collection and analysis proceed simultaneously (Merriam, 1998). The text and observational data obtained through documents and field materials were coded and analyzed for themes.

The steps in thematic analysis included: (1) preliminary exploration of the data by reading through the memos, minutes, emails, faxes, field notes, journal entries, ANCC document submission, reviewer feedback, surveyor feedback, and press releases; (2) coding the data by segmenting and labeling the text; (3) using codes to develop themes by aggregating similar codes together; (4) connecting and interrelating themes; and (5) constructing a narrative (Creswell, 2002).

Data analysis involved developing a detailed account of the case. An analysis rich in the context or setting in which the case presents itself (Merriam, 1998). Based on this analysis, a researcher provides a detailed narration of the case, using either an elaborate perspective about some incidents, chronology, or major events followed by an up-close description. The PTE-LTC Practice Standards were used to establish a priori coding themes (see Table 8).

Table 8. PTE-LTC Practice Standards and Concepts

PS	Concepts
1	Nurses control the practice of nursing (Laschinger et al., 2009)
2	The work environment is safe and healthy (Mark et al., 2007)
3	Address resident care and practice concerns (Mark et al., 2007)
4	Orientation prepares new nurses (Scott et al., 2008)
5	The director of nursing is qualified and participates in all levels of the facility (Jones et al., 2008)
6	Professional development is provided (Estryn-Behar et al., 2010)
7	Competitive wages/salaries (Estryn-Behar et al., 2010)
8	Nurses are recognized for achievements (Jourdain & Chenevert, 2010)
9	A balanced lifestyle is encouraged (Estryn-Behar et al., 2010)
10	Collaborative interdisciplinary relationships are valued and supported (Armstrong et al., 2009)
11	Nurse managers are competent and accountable (Laschinger & Leiter, 2006)
12	A quality program and evidence based practices are utilized (Titler et al, 2009)

Source: Pathway to Excellence Long-Term Care Designation Program

The individual and organizational barriers and facilitators encountered during the process of seeking PTE-LTC designation were obtained primarily from historical document review including meeting minutes, emails, and field observations. Data were reviewed and initially grouped into three broad categories based on the objectives of qualitative analysis: development of share governance, process of implementing the practice standards, and perceived outcomes. Data were grouped separately for nursing administration, nurses, and CNAs. Historical documents were read and data for individuals in each of the 9 groups were compared for similarities and to identify emerging or a priori themes. The themes were laid out on a large grid using sticky notes

which indicated comments related to the themes, examples of barriers and facilitators to use as exemplars. This arrangement enabled the researcher to return to the data throughout the entire process of analysis to ensure the themes were rooted in the data. It also made comparisons of the groups more practical. Throughout the process, the researcher made notes regarding the development of a new theme or early thoughts on the relationships between the themes. Finally, the themes were reviewed with two individuals from each group in order to verify the interpretation of the data.

Establishing Credibility

The criteria for judging a qualitative study differ from quantitative research. In qualitative design, the researcher seeks believability, based on coherence, insight, and instrumental utility (Eisner, 1991) and trustworthiness (Lincoln & Guba, 1985) through a process of verification rather than through traditional validity and reliability measures. The uniqueness of the qualitative study within a specific context precludes it being exactly replicated in another context. However, statements about the researcher's positions – the central assumptions, the selection of informants, the biases and values of the researcher – enhance the study's chances of being replicated in another setting (Creswell, 2003).

To validate the findings, i. e., determine the credibility of the information and whether it matches reality (Merriam, 1988), four primary forms will be used in the qualitative phase of the study: (1) triangulation – converging different sources of information (observations, documents, artifacts); (2) member checking – getting the feedback from the participants on the accuracy of the identified categories and themes; (3) providing rich, thick description to convey the findings; and (4) external audit –

asking a person outside the project to conduct a thorough review of the study and report back (Creswell, 2003; Creswell & Miller, 2002).

To validate the finding from this study, the data were triangulated by comparing observations, journal entries, and historical documents and identifying consistent themes and outliers for further analysis; the researcher used member checking with the nurses and nursing assistants throughout the project to obtain feedback on themes and meaning making; extensive note taking and rich descriptions were used to convey findings; and finally, the entire report was reviewed by administrative staff for perspective and verification.

Positioning Statement

As the researcher, I brought both an etic and emic perspective to this study. Stake (1994) defined etic as the "issues brought in by the researcher from the outside" and emic as "the issues of the people who belong to the case, or the issues from the inside."

My etic perspective stems from my participation in a nursing doctoral program and experience on various research teams. My education offered structure to the project, attention to detail, and emphasis on rigor to the benefit of this project and future studies. I used this knowledge to facilitate understanding and offer recommendations for change within the field in Chapter 5.

My emic perspective originated from my role as Director of Health Services at the study site and 25 years' experience in caring for people residing in nursing homes. My position offered an insider understanding of the culture and people who work and live in nursing homes and added to the rich discussion in Chapter 5.

Limitations

One limitation of this study concerned sample size and representativeness. Survey response rates were limited and the sample was self-selected, making it difficult to assure that the respondents were representative of the populations of interest. Different methods for collecting data from nurses and residents may have influenced who chose to participate at the different survey times. Also, the turnover of staff and residents limited the ability to compare across years.

Generalizability of the findings was also limited, because it is likely that the characteristics of the population studied were different from the population in the United States. This organization has a long history of excellence in the community and the impact of such a designation process, or even the likelihood of other organizations undertaking such a project is difficult to assess. The proportion of RNs to LPNs is unusual for a nursing home.

Human Subjects

Approval for this research was obtained from the University of Iowa Institutional Review Board, Human Subjects Review Committee 2. Approval for the study protocol and procedures were related to collection of the data obtained from Nursing Home Compare database, My InnerView database, historical document review, and Human Resources Database. Prior to securing IRB approval, a letter of support from the organization was required.

Summary

Efforts to improve nursing staff retention in nursing homes have begun to focus on creating a positive work environment, developing shared governance structures, and

promoting professional nursing practice that have implications for nursing practice. Recognition of the positive environmental factors which have been associated with reduced RN turnover including participation in decision making, availability of professional development, and career ladders; reduced CNA turnover including participation in decision making, job training and opportunities for additional training, professional growth, mentoring, employee assistance programs, and improved job satisfaction. Professional nursing practice and shared governance models offer one means to empowering nurses by enabling them to use their knowledge and expertise to manage and direct the practice of nursing within the organization. The shared accountability for resident care and satisfaction greatly reduces the isolation and stress of the Director of Nursing position. The evidence shows that when there is less Director of Nursing turnover, there are fewer turnovers of all other nursing staff.

Various professional practice models are available in the literature, but there is only one positive practice designation specifically for long-term care. Regardless of the model, structures and processes must be in place to empower professional nurses, both individually and collectively, with the authority for nursing practice and the accountability for their practice decisions.

Despite the evidence of shared governance and professional nursing practice as a needed and successful innovation in hospitals, there has been minimal evaluation of similar practices in nursing homes. This study addresses this need by using a case study strategy to demonstrate the impact of a positive work environment, professional nursing practice, and shared governance on quality of resident care, satisfaction, and nursing leadership in one setting. Both qualitative and quantitative data were analyzed to answer

the research questions which were drawn from a theoretical model of professional nursing practice developed from the PTE-LTC practice standards, nursing, and organizational literature.

CHAPTER IV

PRESENTATION OF THE RESULTS

Introduction

The presentation of the results begins with a description of the types of data collected, a description of the demographics for staff and residents, quantitative analyses of inferential statistics, qualitative analyses of various texts with a priori and emerging themes, and concludes with a summary of conclusions based on the case description.

The data were collected in the Midwest and included retrospective data from January 1, 2008 to December 31, 2012. The types of data included demographics of nursing staff and residents, turnover and tenure of nursing staff by job type (DON, RN, LPN, CNA), job satisfaction of nursing staff, overall satisfaction of nursing home and assisted living residents, quality indicators and quality measures for nursing home residents concerning pain, urinary tract infections, unintentional weight loss, and falls with major injury, general observations, and historical document review including policies, emails, minutes, practice standards, budget, organizational structure, and submission document.

The quantitative analyses were accomplished using descriptive statistics. MANOVA and logistic regression were not used as originally planned due to limited sample size.

Appendix G displays the timeline for the data collections along with implementation activities, exemplars, and other important changes that occurred within the organization and within the department of Nursing during the study period.

Specific Aims

1. Describe the structures and processes in place both before and after implementing a PNPM.
2. Compare nursing staff and resident outcomes before, during, and after implementation of the PNPM.
3. Describe the individual and organizational barriers and facilitators encountered during the process of seeking PTE-LTC designation.

Description of Demographics

Organizational Demographics

The organization is well established in the community, has been in operation for approximately 40 years, and enjoys a stellar reputation in the community for providing exceptional retirement living and health services through LifeCare. The organization serves residents at three levels of care, independent living, assisted living, and nursing home level of care and is private pay. To enter, an applicant or spouse must be 62 years of age and be able to live independently. Once an applicant becomes a resident, the Assisted Living and Nursing Home are available at no additional cost. Entrance fees range from $76,000 to $442,000 depending on the size of apartment. The monthly fee range for one person is $1,400 to $2,250; for two the range is $2,600 to $3,600. The monthly fee is also related to the size of apartment. The services are designed to leave behind those extra cares and responsibilities of home ownership. The following are included in the monthly fee:

- 24 hour emergency nursing care
- Daily medication reminders or administration

- Foot care
- All utilities
- Local telephone service with voicemail
- Basic cable television
- Lawn and grounds care
- Full janitorial and maintenance services
- Twice monthly cleaning of your apartment
- Emergency transportation
- Scheduled activities and programs
- Secure building
- Answering service and receptionist
- Laundry facilities on each floor and in some apartments
- Meal allowance
- Temperature controls in apartments
- Wellness Center
- Exercise programs
- Support groups
- Swimming pool
- Movie theater
- In-town transportation services
- Hair salon and spa
- Internet Café with patio seating

There are 30 floor plans to choose from in independent living. These apartment homes are pet free and range in size from 375 to 2,200 square feet. There are also 8 pet friendly houses on the campus.

Demographic variables for the organization were obtained from the Nursing Home Compare Website (NHC), (www.medicare.gov/nhc). They include aegis (tax status), certification (Medicare, Medicaid, or Dually Certified), number of licensed nursing home beds, and staffing hours per resident day in the licensed area (see Table 9). Information at the state and national levels are included for comparison.

Table 9. Organizational Characteristics

Organizational Characteristics	National	State	Case Study
	Average	**Average**	**N**
Total beds 65+			255
Medicare and Medicaid Certified	107	101	48
Independent Living	--	--	175
Assisted Living	--	--	32
Number of Facilities (ALL)	15,690 (N)	443 (N)	1
For Profit	10,832	243	0
Non Profit	3,968	182	1
Government	890	19	0
Total RN hours per resident day	47 mins	44 mins	1 hr, 46 mins
Total LPN hours per resident day	50 mins	38 mins	34 mins
Total CNA hours per resident day	2 hrs, 27 mins	2 hs, 23 mins	3 hs, 22 mins

Source: NHC, 2012; AHCA, 2010

This is a stand-alone Continuing Care Retirement Community in the Midwest. The tax status is non-profit corporation. It is dually certified in Medicare and Medicaid. The governing body is a volunteer Board of Directors. The Executive Director reports

directly to the Board of Directors. Staff members also include: management, department heads, assistant department heads, and front line staff (see Appendix A) for the organizational chart.

Resident Characteristics

Demographic variables for all residents were obtained from My InnerView Consumer Satisfaction Surveys collected in 2008, 2010, and 2012 (see Table 10). Demographics include age, gender, level of care, and race/ethnicity. The respondents may or may not be the same between surveys.

Table 10. Resident Characteristics

Resident Characteristics	2008		2010		2012	
	N	%	N	%	N	%
Total Residents	**217**		**271**		**272**	
Total responses	165		235		239	
Response rate		76%		86%		88%
Level of Care						
IL	134	81%	185	79%	173	72%
AL	18	10%	20	8%	32	13%
NH	13	9%	15	13%	34	15%
Age						
62-69	6	4%	12	5%	5	2%
70-79	45	27%	54	23%	42	18%
80-89	84	51%	123	52%	135	56%
90+	30	18%	46	20%	57	24%
Gender						
Male	53	32%	73	31%	74	30%
Female	112	68%	162	69%	165	70%

Source: My InnerView Consumer Satisfaction Survey; 2008, 2010, and 2012

The residents in independent living require no supervision. At baseline, there were 217 independent residents residing on campus. At the end of the study period, there were 271. The number of residents varies depending on vacant apartments, number of single occupants, and number of couples. It is possible to have one spouse in independent living while the other spouse resides in a different level of care.

The residents in assisted living require some supervision and assistance with activities of daily living. The residents may or may not have cognitive impairment, but the assisted living is certified as dementia specific. The residents live in private apartments ranging from 379 to750 square feet. The organization is certified for 42 pet free apartments, or 84 residents. At baseline, there were 35 assisted living residents on campus. At the end of the study period, there were 33. The number of residents varies depending on vacant apartments, number of single occupants, and number of couples. Again, it is possible to have one spouse in assisted living while the other spouse resides in a different level of care.

The residents in the nursing home require 24 hour supervision and assistance with one to five activities of daily living (bathing, grooming, eating, toileting, and ambulation). The organization is licensed for 32 skilled residents and 16 intermediate residents in both private and semi-private rooms. There is no dementia unit in the nursing home. At baseline, there were 40 nursing home residents on campus. At the end of the study period, there were 46. The number of residents varies depending on vacant rooms, emergency placement needs, and planned procedures. It is possible to have one spouse in the nursing home while the other spouse resides in a different level of care. In addition, the nursing home is licensed for skilled care, so an independent or assisted

living resident may come to the nursing home for a short stay to recover from surgery, illness, or an accident and return to their previous level of care.

Over the three surveys, the response rate trended upward with the majority of responses coming from independent living residents. The sample was predominately female and Caucasian. This is consistent with the population of older adults in the Midwest. It is interesting to note that the older old, (80+), were trending up while the younger old, (62-79), were stable or starting to trend down. This is also consistent with our rapidly aging population.

The data for the resident characteristics were obtained from the My InnerView Consumer Satisfaction Survey sent out in 2008, 2010, and 2012. Over 95% of the residents were Caucasian, which is consistent with the population of adults over the age of 62 in the Midwest.

For T1, 217 surveys were distributed, and 165 (IL=134, AL=18, NH=13) were returned, for a response rate of 76 percent. The respondents were primarily female (N=112) and ranged in age from 62 to 99.

For T2, 271 surveys were distributed, and 235 (IL=185, AL=20, NH=15) were returned, for a response rate of 86 percent. The respondents were primarily female (N=162) and ranged in age from 63 to 101.

For T3, 272 surveys were distributed, and 239 (IL=173, AL=32, NH=34) were returned, for a response rate of 88%. The respondents were primarily female (N=165) and ranged in age from 63 to 103.

Table 11. Staffing Characteristics

	2008		2010		2012	
	N	**Response Rate**	**N**	**Response Rate**	**N**	**Response Rate**
Total staff	150		158		172	
Total responses	75	50%	84	53%	114	66%
Total Nursing Staff	86		88		98	
Total Nursing responses	9	10%	13	15%	42	43%
RNs	4	18%	4	19%	14	61%
LPNs	2	25%	1	17%	4	57%
CNAs	3	.05%	8	13%	24	35%
Age						
18-29	3		4		14	
30-49	2		3		17	
50-69	3		5		10	
70+	1		1		1	
Gender						
Female	8		11		38	
Male	1		2		4	
Shift						
Days	5		7		25	
Evenings	3		4		12	
Nights	1		2		5	
Tenure						
< 1 year	1		3		8	
1-5 years	4		6		20	
>5 years	4		4		14	

Source: My InnerView Staff Satisfaction Survey, 2008, 2010, 2012

Staff Characteristics

Demographic variables for all staff were obtained from My InnerView Satisfaction Employee Surveys collected in 2008, 2010, and 2012 (see Table 11, above). Demographics include age, gender, job category, shift, and length of employment.

Again, as this is a living organization, the respondents may or may not be the same as the respondents from the previous year. As the staff transition out of the organization or change positions within the organization, new staff are hired. This is ongoing and dependent on the needs of the residents and organization.

At baseline, the Management team consists of the Executive Director, the Administrator, the Director of Nursing, the Director of Human Resources, and the Director of Building and Grounds. The Leadership Team consists of Department Heads and Assistant Department Heads. The Health and Safety Committee consists of the Administrator, Director of Nursing, and Independent Living Residents. The Quality Assurance Team consists of the Medical Director, the Administrator, the Director of Nursing, and the Assistant Director of Nursing. There are no teams in nursing and information regarding practice, policy, or organizational updates comes from the Director of Nursing.

At the end of the study period, the Director of Nursing position was renamed to the Director of Health Services. This change encompasses the scope of the position and her involvement at all levels of care. The Management team also added the Director of Dining Services to the team. The Leadership team is open to anyone who considers themselves a leader in the organization. Efforts are made to have nurses and nursing assistants join the team. The Health and Safety committee includes the Apartment Nurse and the Director of Health Services no longer attends. The Quality Assurance team has expanded to include all three levels of care, Social Work, Recreation, Dining Services, CNAs, Nurses, Pharmacy, Housekeeping, and Maintenance. The following task forces have been developed and lead by nurses: Falls/Safety, Pain Management, Behavior,

Skin/Wound care, Palliative care, Professional Development, and Practice Standards. Each task force is interdisciplinary and must include at least one CNA.

The Management Team remained relatively stable throughout the course of the study period. The Director of Nursing/Director of Health Services position turned over three times and the Director of Dining Services turned over once. All other members of the Management team stayed in place. At baseline, the management team (N=5) has 3 women and 2 men who range in age from 41-62. Their range of experience in aging services is 15-31 years with the range at this organization being 1-31 years. At the end of the study period, the management team (N=6) is split evenly on gender lines with 3 men and 3 women. They range in age from 42-66. Their range of experience is 18-34 years with tenure at this organization ranging from 1-34 years. The majority (N=4) have a Master's Degree in: Health Care Administration (1), Business Administration (1), Human Resources (1), and Nursing (1).

For T1, 150 surveys were distributed, and 75 were returned for a 50 percent response rate (4 respondents were RNs, 2 respondents were LPNs, and 3 were CNAs); they were all female.

There were 22 RNs; 20 had an Associate's Degree, 1 had a BSN, 1 had a MSN, none had a Doctorate, and none were currently in school. The range of experience was new grad (less than one year) to 30+ years, with an average of 18 years of experience. No RNs had any specialty certifications and none belonged to a professional organization.

There were 8 LPNs and none of them were currently in school. The range of experience was new grad (less than one year) to 15 years. There were no specialty certifications and no professional organization memberships.

Overall, only the Director of Nursing was involved in any committee work or administrative function. The Assistant Director of Nursing covered in the DONs absence.

For T2, 158 surveys were distributed with 84 returned, for a 53 percent response rate (4 respondents were RNs, 1 respondent was an LPN, and 8 were CNAs); they were all female.

Concerning RN licensure; 19 had an Associate's Degree, 1 had a BSN, 1 had a MSN, 1 had a Doctorate, and 1 was currently in school. The range of experience was new grad (less than one year) to 30+ years, with an average of 9 years of experience. One RN had received certification as an Assisted Living Manager and two RNs belonged to and actively participated in a professional organization.

Concerning LPN licensure; 2 were currently in school and the range of experience was new grad (less than one year) to 7 years, with an average of 5 years of experience. No LPNs had any specialty certifications and none belonged to a professional organization.

For T3, 172 surveys were distributed with 114 returned, for a 66 percent response rate (14 respondents were RNs, 4 respondents were LPNs, and 24 were CNAs); they were predominately female (100 percent, 100 percent, & 98 percent respectively) and ranged in age from 19 to 76.

There were 22 RNs; 13 had an Associate's Degree, 6 had a BSN, 2 had a MSN, 1 had a Doctorate, and 3 were currently in school. The range of experience was new grad (less than one year) to 30+ years, with an average of 11 years of experience. There were 4 RNs with specialty certification in Gerontological Nursing, 1 RN was certified as an Assisted Living Manager, and 1 RN was certified as a Registered Assessment Coordinator. Three RNs belonged to the American Nurses Association, and two belonged to Leading Age.

There were seven LPNs; all were studying for their Associate RN degree. The range of experience was new grad (less than one year) to 7 years, with an average of 2.5 years of experience. Two LPNs were IV certified and none belonged to a professional organization.

There were 68 CNAs; 3 were working as restorative/rehabilitation aides, 1 was an active board member for the state caregiver association, and 1 was a certified mentor.

AIM 1 and AIM 3

Results of Thematic Analysis

Implementation of the structures and processes required to achieve PTE-LTC designation identified in Table 8 was accomplished by a variety of strategies. This study describes three. First, the structural changes at the nursing level focused primarily on shared decision-making processes. The changes were intended to provide ways to obtain input from a group of nurses previously excluded in the decision-making structures within the organization. Second, task forces were organized to formalize the input process and include the CNAs in the discussions. While these first two changes offered the potential for all the nurses to regulate and control the practice of nursing (PS1),

changes were also initiated to develop individual autonomy of nurses, so they retained decision capacity for the resident care of those assigned to them. The third change was accomplished by eliminating the charge nurse and float nurse positions so each nurse became accountable for all decisions related to the care of the consistently assigned group of residents. The nurses in the nursing home and assisted living levels of care are not asked to float. All full-time staff are consistently assigned to a group of residents regardless of the shift.

Structural Changes at the Nursing Level

Data to describe the PTE-LTC model were taken from organizational documents, journal entries and field notes from daily observations of the researcher. The first discussion of shared governance occurred at a monthly nurse's meeting in 2009. The nurses already met monthly to discuss current problems and strategies for improvement, but there was no agenda. The Director of Nursing brought a list of topics to report on and ended the meeting with very little discussion. An agenda was introduced at the meeting and posted outside the office of the DON. Nurses were asked to add topics to the agenda as they desired. They would need to present the information and start a discussion for problem solving. The same strategy was started in the monthly CNA meeting.

In January 2010, the Director of Nursing title was changed to Director of Health Services and a core group of nursing leadership began to take shape. The scope of the position included the entire community, nursing, and social work. The Assistant Director of Nursing and Care Plan Coordinator position was split and a new Care Plan Coordinator was hired. Additionally, the Assisted Living Coordinator and Independent Living Nurse were invited to become part of nursing leadership. Job descriptions for

each position were updated by the group and approved by the Director of Human Resources. The intent of these changes was to support the Director of Health Services position with a nurse leader at each level of care and coordinating care plans.

In February 2010, nursing discussed the benefits and evidence surrounding consistent assignment. The CNA group met to discuss group assignments based on resident acuity and staffing numbers were discussed. The Director of Health Services led the meeting and the Assistant Director of Nursing was at the white board. A number system, 1-5, was used to identify resident needs for transfers, ambulation, toileting, eating, showering, and redirection. The more assistance needed by a resident resulted in a higher number. All the resident's initials were written on a sticky note with their number and placed on the white board. All CNAs and Nurses were encouraged to participate in the discussions. Teams were developed based on those sticky notes and resident acuity. The teams were trialed and adjusted by the CNAs and Nurses as necessary. Individuals were encouraged by the Core Leadership team to talk with each other and adjust the teams as necessary. This encouraged team work and shared decision making.

A CNA at one of the meetings in February:

"I ain't never seen this before. Nobody ever asks what I think!"

In April 2010, the concept of block scheduling was introduced to the nursing team in an effort to bring consistency to the schedule and awareness to hiring needs. The Director of Health Services met with the Core Leadership Group to discuss strategies to improve the hiring process. They discuss different scheduling options and took the topic out to the nursing team for discussion. All staff met with a Core leadership nurse to

discuss hours, days, shifts, and vacations. The framework was built on those requests. In the end, the schedule for the nursing home and assisted living staff is the same every month. Everyone knows when their regular days off are and can plan appointments accordingly. Several part-time and on call people were hired to fill in for vacation requests. A new policy was implemented to reduce absenteeism requiring staff to find their own replacement. Additionally, they are required to work the following weekend if they call in on their weekend. All requests for time off are honored. This has reduced absenteeism and resulted in a more consistent work force.

In May 2010, the Board of Directors and Management team (Executive Director, Administrator, Director of Health Services, Director of Human Resources, and Director of Building and Grounds) met to discuss strategic planning for the next three years. It was decided at that time to seek a specialty designation for long-term care or CCRCs as a mark of excellence. The Administrator and Director of Health Services were elected to research available programs. The only program for long-term care was the American Nurse Credentialing Centers Pathway to Excellence in Long-Term Care. The other accreditation on the table was The Commission on Accreditation for Rehabilitative Facilities (CARF). The PTE program focused on long-term care and nurses. The CARF accreditation included aging services, behavioral health, child and youth services, and rehabilitation services.

In August 2010, a presentation of the two programs was presented to the Board and Management team. It was decided to seek PTE-LTC designation. At this time, the Director of Health Services initiated a formal leadership training with the Core Leadership group. They met weekly, over the lunch hour, to discuss leadership

strategies. Using the book, *The Leadership Challenge* (Kouzes and Posner, 2007), and led by the Director of Health Services, the group worked to engage in best practices and strengthen their leadership skills and abilities. They learned the Five Practices of Exemplary Leadership: Model the way, inspire a vision, challenge the process, enable others to act, and encourage the heart. They also completed a leadership project and improved their confidence as leaders.

In October 2010, the formal process of seeking designation began with the development of four different work teams. Led by the Director of Health Services, the nurses were randomly selected to one of four groups. The 12 practice standards (PS) were divided between the four groups and the work began. The Core nursing leadership team chaired each team and the Director of Health Services functioned as a helicopter between the groups. The CNAs were encouraged to participate as well. All research, meetings, writing time, and effort were compensated. By January 2011, the first four practice standards had been written and the shared governance council had started. Nursing staff discussed current resident conditions, acuity, and needs in order to choose task forces to develop. They came up with 6 initial groups: Falls, Infection Control, Behaviors, Skin/Wound Care, Pain Management, and Palliative Care. Each team was chaired by a registered nurse and required to have at least one CNA. Each team was to develop goals and agendas, meet monthly, and work on a quality improvement project. Core nursing leadership joined the task forces but were not required to chair them. Once the teams were established in nursing, and the chairs felt confident in their new roles, the teams were opened up to any discipline.

In December 2010, the concept of shared governance was introduced to the nurses by the Director of Health Services. Instead of the Director making all the decisions, the decision making structure was changed to include all the nurses. The licensed practical nurses were included in the process because they were all in school to get their RN degree and were functioning with similar responsibilities. They were asked to consult with an RN on resident assessments, admissions, and concerns. The Core nursing leadership team made themselves available by rotating on-call status on the weekends; they also varied the times they were working, so there would be someone from leadership present 12-16 hours per day. All nursing staff were provided an email for internal communication and distribution of educational materials. This was very stressful for some staff who did not know how to email or use the internet. Education was provided through the IT department. A packet of articles were distributed to nursing staff and management to inform them of shared governance.

Task Forces

Several variation of the shared governance model with task forces were defined during the study period. The document describing the January 2012 model was written in bylaws format initially. The document was changed to a structural format and can be found in Appendix C.

The 2012 shared governance model contained 6 overarching councils and 23 task forces (see Appendix C). The model is displayed and described in a hierarchical format, and its structure is consistent an administrative model, separating practice from management accountabilities. The professional practice council oversees scope of practice, leadership, ethics, and mentoring. The quality council oversees skin/wound task

force, pain, behavior, falls, infection control, and palliative care. These areas address resident care and practice concerns (PS3). The management council oversees the budget, regulatory oversight, and business operations. The research and evidence-based practice council oversees policies and procedures, community requests for research participation, and dissemination. Professional development oversees certification, orientation, scholarship, and skill development; specifically, orientation strategies were developed which were self-directed and individual (PS4), allowing orientation to contribute to the competence and confidence of new employees. Finally, unit councils oversee satisfaction, environment, and teamwork. The Core Leadership team is in the center of everything and includes The Director of Health Services, Assistant Director of Nursing, Assisted Living Nurse, Independent Living Nurse, and Care Plan Coordinator. All disciplines are encouraged to participate on any team they are interested in.

The professional practice council and professional development council were both accountable to the Core Leadership Council for clinical and managerial decisions. The function was to oversee the professional practice of nurses and CNAs. Both administrative and direct care nurses were represented as well as CNAs. They were asked to address issues related to the practice environment, scope of practice, leadership and communication, ethics, mentoring, orientation, skill development, certification, and scholarship (PS6). The Quality Council includes all the task forces related to quality of resident care provided. This council works directly with the unit councils of Assisted Living, Nursing Home, and Independent Living; they are focused on staff and resident satisfaction, environment, and teamwork. The work environment is safe and healthy while providing a home-like atmosphere for the resident (PS2). The Management

council has members of administration, department heads, and direct care staff who are interested in budget development, regulatory oversight and business operations. This council is chaired by the Administrator. Finally, the research and EBP council is tasked to oversee the policy and procedure development for all three levels of care, community requests to come into the community and recruit for research projects, and dissemination of information.

Accountability

In January 2011, the second round of practice standards was implemented and the organization was enjoying a 5-star rating from the Nursing Home Compare website. Nurses and CNAs were engaged in shared governance and consumer satisfaction was high. Unfortunately, due to a failure of the elopement system, a resident with dementia left the community and went on a 20-minute walk. The door failed to alarm and staff were not aware that he had gone missing. He was returned unharmed, but the organization received an immediate jeopardy citation from the State Department of Inspections and Appeals. Despite immediate efforts to correct the malfunction, the organization received a $2,500 fine, and lost their 5-star rating. The impact of that elopement is reflected in the star rating for three years. This one incident was very defeating for the staff. Despite the advice of the Medical Director, "sometimes bad things happen to good places," the organization lost some momentum towards designation. The nurse who failed to check the elopement system presented her case at the nurse meeting, was accountable for the outcome, but instead of being terminated, she was given the opportunity to develop strategies to prevent a reoccurrence. This was the first opportunity to see the changed structures and processes tested. The meeting was

successful and the outcomes included changing the elopement system, only using wrist alarms and not ankle alarms, and weekly checks of the entire system. There have been no further instances of elopement.

By March 2011, the nursing team and the entire staff had rallied and received a deficiency-free state survey in nursing. Work started on the last four practice standards and the task forces were in full operation with good attendance. The nurses were learning how to chair committees, set agendas, take minutes, delegate, and follow up. The organization nominated four nurses for state recognition and submitted an abstract to National Gerontological Nursing Association for presentation on shared governance at the national conference.

In April 2011, all the practice standards were implemented and the document was prepared and submitted to the PTE-LTC program.

In July 2011, the quality council began looking at resident outcomes to identify areas of improvement. Although there was no reduction in the number of falls initially, the severity of injuries related to falling had reduced by this time. The Quality Assurance team was expanded to include all levels of care and any interested staff member. The format of the meeting changed from a reporting mechanism to one of problem identification and strategies for improvement.

In October 2011, the PTE-LTC decision came back and the application was not accepted. At that time, the Director of Health Services worked with the PTE-LTC staff to improve the submission process and allow for an iterative process

In January 2012, the reviewers' comments were used to edit the submission for PTE-LTC designation. This time, the model contained: a description of nursing scope of

practice; a mechanism to establish and maintain standards of nursing practice; defined a system for quality assurance; and assigned accountability for the promotion of research based nursing practice. The model also included a mechanism for dispute resolution and concerns related to malpractice of other nurses, physicians, and consultants. The model followed the 12 practice standards of the ANCC PTE-LTC designation process and implemented strategies which would result in designation. These strategies were shared with the Management team, who in turn shared them with the Board of Directors.

In February 2012, the annual state survey resulted in no deficiencies for nursing and only a minor deficiency in dining. The nursing survey was completed for the PTE process with a 68% response rate. The first Gerontological Nursing prep course was started (sponsored by the John A. Hartford Foundation), and three nurses attended.

In March 2012, the surprise federal survey resulted in no deficiencies. In April 2012, the organization was designated as one of two long-term care facilities in the country to receive the PTE-LTC Designation; a CNA was appointed to Caregiver's Association Board of Directors; and two CNAs were accepted to medical school. In May 2012, the Core Nursing Leadership team traveled to Washington, D.C. to receive the PTE-LTC designation at the PTE annual conference.

Although the model did not include a resident care delivery system, the organization has been part of the resident centered care movement for years before the PTE-LTC designation process. The language changed from resident centered to person centered supporting the belief that staff that are valued, supported, and encouraged will value, support, and encourage the residents.

Benefits

Shared Governance – Expecting a voice valued

The idea of shared governance or shared decision making was introduced by this researcher in 2010 at the beginning of the PTE-LTC designation process. Initially discussed with the nurses only, and then shared with the CNAs, and finally the remaining disciplines, shared governance became the corner stone of the PTE-LTC designation process. When the designation idea was first presented to the nurses, their response was minimal and they said it felt like one more quality improvement project to endure. It was not until the nurses realized the decisions regarding nursing practice would, in fact, be made together by all the nurses, as a collective, that their participation began to get exciting. The nurses and CNAs went from not having a voice at the table to expecting to be at the table and demanding to be heard.

Nurse's Meetings

During researcher observations at monthly nursing meetings, the nurses introduced topics regarding skin care products, medication administration, nursing policies and procedures, competencies, and supervision. They could add items to the agenda before the meeting or bring things up at the end of the meeting. The nurses discussed topics in depth, researched products or evidence-based practices, discussed with CNAs, and came to consensus regarding nursing practice and quality of care.

- In the early development of shared governance structure, the nurses discussed areas which would benefit from the specific attention a task force would provide. They chose to start the following task forces: Behavior, Falls/Safety, Pain, Skin/Wounds, Palliative Care and Infection Control (see Appendix C). The task

forces were promoted and sign-up sheets posted for CNAs. All participation in the monthly meetings and any planning or project time were compensated at the individual hourly rate.

- During a CNA meeting, the aides discussed how much they did not like the current skin care cleanser, barrier, and lotion. They felt these products were causing redness and irritation for several residents. This concern was taken to the nurses meeting by the Assistant Director of Nursing and discussed with the Skin/Wound task force chair. The task force researched personal care products, priced out the difference among products and made a recommendation for better products. The recommendation was discussed at the nurse's meeting and the CNA meeting. Both groups agreed to try it and the follow up one month later was overwhelmingly positive.
- In another nurse's meeting, the nurses discussed the importance of being certified in CPR. A show of hands around the table revealed that only 50% of the nurses present held a current CPR card. The group decided all nurses would become certified in CPR. This was previously recommended by the organization, but not required. The nurses who were not in attendance were emailed by the Director of Health Services. Everyone agreed the nurses should be certified. Two nurses volunteered to do some fact checking before the next nurse's meeting. The nurses were able to set up CPR/AED training twice a year at no cost to the employee. All staff, consultants, and residents interested could sign up and become certified in CPR. It is now required for licensed nurses, recommended for all nursing and dining services staff, and encouraged for other staff and residents who are

interested. The nurses also recommended two portable AED machines be purchased for the organization. One is now located in the lobby and one in the nursing home.

- In a final example, an evening nurse asked to discuss resident acuity in the evening. The topic was added to the agenda and discussion occurred at the next nurse's meeting. The attending nurses discussed increased resident acuity at all levels of care. They tracked evening apartment calls over a two-week period and decided it would be beneficial to add a third nurse to second shift. They looked at the staffing budget, considered census numbers, and worked with the Administrator to replace a medication aide with an LPN in Assisted Living. The medication aide was moved to accommodate her scheduling needs.

RNs chairing task forces – A leader emerges

As part of the shared governance process, the nurses were asked to develop task forces with special areas of interest. The nurses came up with several related to resident quality of care: Falls/Safety, Pain management, Skin/Wound Care, and Behaviors. Once the task forces were chosen, the RNs were asked to chair a task force of interest. The Director of Health Services offered learning sessions both in person and online, regarding team recruitment and leadership, setting goals, developing an agenda, managing a meeting, delegating tasks, follow up, and reporting results.

The first volunteer was an Associate's Degree RN who had been employed at the organization for ten years. She had 15+ years of experience with older adults and long-term care. She had always functioned in a float or relief nurse position within this organization and did not feel comfortable in a charge nurse role. She worked four

days/week and rarely called in. She was nervous, but excited to learn about chairing a task force. She chose the Pain team and requested to go to conferences related to pain management. She created her own agendas, recruited interested team members, learned how to send emails and attach documents, implemented recommendations on pain tools by using the Geriatric Pain website, and sent out minutes from the meetings.

At the end of the study period, the Pain task force has implemented evidence-based pain assessments for cognitively intact and cognitively impaired residents on admission, quarterly, and as needed. They also implemented pain diaries and provided training to all staff following their conference attendance.

Behavior Team – A voice at the table

The behavior team was chaired by one of the evening nurses, a recent BSN graduate with no leadership or nursing home experience. She had never chaired a team prior to this one. All disciplines were encouraged to join the team based on interest and willingness to attend regular meetings. The Director of Health Services, Assistant Director of Nursing, Care Plan Coordinator, Assisted Living Coordinator, and Independent Living Coordinator attended each meeting and participated in discussions. Each team is required to be chaired by an RN and have at least one CNA. They met monthly and discussed specific residents, behaviors, current treatment plans, medications, and non-pharmacological interventions.

The chair of this team spent four hours/month planning for the monthly meeting, auditing medical records, reviewing referrals, preparing an agenda, and sending out minutes from the last meeting. She sent email reminders to all staff the week before the meetings and she baked a treat at home for the day of the meeting. The team was asked

for agenda items the week before the meeting. The agenda was clear and allowed for discussion time. The meetings lasted one hour. The chair was mindful of the agenda and time.

During researcher observations, the team was diverse and interdisciplinary: RNs, Care Plan Coordinator, CNAs, LPNs, Recreational Therapy, Social Work, Dining Services, and students from the School of Social Work, Recreational Therapy, and College of Nursing. There was also representation from all three levels of care, although much discussion was directed toward residents of the nursing home. Since the residents were discussed by name, confidentiality was a priority. In order to protect resident privacy, no residents were invited to participate in this team. The chair started the meeting and reviewed the agenda. Staff were totally engaged and leaning forward at the table. They all contributed to the conversation and provided important details to a rich discussion. The CNAs were making recommendations for behavioral interventions and discussing patterns of behavior along with the nurses and other team members.

At the end of the meetings, the chair summarized the discussion for each resident, reviewed current intervention plans and proposed changes, and asked if anyone had anything to add. The care plan coordinator was there to make changes to the CNA flow sheets and care plans immediately. Everyone had a voice at the table. Participants were engaged, confident, and leaning in.

Certifications

There are many opportunities for RNs to specialize in long-term care. Board certifications are offered by the American Nurse Credentialing Center for nursing administration, gerontological nursing, nurse practitioners, and clinical specialists.

Additional certifications are offered by the American Academy of Pain Management, Certification Board of Infection Control and Epidemiology, National Board of Certification for Hospice and Palliative Nurses, Rehabilitation Nursing Certification Board, Wound, Ostomy, and Continence Nursing Certification Board, and Resident Assessment Coordinator Certification.

At baseline, none of the nurses had a specialty certification. During discussions at nurse's meetings, the nurses revealed several reasons for lack of certification: it was too expensive, they didn't know how to sign up, they didn't feel prepared to take an exam, they weren't experts, and they had test anxiety. Several changes occurred to make the certification exam more realistic: the Administrator and Director of Health Services included the cost of the certification exam in the annual budget for 3-4 nurses annually; the College of Nursing offered a 12 week preparation class, sponsored by the Hartford Foundation, to ready participants to sit for the exam; the cost of the class, which was very reasonable, was covered by the organization; the nurses were compensated for class time at their regular hourly rate; and the schedule was adjusted to make time for the nurses to attend. Three nurses attended the first class and two nurses attended the second class. One nurse decided to take the exam without taking the class. At the end of the study period, five nurses are board certified in gerontological nursing, one nurse is scheduled to take the exam, and there is a waiting list of nurses who want to take the next class. In addition to the board certifications in gerontological nursing, one nurse became certified as a Resident Assessment Coordinator and one nurse became certified as an Assisted Living Manager. The management team and the nursing team also developed a clinical

ladder as part of the PTE-LTC designation process. Those who meet certain criteria, like becoming certified, can move up the ladder and receive a higher raise in salary.

Scholarships

There are many options for people to continue their education. In addition to specialty certifications, advanced degrees can open up a world of opportunities. The organization supports all staff as they advance their education with both online and in person classes. Because of the proximity to several colleges and universities, the organization has always employed a number of students in various fields. At any given time, you might find someone studying for a degree in nursing, social work, medicine, recreation therapy, law, administration, physical therapy, physician assistant, radiology technician, etc.

At baseline, there was no scholarship program in place to help staff with the cost of obtaining an education. By the end of the study period, the Director of Human Resources had worked closely with Foundation Board members to develop a Foundation Scholarship and tuition reimbursement program. Both programs are available to all staff and have an application process. The programs have been wildly successful with nursing staff, with three nurses and six CNAs receiving scholarships in the last year of the study. In addition, two nurses and five CNAs received tuition reimbursement.

Federal Surveyors' Attitudes

The federal survey process is random and can only occur once in three years. Unlike the state survey, federal surveyors are following the state surveyors to ensure they did their job well. They are required to come in to a facility within 30 days of a state

survey. Since this process is really an evaluation of the state survey process, the results are not available to the public.

Two federal surveyors were present for one week in March 2011. They followed the same protocols and procedures as the state surveyors with one glaring difference – the federal surveyors were openly supportive of the PTE-LTC designation process. They were engaged and asked many questions. They were also supportive of gerontological certification for nurses. In the exit interview, one surveyor stated, "it is obvious to us that the residents and staff are happy and well cared for". Despite a gloving error by one nurse and a hand washing procedural error by one CNA, they chose not to cite a deficiency because they looked at outcomes related to infection control. The enthusiasm and support they provided during the week and at the exit interview were exciting and encouraging to the staff. Many staff who have worked in other places remarked they had never had a deficiency-free federal survey.

Drawbacks

Buy-In

"Not another project" could be heard from the halls when the idea of PTE-LTC designation was introduced. More work, less time, and same pay were also ideas that were passed around. The idea of changing long held structures and processes for long-term care is a daunting task when you combine it with the daily duties and crisis intervention you find in a nursing home. The counter to the "I don't have time to do another thing" argument is to make time for thinking, researching, and talking. The nurses and nursing staff must make time to accomplish bigger tasks than passing pills and taking people to the bathroom. You must make people see their role in the bigger picture.

Not all nurses participated in all aspects of governance, specifically electing to forego participation in the hiring process.

Cost

There is a cost to the program that may be off putting to some organizations. The real cost of this application process was approximately $14,000. This number includes the application fee ($750), document submission fee based on bed size ($6500), document development ($4500) estimated at one hour per week for each nurse over 10 months, editing ($1800) estimated at one hour per week for each Core member over 12 weeks, printing, binding, and postage ($200). Additional "costs" might include added discussions during regular monthly meetings, "talking" via email, formal leadership training.

In an effort to build a business case for quality and designation, one must consider the potential savings as well. The cost of RN turnover can range from $22,000-$64,000 for each nurse. That includes vacancy rates, agency staff, recruitment, hiring, orientation, precepting, loss of productivity, and loss of organizational knowledge. There is a cost to unplanned absences which includes burnout, overtime, and working short staffed. In 2009, there were 51 unplanned nursing absences. In 2010, there were 47 unplanned nursing absences. In 2011, there were only 23 unplanned absences. The cost of a resident fall with major injury has been estimated at $3,000 per incident. This includes transportation to hospital, evaluation, treatment, and hospitalization. There is also the ultimate price some residents pay when a fall with major injury causes a steady decline leading to death. Intangible cost savings include improved confidence, autonomy, accountability, improved resident outcomes, and satisfaction.

LPN Push Back

In an effort to improve the professional nursing practice through this process, one of the LPNs felt alienated and responded negatively to the entire process stating, “this doesn’t make us perfect”, “I know I am a better nurse than her and just because she went to school one year longer doesn’t make her better”; and “we’re spending too much time on this, why don’t we get back to taking care of the residents?”

State Surveyors’ Attitudes

The state survey process is random and required every 12-15 months. Unlike the federal survey, state surveyors are evaluating the quality of care provided in the nursing facility. The information is a matter of public record and available on the nursing home compare website.

Two state surveyors were present in the facility for one week in February 2011. They looked at all areas of care, including environment, policies, procedures, staffing, dining services, and recreation. The state surveyors were openly against the PTE-LTC designation and spoke openly in front of nurses and CNAs about the cost of such a program. The surveyors told the nurses not to obtain gerontological certification because it was “a waste of time and money.” They both explained that they had received specialty certifications in their field of expertise (emergency room and cardiac) and it was too hard to keep it. They showed no value for education, specialization, or continuing education. They were so negative, I was sure there would be push back from the nurses, but I was pleasantly surprised when the nurses were able to defend the benefits of the PTE-LTC program and certification.

AIM 2

Results of inferential analyses

The inferential analyses addressed specific aim 2 of the study, comparing nursing staff and nursing home resident outcomes before and after implementation of the PNP model and PTE-LTC designation. The majority of staff data were collected from the organization's Human Resource database. The resident and staff satisfaction data were collected during My InnerView surveys in years 2008, 2010, and 2012. The quality indicator and quality measure data were collected from the CMS database, Nursing Home Compare.

Overview

Aim 2 had 5 outcomes of interest which were analyzed using inferential statistics: tenure, voluntary turnover, involuntary turnover, staff satisfaction; and resident/family satisfaction. Logistic regression was used in the three analyses where the dependent variable was dichotomous (Menard, 2002; Pampel, 2000; and Pedhazur, 1997). MANOVA was used in the two analyses where the outcome was continuous (Scheiner, 2001). The primary independent variable in these analyses was year. All outcomes were collected each year starting in January and continuing through December, thus there were five waves of data collection, 2008, 2009, 2010, 2011, and 2012. An additional independent variable of interest was type of nurse with the possible values being: Registered Nurse (RN), Licensed Practical Nurse (LPN), Certified Nursing Assistant (CNA), or Director of Nursing (DON).

Unfortunately, there were a number of issues with the satisfaction survey data once the analyses began. The amount of difference between 2008 and 2010, and 2012

was too big to draw any statistical conclusions. The complex system of the nursing home contains too many variables to account for such a change (see Table 12). In addition, there were only 9 responses from nursing the first time and 13 the second time. By the third time, the number rose to 42 responses.

Resident/Family Satisfaction Surveys

- Resident surveys were mailed to all current residents (T1N=217; T3N=271; T5N=272). If the resident was unable to complete the survey due to cognitive impairment, a survey was mailed to the family member listed in the medical record as responsible party. A listing of all residents and/or family members with addresses was created by administration and forwarded to My InnerView. This was sorted into Independent Living residents, Assisted Living residents, Health Center (nursing home) residents, and Family. The survey included a self-addressed, stamped envelope to return the confidential survey to My InnerView. There were also several locations throughout the community to place the sealed survey in a drop box.
- There were no incentives provided for the residents or family to return the survey. The net response rates were 85%, 87%, 88% respectively.
- Overall satisfaction was greater than 96% in all three survey years. This is consistent over time and consistent between the three surveys.

Staff Satisfaction Surveys

- Staff surveys were given to all current staff employed by the organization (T1N=150; T3N =158; T5N=172). The survey included a self-addressed, stamped envelope to return the confidential survey to My InnerView. There were

also several locations throughout the community to place the sealed survey in a drop box. The response rate of nurses and CNAs was small, which was a surprise because nursing represents the largest department (see Tables 13, 14).

- There were no incentives provided for the staff to return a completed survey. The net response rates were 50%, 53%, and 66% respectively.
- The overall satisfaction was above 95% in all three survey years. Job satisfaction scores remained fairly constant over time and demonstrated consistent variation between the three surveys.

Turnover and Tenure

At baseline, the nursing staff included the Director of Nursing, Assistant Director of Nursing/Care Plan Coordinator, and Assisted Living Coordinator. The nursing team consisted of 86 people: 22 RNs, 8 LPNs, and 56 CNAs. Over the course of the first study year, 7 nurses and 22 CNAs left their positions (18 resigned and 11 were terminated). This is a turnover rate of 23 percent for nurses and 39 percent for CNAs, total overall turnover was 34 percent (see Tables 12-14).

At the end of the study period, the nursing team included a Core Council of nursing leaders: the Director of Health Services, Nursing Home Nurse Coordinator (Assistant Director of Nursing), Care Plan Coordinator, Assisted Living Nurse Coordinator, and the Independent Living Nurse Coordinator. The nursing team consisted of 98 people: 22 Registered Nurses, 7 Licensed Practical Nurses, and 68 CNAs. Over the course of the final study year, 6 nurses and 22 CNAs left their positions (21 resigned and 7 were terminated). This is a turnover rate of 21 percent for nurses and 32 percent for CNAs, with overall nursing turnover being 29 percent (see Tables 12-14). The main

reasons for turnover shifted over the course of the study from poor performance, lack of fit, and dissatisfaction to moving, graduation, and lack of fit.

Resident Outcomes

Resident outcomes are used as a measure of quality in long-term care. The data are available to the public on the Nursing Home Compare website (see Table 15). Although there is a general downward trend (lower numbers are better), the numbers are consistent across the years. It is difficult to assess resident outcomes across time because the resident group changes due to death and discharges.

Table 12. Overall Nursing Turnover

OVERALL				
YEAR	EMPLOYED	LEFT POSITION	VOLUNTARY	INVOLUNTARY
	N	N	N	N
2009	86	29	18	11
2010	81	19	9	10
2011	88	20	14	6
2012	98	28	21	7
YEAR	EMPLOYED	LEFT POSITION	VOLUNTARY	INVOLUNTARY
	N	Percent	Percent	Percent
2009	86	34%	21%	13%
2010	81	23%	11%	12%
2011	88	23%	16%	7%
2012	98	29%	21%	7%

Source: Organizational Database

Table 13. RN/LPN Turnover

RN/LPN				
YEAR	EMPLOYED	LEFT POSITION	VOLUNTARY	INVOLUNTARY
	N	N (%)	N (%)	N (%)
2009	30	7 (23%)	4 (13%)	3 (10%)
2010	33	7 (21%)	6 (18%)	1 (3%)
2011	28	5 (18%)	3 (11%)	2 (7%)
2012	29	6 (2%)	6 (21%)	0 (0%)

Source Organizational Database

Table 14. CNA Turnover

CNA				
YEAR	EMPLOYED	LEFT POSITION	VOLUNTARY	INVOLUNTARY
	N	N (%)	N (%)	N (%)
2009	54	21 (39%)	13 (24%)	8 (15%)
2010	47	12 (26%)	3 (6%)	9 (19%)
2011	59	15 (25%)	11 (19%)	4 (7%)
2012	68	22 (32%)	15 (22%)	7 (10%)

Source: Organizational Database

Table 15. Resident Outcomes

Year	Falls %	UTI %	Pain %	Pressure Ulcer %	Weight Loss %
2008	10.1	5.3	7.9	1.1	5.6
2009	9.6	5.2	7.8	1.2	5.9
2010	8.7	5.0	7.5	1.0	6.1
2011	8.3	4.7	6.9	1.1	5.7
2012	8.0	4.5	6.5	1.2	5.5
State 2012	3.8	8.4	10.5	4.5	6.4
National 2012	3.8	7.2	10.1	6.4	7.3

Source: Nursing Home Compare 2012

Summary

A descriptive analysis based on scores from satisfaction surveys indicates no change over time. The variable of turnover was found to trend downward, but show no significant change either. Throughout the study period, the observations of individual autonomy, accountability, shared governance, and leadership among the nurses, and satisfaction and outcomes among the residents indicate improvement.

The concept of shared governance was challenging for the nurses to conceptualize at first; eventually, they understood it to mean an increased involvement in decision making. Once they trusted the process, and the Director of Health Services, shared governance was the reason most nurses became engaged with the PTE-LTC designation process. Clinical decisions regarding nursing practice were delegated to the nursing collective and monthly nurse's meetings changed from a reporting mechanism to a collaborative and highly functional team meeting. Similarly, the monthly CNA meeting changed and the interdisciplinary task forces seemed to take on a life of their own. Administrative decisions remained with the Management team, but included input for all staff at all levels. The structure of the shared governance model was consistent with the nursing definition and reflected both aspects of clinical and administration. The nurse led task forces are all located within the Quality and Professional Practice Councils. The administrative task forces are all located within the Management and Professional Development Councils.

Data from the PTE-LTC Nurse Survey indicate that the clinical and administrative decision tree existed. The survey indicates nursing involvement in the designation process and asked respondents if direct care nurses were involved in quality

initiatives, professional development activities, and decision making about standards of care. Responses were overwhelmingly positive at 97.87 percent favorable.

CHAPTER V

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Overview

This research used a case study approach to describe the implementation of a professional nurse practice model within the PTE-LTC specialty designation process in one Midwest Continuing Care Retirement Community. Components of professional nursing practice over a 5-year study period were documented and compared with those found in the literature. Both quantitative and qualitative approaches were utilized to explore and describe the process in a CCRC to improve the quality of care and life for the people who live there and improve job satisfaction and retention of the people who work there. The designation process strengthened the role of RNs in the nursing home, encouraged participative decision-making with all staff, and created a collective of nursing professionals.

The qualitative data were collected by historical record review and field observations to understand the impact of a specialty designation. The quantitative data were collected by accessing national and local databases to compare staff and resident outcomes before and after designation.

This chapter provides a brief summary of finding and discusses implications for clinical and administrative nursing practice, nursing research, and nursing education.

Summary of Findings and Discussion

Professional nursing practice models described in the literature are generally informing hospital practice. They can be a centralized department model with a single governance structure or a unit-based structure. The Pathway to Excellence – Long Term

Care designation is a special program designed specifically for long-term care and incorporates professional practice with leadership and quality improvement. In this case study, a centralized model was implemented due to the limited size of the organization. As recommended in the literature, issues related to clinical practice are discussed in task forces composed mainly of nurses and CNAs (Mueller, 2010; Lyons et al, 2009; Maas & Specht, 2008). Task forces are open to interdisciplinary collaboration and practice. Value is placed on transparent communication and sharing of information. The task forces make recommendations to a Core Nursing Leadership team based on research, evidence, and consensus. If necessary, the recommendations can be taken to the Management team as well.

In the study site, clinical practice and management decisions were distinct in various task forces; the Core Nursing Leadership team and Management team had different functions. Membership of the Core Nursing team was restricted to nursing leadership members; the other task forces were open to all. The Management team was restricted to executive members only (executive director, administrator, DHS, Director of Human Resources, Director of Building and Grounds, and Director of Dining Services). Components of nursing practice models include autonomy and accountability (Mueller, 2010). In order to increase support those components in this case study, decisions made in the councils and task forces were generally conclusive and did not need to have executive approval. This was successful in part because of the transparent communication and no surprise philosophy. The role of communicator fell to the Director of Health Services. She was responsible for making sure information from the

task forces was communicated to management and information from management was communicated to the task forces.

A second important change which was in the process of evolving was the interdisciplinary character of the task forces. According to Maas & Specht (2008) and Mueller (2010), it is critical to recognize the practice of nursing within the interdisciplinary team. Individuals representing other disciplines were incorporated into the task force structure. At the executive level, the management team was expanded to represent administration, nursing, dining services, and building and grounds. This decision was based on the size of the two largest departments (nursing and dining), the complexity of the organization, and the need to support the entire community. The Quality Assurance team was also expanded from the Medical Director, Director of Health Services, Pharmacist, and Administrator to include all three levels of care, department heads, assistant department heads, nurses, and CNAs. The leadership team was expanded to include anyone within the organization who saw themselves as a leader.

If the structures and processes of professional nursing practice and shared governance were operating, decision making methods should reflect participation of the nursing collective in all roles within the organization (Maas & Specht 2008; Lyons et al., 2009). As mentioned previously, the decision making methods established in this case study incorporated a shared governance structure. According to the landmark study by Maas and Jacox (1977), in order for the collective to retain control of nursing practice, the group must be vested with authority and accountability for the decisions regarding scope of practice, practice standards, leadership, mentoring, scholarship, skill development, orientation, and certification. At the end of the study period, the case study

supported the ideas posited by Maas and Jacox by retaining some collective decision making with regard to orientation, nursing policies and procedures, board certification, and skill development.

There were nurse and CNA input into following scope of practice recommendations from the state board of nursing; however, CNAs did not participate in the development of the statements defining scope of practice. There was more nurse input for the development of the task forces, but once the teams were identified, CNAs were included in the purpose and goal setting for each team.

The development of clinical practice delivery was one function that was addressed in the shared governance model but it did not provide a means of incorporating the collective authority of nurses in all roles in decisions about how care was delivered. Although some of the nurses were very involved in the development of team assignments and care practices, others preferred to defer to more assertive nurses or the Director of Health Services. If they had no leadership training or confrontation skills, they opted to keep quiet and go with group consensus. This is consistent with the findings from Armstrong et al. (2009) who found increased empowerment and job satisfaction in nurses with formal leadership training.

The development of practice standards and research utilization was an area where the authority of the nursing collective was consolidated to specific task forces. If the task force recommended an evidence-based practice, the nurses not on that particular task force felt they had little influence on the decision making process, assuming the decision had already been made.

Finally, as recommended by Laschinger (2008), the nurses were invited to participate in the interview and selection process when selecting new nurses. Only one nurse during the study period actually participated in the process to hire a new nurse for night shift. She expressed great satisfaction with being included in the decision process. Other nurses said they were too busy, didn't know how to interview people, liked everyone, or didn't want to work with the Human Resource Director (because she was "administration"). Nurses felt they were not qualified to participate in hiring decisions and would prefer management retained this function. In contrast, many CNAs were excited to participate in the hiring of new CNAs, so many in fact, that a sign-up sheet was created for each month to make sure everyone had an opportunity. The CNAs also took applicants on a tour of the building to get a sense of the way they interacted with the residents.

Level of Care Specific Implementation Efforts

Efforts to include all levels of care for the PTE-LTC designation were present from the beginning of the study period. All nurses and CNAs, regardless of where they worked, were included in the development of task force structures that formalized nursing input on decisions, both at the organization and level of care levels. Changes were undertaken in all areas to encourage individual autonomy as well as the potential to organize as a collective. The Assisted Living team was already functioning with an RN coordinator and 10 CNA/CMA team members. The Independent Living nurse worked alone in the apartments, but participated as part of the nursing team. The majority of changes were within the nursing home level of care.

Changes in the care delivery system eliminated the charge nurse role, so that each nurse became accountable for clinical decisions related to the assigned group of residents. This change is well supported in the literature (Mueller, 2010; Lyons et al., 2009; Maas & Specht, 2008). Similarly, the CNAs were consistently assigned to the same group of residents. The other change was related to the Director of Nursing position; if this organization was only a nursing home, or only an assisted living facility, or only a residential community, it would be appropriate to have one head nurse. This community is diverse, however, with three levels of care. The change included a name change to Director of Health Services to better represent the scope of the position at all levels of care and at every level of the organization. The Core Leadership Team was developed with a coordinator for each level of care: Assisted Living Coordinator, Nursing Home Coordinator (formerly the Assistant Director of Nursing), Care Plan Coordinator, and Independent Living Coordinator. The change necessitated a redefinition of the role from that of controller and organizer to that of change agent, teacher, coach, and facilitator. The Director of Health Services clearly articulated the change and was viewed as mentor and change champion. The Core Leadership Team seemed to understand the need for the change and readily accepted their new roles. The Management Team was on board from the very beginning. The other nurses and CNAs, however, were slower to respond. State surveyors were also confused, often calling the DHS an administrator and calling the Nursing Home Coordinator the Director of Nursing. These changes may seem unique to the case study however there is ample literature on change theory which supports the identification of a change champion, expansion of the leader role, and a release of control

in order to empower others (Taunton et al., 1997; Komeratat & Oumtanee, 2009; Fox, 2010).

Overall, the literature supports the potential benefits of collaborative or shared governance, professional practice, and increased decision making capabilities (Laschinger & Leiter, 2006; Manojlovich & Laschinger, 2007; & Laschinger, 2008). The changes implemented during the study period seemed related in part to understanding the shared governance model. Nurses were strongly influenced by the philosophy of shared governance and the implications that it held for their participation in decision making. In general, the CNAs are also strongly influenced by the idea of participating in decisions. The task force meetings are productive, organized, and effective. The participating members are engaged in the process and to have a voice at the table.

Implications for Nursing Research

Clearly, nurse leaders need to develop a very thorough understanding of the shared governance and professional practice concepts (Mueller, 2010; Lyons et al., 2009, & Maas & Specht, 2008). In this study, the key to participation at all levels was the shared governance model. This is not something that can be done to the nursing staff, but rather a process to develop with the nursing staff. Further research on the types of shared governance and impact on nursing practice in nursing homes is warranted. Autonomous decision making may be harder for those nursing homes with a corporate structure and one prescribed way to do things.

The PTE-LTC program is relatively new and with only two organizations in the country designated, it is our social responsibility to get the word out. Imagine the changes that could occur if the majority of long-term care nurses were in their jobs

intentionally and specializing in gerontological nursing. Further study is critical in determining if the PTE-LTC program does indeed reduce turnover and increase job satisfaction. The literature already supports that quality is impacted by less turnover and more job satisfaction (Bowers, 2003; Anderson, Issel, McDaniel, 2003; Anderson, Corazzini, & McDaniel, 2004; Mueller, Anderson, McConnell, & Corazzini, 2012). In addition to the PTE-LTC program, there needs to be further research on the implementation of other professional nursing practice models in nursing homes.

When a financial investment is required, it is imperative that a strong business case for designation be developed to engage senior decision makers in long-term care (Arling et al., 2007; Castle & Ferguson-Rome, 2010). A cost analysis of the PTE-LTC process and outcomes must be evaluated on a broader scale. This case study gave us a good idea of some cost savings by decreasing turnover and resident injuries from falls, but there needs to be a systematic way to document cost savings across the board to further demonstrate the benefits of this designation. A tremendous outlay is required at the front end of this designation process to educate all nursing staff in the organization and achieve consensus about what is shared, who governs, and who benefits. Expenses are not confined to start-up costs alone; operating expenses persist. Nurses must be replaced in order for others to attend meetings, and accomplish work tasks; they also need time for research and writing. All new staff must be oriented to the shared governance model and expectations related to job performance. In this study, we did lose some momentum with the addition of new nurses. It proved difficult to explain the practice standards and shared governance model with the same enthusiasm achieved during the process. The impact of turnover on the process needs to be measured as well.

Without a significant investment in the PTE-LTC practice standards and the value of such a designation among the nursing collective, it is unlikely it would be self-perpetuating if the head nurse or change champion position turned over. In this study, a small core group of nurses emerged who were very engaged and excited in their work. This Core Leadership Council would seem to be the ideal group to build on for further development of shared governance. Nurses with characteristics similar to this group could be identified and enlisted to provide leadership for others in an effort to implement similar models. Also, taking the model to the board and getting their endorsement helps the model continue regardless of changes in administration.

As stated by other researchers (Anderson, Issel, & McDaniel, 2003; Castle, 2006; Castle & Engberg, 2006; and Castle & Lin, 2010), this study also suggests there is a need to examine relationships between administration, nurses, nursing leadership, and CNAs. If shared governance is truly occurring, redistribution of power should reduce the hierarchical relationships that traditionally represent a long-term care organization. The director must give up power in order to empower others, which actually results in more power. Similarly, the Administrative Team must also give up some power. An exploration of leadership traits and styles would benefit the literature. As the governance process becomes the cultural norm, communication difficulties between CNAs, nurses, management, and administration should lessen as everyone develops the skills necessary for consensus. Finally, further mixed methods studies comparing non-designated organizations with designated facilities, not-for-profit and for-profit, stand alone and chains, high and low performers, are warranted.

Implications for Nursing Practice

The results of the study support the implementation of a shared governance model which encourages nurses and CNAs to obtain specialty certification and expertise in gerontological nursing (Kendall-Gallegher & Biegen, 2009; Cherry et al., 2007; Decker & Castle, 2009; & Harrington et al., 2006). Organizations serving aging persons need to provide for gerontological education sessions and interdisciplinary dementia training.

Providers, nurses, regulators, and consumers have a social responsibility to collaborate in establishing minimum staffing requirements. The evidence is there supporting more staff for more quality. This study is consistent with the literature on improved quality with less turnover and more RNs on staff.

Another important implication from this study concerns the need for patience and persistence throughout the implementation process. People learning to make decisions and manage autonomy and accountability will make mistakes. It is the responsibility of the organization and the leaders to support and teach when less than optimal decisions are made. Gone is the culture of blame which supports finding fault and eliminating people instead of critically analyzing situations and developing strategies for improvement.

In this study, we were able to show if expectations are raised and encouragement provided, people are capable of amazing things. At the end of the study period, the Core Nursing Leadership Team and Administrative Team decided to complete the annual survey without notifying the Director of Health Services. This was not possible at the beginning of the study period. They embraced the survey as an opportunity to shine. The other example is regarding the CNAs; during the state survey, the Core Nursing Leadership Team decided to send the surveyors on the environmental tour with the CNAs

who were consistently assigned the each area. Asking the CNAs to perform a task which is generally reserved for the director showed confidence in their abilities. The state surveyors were impressed with how well the CNAs knew the residents and how much the nurses trusted the CNAs. Although the CNAs were nervous at first, they showed tremendous pride in their knowledge of each resident and their preferences for receiving care.

As demonstrated in the literature, nurses need time to be nurses (Kim et al., 2009; Lyons et al., 2009; Maas, 1989; Maas et al., 2008; Mueller, 2006). The results of the study supported the development of support positions to allow the nurses time off the floor for other projects, or time with residents. The utilization of certified medication aides may enable the nurses to use critical thinking skills, perform assessments, plan, research, and write. The other strategy which may give them more time is to critically analyze medications to eliminate unnecessary medications. Using a “soft med pass” policy allows for medications to be given in the AM, PM, or HS as opposed to specific times. This allows the nurse to establish person-centered administration times for each resident.

Implementation of professional nursing practice and shared governance in long-term care is a major culture change (Mueller, 2010; Lyons, et al., 2009; Maas & Specht, 2008). The image of long-term care has been ingrained in our societal fabric since the very beginning. In this study, we attempted to change the image of long-term care from the inside out by building confidence, autonomy, accountability, and expertise. Commitment to such an ambitious undertaking requires a systematic plan that identifies

goals, methods, and expected outcomes. The PTE-LTC designation process is one method to provide this structure and guidance.

During the study period, the lack of state surveyor support could have had a very negative impact on the PTE-LTC designation process, the shared governance model, and the effort to have nurses obtain specialty certification. Surveyors should be certified in gerontological nursing in order to be a surveyor for long-term care; they should also be required to learn the benefits of outcome based evaluations and support for advanced education.

Finally, nursing needs to gain consensus on how we define nursing. The various levels of nursing, LPN or RN (ADN, BSN, MSN), is confusing to the general public. LPNs can work in long-term care, but not in the hospital, leading some to believe long-term care is somehow less complex or important than acute care. LPNs and RNs are used interchangeably in long-term care when there are vast differences in years of education (LPNs are one year, ADNs are two years, BSNs are four years, MSNs are six years) and scope of practice. This is not fair to the LPNs, RNs, or residents they are caring for.

Recommendations for Education

There is a great need for nurse educators to incorporate into the curricula of nursing students a strong emphasis on professionalism and the relationship of authority and accountability (Harrington et al., 2012; IOM, 1986, 2000, 2001, and 2008). Additionally, the silent push away from gerontological nursing and long-term care needs to stop. In this study, students reported they were encouraged to “do anything else but long-term care” by advisors and professors. A BSN student who was interested in leadership in long-term care was told to look elsewhere for a preceptor because there are

"no qualified nursing leaders in long-term care." This is an outrage and perpetuates the stereotype that nursing homes are bad. This environment should be embraced as an opportunity to study complex health conditions, family dynamics, nursing autonomy, interdisciplinary teamwork, and ethical dilemmas. Nursing homes are complex adaptive systems which function somewhere between chaos and routine where new challenges arise and every day is different. The challenge is to create a home-like environment where someone lives (quality of life) which also provides individualized and exceptional nursing care (quality of care).

In order to prepare new nurses, shared governance, gerontological content and leadership skills should be included in all BSN programs with a special focus on clinical experiences in a variety of long-term care settings. These clinical opportunities should emphasize the complexity of aging care and not just the basics. Further opportunities for specialization could be developed for nursing residency programs in long-term care which focus on nursing leadership and shared decision making.

Limitations

This case study was instrumental in understanding and giving voice to the experience of implementing a PNP model in the nursing home and developing recommendations regarding shared governance and strengthening the RN role. The study breaks new ground by introducing a clinical application of the PTE-LTC designation process and discussing both the unintended consequences and benefits of such an undertaking. While making a contribution to the nursing home literature, a full discussion of possible limitations of this study is warranted.

A major limitation of case study was the knowledge that the experiences from one nursing home cannot necessarily be generalized to all nursing homes. There are many factors that make this study a unique understanding of one case. As a result, the focus of this study was to understand how the residents and staff viewed their experiences at this setting and interpret those experiences in an effort to contribute to nursing home literature and address gaps in the research.

While the results for nursing turnover were not significant, there was a downward trend represented by overall turnover. Limited sample size and length of study were limitations of this study, but the trend is a positive result and is indicative of longer tenure of nursing staff. Further study of turnover in nursing homes with PTE-LTC designation is warranted.

Another limitation, and possibly the most challenging, but most rewarding, was the researcher's positioning and ability to bracket her experiences while working within the study setting. As previously noted, the researcher is a doctoral student at the College of Nursing and the Director of Health Services within the organization. The inclusion of the self within the interpretation of the findings may also be viewed as a deterrent in the validity of the study. This may be a noticeable limitation due to the fact that the emergent themes within the study seemed to line up with the a priori themes the researcher expected to find. To add credibility, the a priori themes were selected purposely from the PTE-LTC practice standards. Additionally, member-checking and triangulation were used to add perspective to coding and overall lens of the study.

Closing

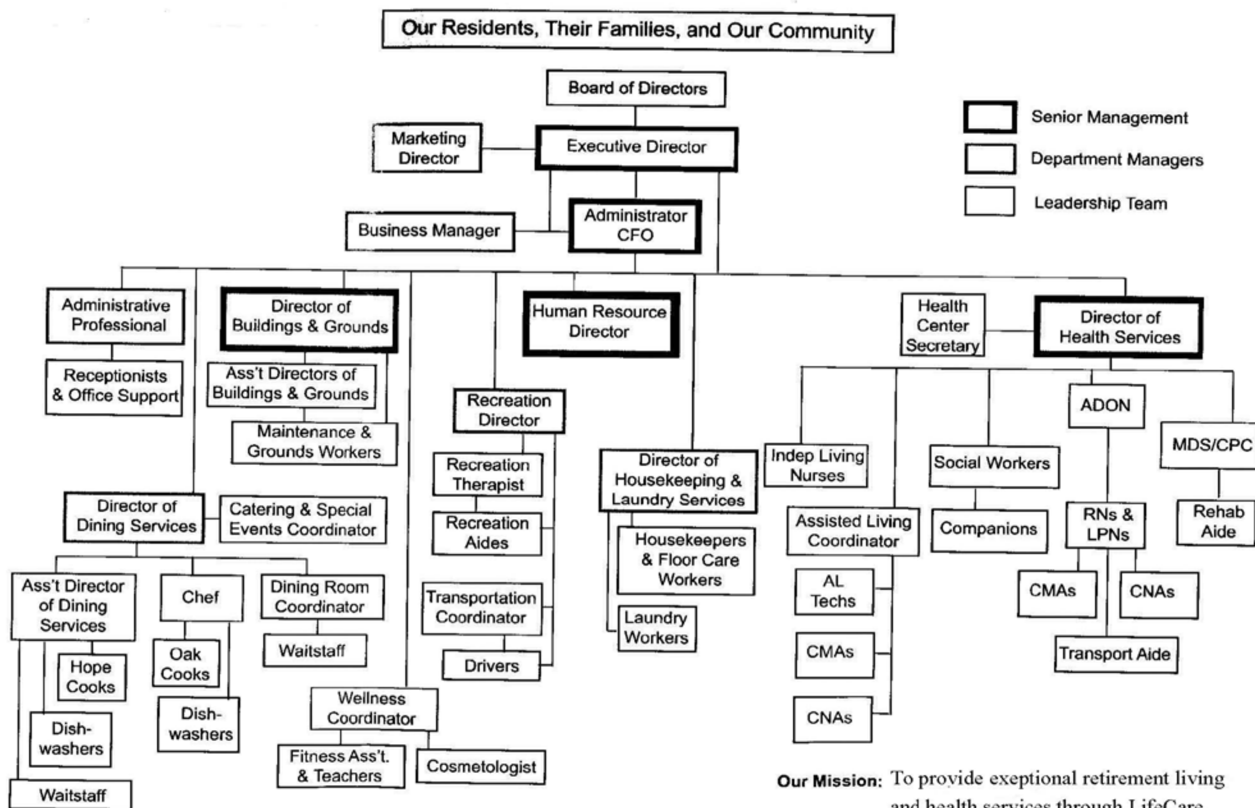
Implementing the PTE-LTC practice standards, including shared governance and professional nursing practice, is a complex undertaking and is influenced by many organizational, individual, and environmental factors. Although the nursing leadership supported the model and anticipated a lengthy process for changes to occur, the findings revealed minimal changes in staff turnover, job satisfaction, customer satisfaction, and resident outcomes. The Director of Health Services provided the major coaching for nurses and CNAs by focusing on leadership training, coaching, and encouragement.

Overall, nurses and CNAs participated in the overall designation process, but struggled to find their new place in the shared governance model. Spending more time on the features of a shared governance model and professional nursing practice up front may result in less confusion.

The PTE-LTC designation process highlighted what the organization was doing well and provided a roadmap for them to follow where improvement was needed. This was a confidence builder as the team moved forward through the 12 practice standards.

APPENDIX A

ORGANIZATIONAL CHART

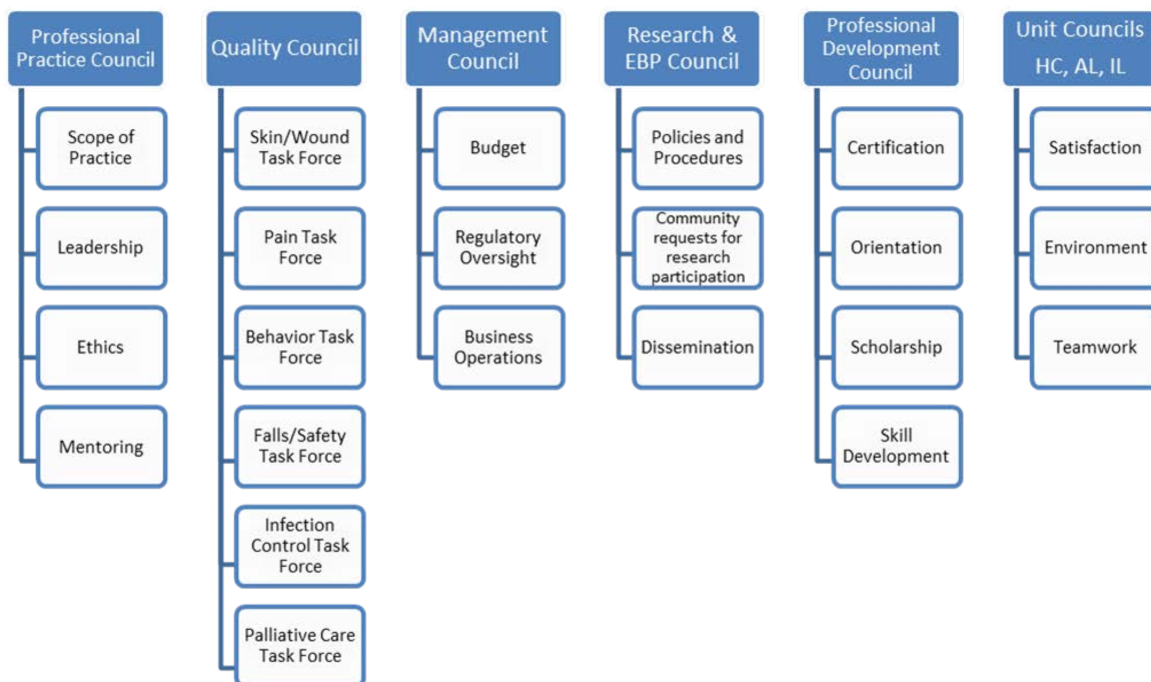


APPENDIX B

NURSING SHARED GOVERNANCE

APPENDIX C

SHARED GOVERNANCE WITH TASK FORCES



APPENDIX D

INSTRUMENT FOR MEASURING CONSUMER (RESIDENT) SATISFACTION

Likert Scale 1-4 (1 –poor, 2- fair, 3 – good, 4 – excellent)

1. Recommendation to others
2. Overall satisfaction
3. Respect for privacy
4. Respectfulness of staff
5. Feeling of security
6. Courteousness of dining staff
7. Billing/Payment issues
8. Commitment to independence
9. Care of staff
10. Provision of healthcare services
11. Quietness of apartment
12. Cleanliness of common areas
13. Sufficiency of personal assistance
14. Quality of amenities
15. Home-like atmosphere
16. Responsiveness of staff
17. Quality of laundry services
18. Maintenance of apartment
19. Control of room temperature
20. Meaningfulness of activities

21. Appeal of food

22. Adequacy of storage space

APPENDIX E

INSTRUMENT FOR MEASURING EMPLOYEE SATISFACTION

Likert Scale 1-4 (1 –poor, 2- fair, 3 – good, 4 – excellent)

1. Recommendation for care
2. Recommendation for job
3. Overall satisfaction
4. Sense of accomplishment
5. Safety of workplace
6. Adequacy of equipment/supplies
7. Care of supervisor
8. Appreciation of supervisor
9. Respectfulness of staff
10. Communication by supervisor
11. Care of management
12. Fairness of evaluations
13. Comparison of pay
14. Quality of teamwork
15. Assistance with job stress
16. Attentiveness of management
17. Quality of in-service education
18. Quality of orientation
19. Quality of resident-related training
20. Quality of family-related training

21. Staff to staff communication

APPENDIX F

INSTRUMENT FOR MEASURING GAP ANALYSIS

Organizational Self-Assessment

(Recommended prior to submitting a formal intent to apply for PTE®)

The first step in pursuing recognition as a Pathway to Excellence in Long Term Care™ organization is a Self-Assessment. The Self-Assessment must be deliberate and honest if it is to serve as an organizational measure of whether or not to pursue the Pathway to Excellence in Long Term Care designation. This process requires an organization to compare itself against the compulsory elements of the Pathway to Excellence in Long Term Care program to assess the organization's current state.

1) Are all members of the nursing staff actively engaged in and aware of the Pathway to Excellence in Long-Term Care application?
2) Are Certified Nurse Assistants (CNAs) included in the nursing community?
3) Are RNs, LPNs, and/or CNAs involved in decision-making and all phases of projects that affect nursing, including quality processes?
4) Is there evidence that a delineated nursing shared governance model is in place and integrated throughout the organization?
5) Is there a policy indicating mandatory overtime is not required for nursing staff?
6) Is the development of policy/procedures evidence-based and are at least two of these being implemented?
7) Is there input from RNs, LPNs, and CNAs on staffing plans and do they serve on nursing and facility committees?

8) Are protective security measures in place for residents and staff?

9) Are prevention measures in place to decrease injury, illness, and accidents?

10) Do RNs, LPNs, and/or CNAs actively participate on safety committees and in product evaluation?

11) Are policies in place to address resident abuse and neglect?

12) Are policies in place to address the use of restraints and falls prevention?

13) Are employee support structures in place for reporting and addressing work environment events or concerns?

14) Are supportive processes in the work environment perceived as restorative and/or holistic?

15) Is there a person-centered model of care present?

16) Is the person-centered model of care well understood by all staff?

17) Are non-adversarial, non-retaliatory, and alternative dispute resolution mechanisms in place to address concerns about the professional practice of healthcare professionals?

18) Are there systems to assess quality of resident care as well as rights and culturally sensitive needs of residents?

19) Are error prevention and management procedures disseminated to all staff on an ongoing basis?

20) Do orientation activities incorporate general and specific mandatory training requirements?

21) Does nursing orientation involve a personalized plan with close supervision of the orientee/new nurse by peers and supervisors providing timely feedback?

22) Do staffing patterns accommodate the orientation activities of new nurses?

23) Is a cross orientation program in place if assigned to multiple staffing areas?

24) Are nurses provided education/training to serve as a preceptor and receive feedback?

25) Is the DON a registered nurse (RN)?

26) If the DON does not currently hold a BSN, is there a written plan demonstrating active progression toward certification in management or administration and/or degree advancement?

27) Is the DON accessible and an advocate for residents and direct care staff?

28) Is the DON an advocate for quality of care?

29) Is continuing education supported and geared toward the RNs, LPNs, and/or CNAs roles and responsibilities?

30) Are there examples of development opportunities through mentoring of staff in both the clinical and administrative arenas?

31) Is there a process for nurses that facilitates the development of competence, recognition and/or advancement?

32) Can we demonstrate that nurses' wages and salaries are competitive, market adjusted and commensurate with education, expertise, experience and longevity?

33) Is incentive pay based on performance and goal achievement?

34) Are opportunities and rewards or incentives offered to nurses who serve as outstanding role models for exceptional service?

35) Do external entities, such as community and nursing organizations, recognize the nurses employed at the healthcare organization for the accomplishments and contribution to the community and/or profession?

36) Are flexible staffing options provided?

37) In addition to Employee Assistance Programs, are other health and wellness support services in place?

38) Are RNs, LPNs, and CNAs involved in developing their work schedule to meet organizational and personal needs?

39) Are mechanisms in place that foster and support collaborative interdisciplinary initiatives?

40) Are established procedures utilized to constructively manage interdisciplinary conflict?

41) Does the nurse manager participate in self-evaluation, development, and achievement of predetermined goals?

42) Is the nurse manager able to describe examples in which s/he has advocated for residents, direct care nurses, and nursing staff?

43) Do both staff and peers have input to manager's/supervisor's evaluation?

44) Is the nurse manager's performance evaluated on outcome measures?

45) Are incentives awards provided for nurse managers achieving outcomes beneficial to the resident and/or organization?

46) Is there a current written nursing quality plan?

47) Do direct care nurses actively participate in outcome based quality initiatives?

48) Are evidence-based practices utilized by direct care nurses and nursing staff?

APPENDIX G

STUDY TIMELINE

2008

October	Director of Nursing position turned over
November	
December	

2009

January	
February	Annual state survey
March	
April	
May	
June	
July	
August	
September	
October	Director of Nursing position turned over
November	Director of Nursing changed to Director of Health Services
December	Director of Health Services – full time

2010

January	Split ADON and MDS position
February	Implemented consistent assignment
March	Annual state survey

April	Block scheduling
May	Core leadership team development, budget talks with Admin, AL RN, ADON
June	On call status for core leadership
July	5 star rating, party
August	Leadership Challenge starts with 5 participants
September	Both Direct Care nurses quit Leadership Challenge
October	Start ANCC process, 100 Great Nurse Nominees, LA Conference
November	Nurse meetings to plan, round One Practice Standards (1-4)
December	Shared Governance Task Force Development, nurses volunteer to chair committees, CNAs included in team development

2011

January	Nursing Vision, Round 2 practice standards 5-8, IJ (Elopement)
February	Certified Mentor Program (2 CNAs), Noiseless Call System & Elopement
March	ANCC Submission deadline nearing, Round 3 practice standards 9-12, Abstract NGNA, Survey (6 citations), change to three star rating
April	Submit ANCC; IAHSA Award Nominations (4 nominations: Nurse Leadership, Mentor of the Year, Excellence in the Workplace, and Caregiver of the Year)
May	IAHSA Spring Conference, Pain task force takes off, budget talk with entire nursing team

June	IAHSA Awards (2 awards: Mentor and Excellence in the Workplace), MDS nurse certified, budgeted hours for thinking, paperwork, task forces, certification
July	Falls show no reduction in number, but reduced injury and no hospitalizations related to falls
August	
September	Behavior task force takes off
October	Decision for no ANCC designation, Presented at CON, Reduction in falls, improved turnover, greater job and resident satisfaction, DC Conference
November	Presented at Leading Age Iowa, Developed abstract for Leading Age national conference
December	Resubmission to ANCC, 2 RNs problem solve with CNA without DHS involvement, 100 Great Nurse Nominations (3)

2012

January	Final ANCC submission
February	Annual Survey (Nursing deficiency free)
	Exit interview
	ANCC Survey to staff
	Amazing CNA meeting
	Spring Gero Cert Class starts (3 participants)
March	Federal Survey, deficiency free, budget planning with entire nursing team

April	ANCC PTE-Designation, Survey results, CNA appointed to Iowa Caregiver Board
May	Attended PTE conference (4 attendees) in DC
June	Leading Age Awards CNA the Outstanding Mentor Award
July	
August	
September	Fall Gero Cert Class starts (2 participants)
October	Attended annual Leading Age conference in Denver, Submitted abstract to Leading Age national conference with ANCC
November	
December	100 Great Iowa Nurse nominations (4)

APPENDIX H

GLOSSARY OF TERMS

- *American Nurse Credentialing Center (ANCC):* A subsidiary of the American Nurse Association (ANA) that provides individuals and organizations throughout the nursing profession with the credentialing resources they need to demonstrate practice excellence. ANCC's internationally renowned credentialing programs certify nurses in specialty practice areas; recognize healthcare organizations for promoting safe, positive work environments through the Magnet Recognition Program®, the Pathway to Excellence® and Pathway to Excellence in Long-Term Care™ Programs; and accredit providers of continuing nursing education. In addition, ANCC's Institute for Credentialing Innovation® offers an array of informational and educational services and products to support its core credentialing programs.
- *American Nurse Association (ANA):* The only full-service professional organization representing the interests of the nation's 3.1 million registered nurses through its constituent and state nurses associations and its organizational affiliates. The ANA advances the nursing profession by fostering high standards of nursing practice, promoting the rights of nurses in the workplace, projecting a positive and realistic view of nursing, and by lobbying the Congress and regulatory agencies on health care issues affecting nurses and the public.
- *Assistant Director of Nursing (ADON):* An RN or LPN who assists the Director of Nursing.
- *Assisted Living (AL):* Level of care between independent living and nursing home level of care that provides coordination, monitoring, and/or assistance with ADLs and

IADLs, but not 24 hour nursing care. Assistance for residents is provided by a variety of disciplines and varies in terms of the prominence and roles of RNs.

- *Basic and Instrumental Activities of Daily Living (ADL, IADL):* Self-care activities or activities of self-care performed independently by an individual (e.g., dressing, grooming, eating, bathing, hygiene, paying bills, driving).
- *Continuing Care Retirement Community (CCRC):* Part independent living, part assisted living and part skilled nursing home, CCRCs offer a tiered approach to the aging process, accommodating residents' changing needs. Upon entering, healthy adults can reside independently in single-family homes, apartments or condominiums. When assistance with everyday activities becomes necessary, they can move into assisted living or nursing care facilities. These communities give older adults the option to live in one location for the duration of their life, with much of their future care already figured out. This can provide a great level of comfort to both your parents and you and take much of the stress out of the caregiving relationship.
- *The Centers for Medicare & Medicaid Services (CMS):* A branch of the U.S. Department of Health and Human Services. CMS is the federal agency which administers Medicare, Medicaid, and the Children's Health Insurance Program.
- *Certified Nursing Assistant (CNA):* An unlicensed direct care worker who functions under the supervision of a registered nurse or licensed practical nurse. In Iowa, a CNA has completed a basic 75-hour course and passed a state exam.
- *Director of Nursing (DON):* A registered nurse who supervises care of all the residents in a long-term care facility. They are responsible for the development and implementation of nursing policy and procedure, overseeing the hiring and continued

employment of nursing staff, ensuring there is adequate nursing staff, and that the staff skills are current, overseeing employee conduct, assessing health needs of the residents, communicating with physicians and providers, and coordinating care with multidisciplinary team.

- *Gerontology:* The **s**tudy of aging.
- *Hours per Resident Day (HpRD):* The total number of hours worked per resident and per day. It is calculated in two steps: (1) the average total number of hours worked each day during a two-week period, and (2) the average total of number of hours worked divided by the number of residents.
- *Independent Living (IL):* Living in one's own home safely, independently, and comfortably.
- *The Institute of Medicine (IOM):* An independent, nonprofit organization that works outside of government to provide unbiased and authoritative advice to decision makers and the public.
- *Licensed Nursing Home Administrator (LNHA):* A nursing home administrator trained and licensed to ensure the safety and care of individuals living in nursing facilities. They also oversee budgets and direct the day-to-day operations of nursing home staff. A graduate degree is often required. A national licensure exam is also required.
- *Licensed Practical Nurse (LPN):* Entry level in nursing following one year of post-secondary education. An LPN provides basic nursing care and some duties may vary from state to state. They work under the direction of a registered nurse or physician.

- *Long-Term Care (LTC):* A variety of services that includes medical and non-medical care to people who have a chronic illness or disability. Long-term care helps meet health or personal needs. Most long-term care is to assist people with support services such as activities of daily living like dressing, bathing, and using the bathroom. Long-term care can be provided at home, in the community, in assisted living or in nursing homes.
- *Magnet Recognition Program®:* Program that recognizes healthcare organizations that provide the very best in nursing care and professionalism in nursing practice. The program also provides a vehicle for disseminating best practices and strategies among nursing systems. The ANCC Magnet Recognition Program is the gold standard for nursing excellence.
- *Minimum Data Set (MDS):* Part of the U.S. federally mandated process for clinical assessment of all residents in Medicare or Medicaid certified nursing homes. This process provides a comprehensive assessment of each resident's functional capabilities and helps nursing home staff identify health problems.
- *My InnerView:* A non-profit web-based company offering evidence-based management tools, benchmarking capabilities with the largest database of senior care satisfaction, and quality metrics.
- *Nursing Home (NH):* Places of residence for people who require 24-hour nursing care and have significant deficiencies with ADLs. For the purposes of this study, nursing home residents will be restricted to those individuals over the age of sixty-two. Residents may require long-term care or they may be short-term and require

skilled level of care with physical, occupational, and other rehabilitative therapies following an accident or illness.

- *Omnibus Budget Reconciliation Act of 1987 (OBRA '87):* In 1987, President Ronald Reagan signed into law the first major revision of the federal standards for nursing home care since the 1965 creation of both Medicare and Medicaid. The landmark legislation changed forever society's legal expectations of nursing homes and their care. Long-term care facilities wanting Medicare or Medicaid funding are to provide services so that each resident can attain and maintain his/her highest practicable physical, mental, and psychosocial well-being.
- *Online Survey Certification and Reporting (OSCAR)***:** A data network maintained by CMS in cooperation with the state long-term care surveying agencies. OSCAR is a compilation of all the data elements collected by surveyors during the inspection survey conducted at nursing facilities for the purpose of certification for participation in the Medicare and Medicaid programs. OSCAR is the most comprehensive source of facility level information on the operations, census and regulatory compliance of nursing facilities.
- *Outcome:* One of three quality measures in Donabedian's SOP Model. These measures refer to the desired states resulting from care processes, which may include reduction in falls, less pain, fewer urinary tract infections, and improved quality of life.
- *Professional Nurse Practice Model (PNPM):* A system (structure, process, and values) that supports registered nurse control over the delivery of nursing care and the environment in which care is delivered.

- *Pathway to Excellence in Long-Term Care (PTE-LTC):* The Pathway to Excellence® Program recognizes the essential elements of an optimal nursing practice environment. The designation is earned by healthcare organizations that create work environments where nurses can flourish. The award substantiates the professional satisfaction of nurses and identifies best places to work.
- *Processes:* One of three quality measures in Donabedian's SOP Model. These measures refer to the tasks done to and for the residents by nurses and direct care workers in the course of treatment, or for the nurses and direct care workers by administration.
- *Quality of Care (QoC):* A measure of the ability of a nurse or nursing home to provide services for individuals that increase the likelihood of desired health outcomes and are consistent with current professional knowledge. Good quality health care means doing the right thing, at the right time, in the right way, for the right person and getting the best possible results.
- *Quality of Life (QoL):* The amount of happiness and balance in an individual's life. Attention to good health will create a better quality of life.
- *Quality improvement Program (QIP):* A system for looking at ways to streamline and improve processes and systems. The goal of quality improvement strategies is for residents to receive the appropriate care at the appropriate time and place with the appropriate mix of information and supporting resources. In many cases, health care systems are designed in such a way as to be overly cumbersome, fragmented, and indifferent to residents' needs. Typically, quality improvement efforts are strongly

rooted in evidence-based procedures and rely extensively on data collected regarding processes and outcomes.

- *Quality Indicator/Quality Measure (QI/QM):* An agreed upon process of outcome measure that is used to determine the level of quality achieved. They are measureable variables or characteristics from MDS data that can be used to determine the degree of adherence to a standard or achievement of quality goals.
- *Resident:* An individual residing in a nursing home.
- *Resident Assessment Instrument (RAI):* A core set of screening, clinical, and functional status elements, including common definitions and coding categories, that forms the foundation of the comprehensive assessment for all residents of long-term care facilities certified to participate in Medicare and Medicaid. Items in the RAI standardize communication about resident problems and conditions within facilities, between facilities, and between facilities and outside agencies.
- *Registered Nurse (RN):* A nurse who has graduated from a nursing program at the college or university level (2-year associate degree; 3-year diploma; 4-year baccalaureate degree; or 4+ graduate degrees) and passes a state licensing exam. RNs help individuals, families, and group to achieve health and prevent disease.
- *Shared Governance:* Decentralized decision-making regarding nursing practice.
- *Structure:* One of three quality measures in Donabedian's SOP Model. These are the professional and organizational resources associated with the provision of care, such as staff credentials and facility operating capacities.
- *Turnover:* The rate at which an employer gains and loses employees. Simple ways to describe it are "how long employees tend to stay" or "the rate of traffic through the

revolving door." Turnover is measured for individual companies and for their industry as a whole. If an employer is said to have a high turnover relative to its competitors, it means that employees of that company have a shorter average tenure than those of other companies in the same industry. High turnover may be harmful to a company's productivity if skilled workers are often leaving and the worker population contains a high percentage of novice workers. To calculate monthly employee turnover rates, divide the number of employee separations in one month by the average number of active employees at the worksite during the same period.

- *United States Government Accountability Office (U.S. GAO):* The U.S. GAO is an independent, nonpartisan agency that works for Congress. Often called the "congressional watchdog," GAO investigates how the federal government spends taxpayer dollars.

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