

LEADING CHANGE IN CRITICAL ACCESS HOSPITALS: A CASE STUDY OF THE  
JOURNEY TO MAGNET®

By

© 2016

HEATHER VACHELLE NELSON-BRANTLEY

Submitted to the graduate degree program in Nursing and the Graduate Faculty of the University of Kansas in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

---

Chairperson, Marjorie J. Bott

---

Debra J. Ford

---

Karen L. Miller

---

Kristin Stegenga

---

Robert Lee

Date Defended: June 21, 2016

The Dissertation Committee for HEATHER VACHELLE NELSON-BRANTLEY

certifies that this is the approved version of the following dissertation:

LEADING CHANGE IN CRITICAL ACCESS HOSPITALS: A CASE STUDY OF THE  
JOURNEY TO MAGNET®

---

Chairperson, Marjorie J. Bott

Date approved: June 27, 2016

## Abstract

Nurses have been called to lead change in transforming health care systems to provide safe, high quality care. This is an especially challenging goal for nurses in rural critical access hospitals (CAHs) with limited resources. The Magnet<sup>®</sup>-designated hospital is a universal symbol for high quality nursing care and superior outcomes. Yet, little is known about how nurses, in collaboration with others, lead organizational change to achieve Magnet<sup>®</sup> standards.

The purpose of this qualitative, index case study was to understand how nurses in one Midwestern 25-bed hospital led change to become the first independent CAH to achieve Magnet<sup>®</sup> designation. A case study design was used to gain a holistic understanding of how nurses at all levels of the organization individually and collectively led change. A conceptual model of leading change was developed from a concept analysis and subsequently used as the conceptual framework for the study.

Twenty-seven individuals, including staff nurses, nurse managers, interprofessional care providers, nursing administrative leaders, hospital Board of Directors, and the Magnet<sup>®</sup> consultant participated in the study. Data collection included in-depth semi-structured individual interviews, focus groups, unstructured observation, documents and artifacts. Qualitative thematic analysis and the triangulation of data sources were used to analyze and interpret the data.

Nine themes emerged to support a refined conceptual model of leading change: driving forces, organizational readiness, individual and collective leadership, organizational learning, operational support, fostering relationships, balance, improved performance and outcomes, and new organizational culture and values. The journey to Magnet<sup>®</sup> leads to improved nurse and

patient outcomes, and a new organizational culture centered on shared governance, evidence-based practice, and higher education.

Rural nurse executives may use the journey to Magnet<sup>®</sup> as a blueprint for leading change to advance CAH outcomes. Efforts should focus on: securing administrative support; strategically planning for small, incremental change; building shared governance, quality improvement, research, and education; harnessing collective power; and believing and staying committed to the purpose of improving staff and patient outcomes. This study adds to the body of organizational systems and nursing leadership knowledge through a greater understanding of the phenomenon of leading change to advance rural CAHs.

## Acknowledgements

I would like to take this opportunity to express my sincerest gratitude to the many people who helped make this journey to PhD both possible and achievable. First, a special thanks to my dissertation tri-chairs: Dr. Marjorie J. Bott, Dr. Debra J. Ford, and Dr. Karen L. Miller. Dr. Bott, thank you for your unwavering positive support, encouragement, and enthusiasm for my research. Your vision helped shaped my rough ideas into a clear direction for this dissertation and for my future research career; for that, I am tremendously grateful. You always believed in my work and in me; your support has strengthened my passion for organizational systems research and has inspired me to achieve far greater than I imagined possible. Dr. Ford, thank you for being there for me from the very beginning; you have been my rock. I will always cherish our scholarly discussions that helped me fully explore my philosophical beliefs about leadership. Thank you for your mentorship, your encouragement, and your friendship. Dr. Miller, thank you for being such a tremendous mentor and role model; thank you for showing me through your everyday actions what it means to be a nurse leader, for always making time for me, and for your wisdom that encouraged me to be helpful to Waverly Health Center.

Dr. Stegenga, I am so very grateful for all that you have taught me with regards to qualitative research, as well as your gift for cheering me up and cheering me on. I will always remember your encouraging words to “put one fin in front of the other and just keep swimming.” As you read this, know I am standing tall like Wonder Woman because of the confidence you have instilled in me. Dr. Lee, thank you for your kindness, generosity, and health care management expertise; your contributions helped complete a strongly supportive dissertation committee, to which I am beyond blessed to have had.

A special thanks to Dr. Cynthia Teel for expanding my passion for nursing leadership, from the bedside to the boardroom; to Dr. Rita Clifford for encouraging me to pursue a doctorate of philosophy in nursing; to Dr. Elaine Frank-Ragan, Dr. Mary Gambino, and Dr. Nelda Godfrey for igniting my interest in complexity science; to Dr. Nora Warshawsky for your mentorship in writing for publication and dissertation pearls of wisdom; and to Dr. Caryl Goodyear-Bruch for your living example of authentic leadership. I also would like to thank everyone at Waverly Health Center for making this study possible; your dedication to caring for your patients, your community, and each other are a testament to the vision of a transformed health care system that advances the mind, body, and spiritual health of individuals and communities. Thank you for sharing your time, your experiences, and your organization with me to share with the world.

Most importantly, thank you to my family, whose love, support, and encouragement saw me through each step of this journey. To my spouse, Jennifer, words cannot express how grateful I am for all that you are and all that you have given me—for picking me up when I felt defeated; for reading countless drafts and entertaining endless thoughts about my study as it evolved; for your tremendous dedication that went above and beyond, even traveling and serving on my study team; and for ensuring the house was livable, the dogs were healthy, and our boys were thriving while I focused on meeting deadlines. To my dearest sons, Kristoffer 13 and Elijah 10, thank you for listening to mommy as I shared all I was learning about nursing, leadership, research, and critical access hospitals; for serving as a trial audience for my defense presentation; and for your creative insights for manuscript titles. Finally, thank you to my mother, Carol, and my father, Kenny, my biggest cheerleaders. Thank you, mom, for always being interested in what I was working on; your ability to digest qualitative and quantitative research and the dissertation process both amazed me and inspired me to be my best.

## Table of Contents

Abstract.....	iii
Acknowledgements.....	v
Table of Contents.....	vii
List of Figures.....	xiii
List of Tables.....	xiv
List of Appendices.....	xv
CHAPTER 1.....	1
Introduction.....	1
Statement of the Problem and Significance.....	2
Review of the Literature.....	4
Leadership Theories that Have Influenced Hospital Nursing Care.....	4
Transformational leadership theory.....	5
Authentic leadership theory.....	6
Nursing's Role in Leading Change.....	7
Magnet <sup>®</sup> as a Model for Excellence in Care Delivery.....	10
State of the Science.....	12
Research Questions.....	14
Theoretical Framework.....	15
Purpose, Scope, and Methods for Manuscripts.....	17
Manuscript 1.....	17
Purpose.....	17
Methods.....	18

Manuscript 2 .....	19
Purpose.....	19
Philosophical Framework .....	19
Methods.....	22
Data Analysis .....	28
Trustworthiness and Methodological Rigor.....	29
Ethical Considerations .....	32
Manuscript 3 .....	33
Purpose.....	33
Methods.....	34
Assumptions.....	35
Definition of Terms.....	36
Summary .....	37
References.....	39
CHAPTER 2 .....	49
Leading Change: A Concept Analysis.....	49
Abstract.....	50
Summary Statement.....	51
Introduction.....	53
Background.....	54
Concept Analysis Method.....	55
Data Sources .....	55
Results.....	57

Uses of the Concept .....	57
Defining Attributes .....	58
Constructed Cases .....	63
Antecedents and Consequences .....	65
Empirical Referents .....	68
Discussion .....	68
Limitations .....	71
Conclusion .....	72
Acknowledgements .....	73
References .....	74
CHAPTER 3 .....	81
Leading Change: A Case Study of First Independent Critical Access Hospital to Achieve Magnet <sup>®</sup> Designation .....	81
Abstract .....	82
Introduction .....	83
Background .....	83
Purpose .....	84
Conceptual Framework .....	85
Methods .....	85
Design and Sampling .....	85
Study Site .....	86
Recruitment and Data Collection .....	87
Data Analysis .....	89

Results.....	90
Themes.....	92
Driving forces .....	94
Organizational readiness.....	94
Individual and collective leadership .....	95
Organizational learning.....	95
Operational support.....	96
Fostering relationships .....	97
Balance.....	99
Improved performance and outcomes.....	99
New organizational culture and values .....	100
Discussion.....	101
Limitations .....	105
Conclusions.....	106
Acknowledgements.....	107
Disclaimer .....	107
References.....	108
CHAPTER 4 .....	114
Nurse Executives Leading Change to Improve Critical Access Hospital Outcomes: A Literature Review with Research-Informed Recommendations.....	114
Abstract.....	115
Introduction.....	116
Methods.....	118

Findings .....	119
Critical Access Hospital Legislative History and Performance.....	120
Challenges Faced by Rural Hospital Nurse Executives.....	123
Waverly Health Center: A Model of Success.....	128
Recommendations for Critical Access Hospital Nurse Executives Considering Magnet® .....	131
Discussion.....	134
Conclusions.....	138
Acknowledgements.....	139
Disclaimer.....	139
References.....	140
CHAPTER 5 .....	148
Summary.....	148
Explication of Manuscript Fit.....	148
Summary of Results.....	149
Manuscript 1 .....	149
Manuscript 2 .....	150
Manuscript 3 .....	152
Strengths .....	154
Limitations .....	155
Implications for Practice and Future Research.....	156
Conclusions.....	161
References.....	163
Appendix A.....	165

Appendix B.....	166
Appendix C.....	167
Appendix D.....	171
Appendix E.....	175
Appendix F.....	177
Appendix G.....	181

## List of Figures

	Page
CHAPTER 2	
Figure 2.1: Data selection process	57
Figure 2.2: Defining attributes and associated characteristics of leading change	59
Figure 2.3: Conceptual Model of Leading Change	69
CHAPTER 3	
Figure 3.1: Conceptual Model of Leading Change (Revised)	92
CHAPTER 4	
Figure 4.1: Literature search and selection process	120

## List of Tables

	Page
CHAPTER 2	
Table 2.1: Frequency of defining attributes in the literature	59
CHAPTER 3	
Table 3.1: Interview guide questions	89
Table 3.2: Participant demographics	91
Table 3.3: Themes and subthemes	93
CHAPTER 4	
Table 4.1: Waverly Health Center outcomes attributed to the journey to Magnet <sup>®</sup>	130
Table 4.2: Recommendations and action steps for critical access hospital nurse executives seeking Magnet <sup>®</sup>	132-133

## List of Appendices

	Page
Appendix A Letter of Invitation	165
Appendix B Letter of Interest in Participation from Identified Hospital	166
Appendix C Individual Interview Informed Consent Form	167-170
Appendix D Focus Group Informed Consent Form	171-174
Appendix E Individual Interview Guide	175-176
Appendix F Focus Group Interview Guide	177-180
Appendix G Permission to Use Waverly Health Center Name	181

## CHAPTER 1

### Introduction

Nurses have been called to transform our current health care system to advance the health of individuals, populations, and systems. They also have been recognized as crucial in leading change to prevent medication errors and decrease infection rates, facilitating patients' transition from hospital to home, and in generating effective solutions for decreasing hospital readmissions. Nurses' regular, close proximity to patients, scientific understanding of care processes, and involvement in all areas of healthcare delivery give them the unique ability to lead collaboratively the redesign of the healthcare system and its many practice environments, including the acute care hospital (Institute of Medicine [IOM], 2011).

Despite a multitude of initiatives, transforming hospitals to provide more efficient, effective, and patient-centered care remains an elusive goal for many. One particular type of acute care system, the Magnet<sup>®</sup>-designated hospital, is making significant inroads in this change effort. Magnet<sup>®</sup> has become a universal symbol of nursing quality and excellence (Lacey et al., 2007). Although the superior outcomes of Magnet<sup>®</sup> hospitals have been studied well, understanding how nurses individually and collectively lead change to achieve the outcomes associated with Magnet<sup>®</sup> remains an underexplored area of research (Havens & Johnston, 2004). Thus, a gap remains between where nursing aims to be—leading change to advance health—and knowing how to get there. Studies that explore nursing leadership as a collective effort of nurses at all levels, from the bedside to the boardroom, are needed to inform practice, programs, and policies that prepare and enable nurses to lead change to advance health.

## Statement of the Problem and Significance

Leading change in acute care hospitals is a significant phenomenon of concern for nursing. The call for change in acute care hospitals began with the release of the IOM landmark report (2000) that indicated as many as 98,000 people a year were dying as a result of medical errors. The report provided the fact that deaths attributable to medical error were the eighth leading cause of death in the U.S., far surpassing deaths attributable to motor vehicle accidents (43,458), breast cancer (42,297), and AIDS (16,516) (IOM, 2000). In 2001, the IOM officially laid the groundwork for leading change with the release of *Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century*. This report called for wide-sweeping change within the healthcare delivery system, including building organizational supports for change, using information technology, employing a new mental model of health care systems as complex adaptive systems, aligning payment policies with quality improvement, and reforming the way that health care professionals are educated and trained (IOM, 2001).

Since then, the call for broad sweeping change in the delivery of care continues to be raised (IOM, 2003, 2004) as many hospitals continue to search for effective solutions. Nursing care within the hospital setting has evolved from caring for individuals in acute illness episodes, to a new reality of caring for individuals with multiple chronic health concerns (Lindberg & Lindberg, 2008). Duplication of process can result from uncoordinated care teams (Witlock, 2009). Fast-paced, demanding work environments have led to increased medical errors (Lindberg & Lindberg, 2008), nurse burnout (Spence, Wong, & Grau, 2013), and increased workforce turnover (Duffield, Roche, Homer, Buchan, & Dimitrelis, 2014).

In response, hospital organizations have attempted to lead change by implementing methodologies successful in manufacturing industries, most notably Six Sigma (Lean). Lean

offers a number of standardized solutions to common organizational problems, including complexity reduction and the five Ss (e.g., short, straighten, scrub, standardize, and sustain). Six Sigma is a linear approach to quality improvement whereby change occurs in five small, incremental phases (e.g., define, measure, analyze, improve, and control). Lean Six Sigma strategies have been incorporated into health care organizations, including the Red Cross and Stanford Hospital and Clinics, in an attempt to control ever-increasing complexity through the implementation of change strategies centered on reducing inefficiency and improving quality (de Koning, Verver, van den Heuvel, Bisgaard, & Does, 2006).

Yet, despite the implementation of various strategies, medical errors continue as health care costs skyrocket (IOM, 2011). It is estimated that 75% of traditional change efforts in health care will fail (Gambino, 2008). Furthermore, 26% of new graduate nurses leave the profession despite a decade-long implementation of nurse residency programs (Dyess & Sherman, 2011). In 2011, the IOM once again raised the call with *The Future of Nursing: Leading Change, Advancing Health (FON)* report; only this time, nurses at all levels, “from the bedside to the boardroom” (p. 221) have been called to lead change.

In times of change, leadership has been shown to contribute significantly to positive patient and organizational outcomes (Kan & Parry, 2004; Salmela, Eriksson, & Fagerstrom, 2012). Never has there been a more significant time of change for nursing than the present. Nursing has been called to lead the transformation of healthcare delivery in the U.S. from a disjointed, inefficient, and cost-prohibitive system towards a system that: (a) makes quality care accessible to diverse populations, (b) intentionally promotes wellness and disease prevention, (c) reliably improves health outcomes, and (d) provides compassionate care across the lifespan. This transformation will require a paradigm shift where collaboration and coordination are the

norm, where payment for health care services reward value not volume, and excellent quality care is provided at a price that is affordable for both individuals and society (IOM, 2011).

Nurses are the largest segment of health care providers and operate from a holistic, health-oriented ontology and epistemology. As such, nurses have been identified as key leaders for a transformed, better-integrated, patient-centered health care system (IOM, 2011). If nursing is to realize its social mandate to lead change and transform our health care system, then we must better understand how to leverage nursing leadership processes at all levels of health care systems. These processes must thrive in the current environment of uncertainty, complexity, and paradox.

### **Review of the Literature**

Given more than a decade of continued calls for transforming the U.S. health care system (IOM, 2000, 2001, 2003, 2004, 2011), with the most recent call looking to the nursing profession, it is important to understand what is known about nursing leadership and how nurses view their role in leading change. In addition, identifying successful nursing care delivery models is an important first step for developing recommendations for leading change in acute care hospitals, including rural, critical access hospitals (CAHs). Therefore, a review of the literature was conducted to: (a) identify leadership theories that have shaped nursing care in the hospital setting, (b) gain an understanding of how nurses view their role in leading change, and (c) examine the Magnet<sup>®</sup>-designated hospital as a potential model for leading change to advance patient, nurse, and organizational outcomes.

### **Leadership Theories that Have Influenced Hospital Nursing Care**

Nursing leadership in the acute care hospital predominately has been influenced by two theories. These theories include transformational leadership and authentic leadership.

**Transformational leadership theory.** Transformational leadership theory, developed by James MacGregor Burns in 1978, posits that the leader uses idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration to engage their followers to achieve something greater than they imagined possible (Burns, 2003). Through clear and inspirational articulation of their compelling vision, transformational leaders uplift their followers to achieve change. Transformational leaders are admired, respected, trusted, and perceived to have extraordinary capabilities, persistence, and determination. The transformational leader engages with others and creates a connection that raises the level of motivation in both the leader and the follower (Burns, 2003). In 1985, Bass further expanded the theory by identifying motivational methods that inspire performance, including: (a) raising followers' levels of consciousness about the importance of organizational goals, (b) getting followers to transcend their own self-interests for the sake of the organization, and (c) moving followers to address higher level needs (e.g., self-actualization) (Bass & Riggio, 2006).

Transformational leadership theory is the most widely used theoretical framework for leadership research in the past 30 years. In nursing, transformational leadership theory has been embedded in the American Nurses Credentialing Center's (ANCC) Magnet<sup>®</sup> Model (Wolf, 2008). According to the ANCC Magnet<sup>®</sup> Model, nursing leaders at all levels of the organization must demonstrate advocacy and support on behalf of patients and the organization to transform values, beliefs, and behaviors (ANCC, 2015b). Hospitals wishing to apply for Magnet<sup>®</sup> designation must demonstrate how they embody transformational leadership.

While this theory has been embraced widely in hospital settings, it also has been criticized for its overemphasis on the leader at the exclusion of other individual, group, or organizational factors that influence change (Diaz-Saenz, 2011). Transformational leadership

theory also has been criticized for its view of leadership as a personality trait or personal predisposition rather than a behavior that people can learn (Northouse, 2013b). Furthermore, concerns have been raised by leadership scholars over the potential for transformational leaders to intentionally manipulate followers' values in unethical ways. While transformational leaders often operate from high moral principles, this factor is not a prerequisite for influencing others to act in ways they never thought possible. To illustrate this point, Ghandi and Hitler both have been identified as transformational leaders (Caza & Jackson, 2011).

**Authentic leadership theory.** Authentic leadership theory, developed by Luthans and Avolio (2003), emerged in response to scholarly criticism that the concept of high moral principles was underdeveloped in transformational leadership theory, as well as in response to corporate and political scandals that placed leadership in a state of global crisis (Caza & Jackson, 2011). As such, authentic leadership theory focuses primarily on whether leadership is genuine and real. According to this theory, authentic leaders have a genuine desire to serve others, understand their true purpose, operate from strong moral values about the right thing to do, are highly effective at establishing trusting relationships, demonstrate self-discipline, and are passionate about their mission (Luthans & Avolio, 2003).

Authentic leadership theory is grounded in a pattern of leader behavior that promotes positive psychological capacities and a positive ethical climate. Authentic leaders, through full self-awareness and unbiased processing of self-relevant information, engage in action consistent with their true self and foster a relational transparency with their followers that values openness, truth, and close personal relationships (Luthans & Avolio, 2003). By enacting these behaviors, authentic leaders foster high quality relationships, which translates to active engagement of

employees in organizational citizenship behavior and nurses empowered to embrace change (Wong & Laschinger, 2013).

Although a very young theory, authentic leadership has attracted considerable theoretical and research attention, including special focus in *The Leadership Quarterly*, the *Journal of Management Studies*, and the *European Management Journal* (Caza & Jackson, 2011). In addition, the American Association of Critical Care Nurses (AACN) has adopted authentic leadership as one of six essential elements of a healthy work environment (AACN, 2005). Authentic leadership theory has held promise for nursing, particularly with regards for authentic nursing leaders to generate an environment that optimizes the match between new graduate nurses' expectations and the realities of today's complex work environment. Authentic leadership empirically has been linked with strengthening new graduate nurses' confidence in their ability to cope with job demands, acting as a protective factor against burnout and poor mental health (Laschinger, Borgogni, Consiglio, & Read, 2015). Authentic leadership theory helps fill a void for individuals searching for good and sound leadership in an uncertain world, and has appeal because it emphasizes that authenticity is something that is developed over time (Northouse, 2013a). Critics of authentic leadership theory raise concerns regarding the empirical measurement of authentic leadership, which to date has relied solely on observer attributions of authenticity, failing to take into account the leader's perceptions (Caza & Jackson, 2011).

### **Nursing's Role in Leading Change**

Nurses have been called to lead change, in partnership with other health professionals, in improving healthcare delivery to provide higher quality, safer, more affordable, and more accessible care (IOM, 2011). Yet, only three studies were identified in the literature that explored how nurses understand their role in leading change. In a phenomenological study that

explored how nurse leaders (Chief nursing officers [CNOs] and Directors of Nursing [DONs]) understood their roles during a hospital merger in Canada, three dimensions emerged: (a) leading relationships (e.g., being a team player, a coach, and parental figure), (b) leading processes (e.g., being a coordinator and conductor), and (c) leading a culture (e.g., creating an open, confirming, and evidence-based atmosphere) (Salmela et al., 2012). This study found that in times of change, nurse leaders are tasked with the challenge of navigating uncertainty, advocating for themselves, their staff, their organization, patients, and their profession. Nurse leaders in this study were found to be the orchestrators of expert teams, resource linkers, and observers and interpreters for integrating the efforts of others. Nurses give and receive information from various levels of the organization, and serve as coaches who guide, motivate, and establish an ethical ethos within the nursing unit environment. They act as facilitators, teachers, and stewards as they walk alongside others, establishing interpersonal relationships. Leading change places the nurse leader in the process of maintaining a dialogue with personnel while at the same time ensuring the mission of the organization results in action and desired change (Salmela et al., 2012).

A qualitative phenomenological study of seven DONs in six different county local health departments identified three key attributes of leading continuous change: collaborative change management, lifelong learning, and being visionary (Reyes, Bekemeier, & Issel, 2014). Nurse leaders used participatory strategies to mobilize stakeholders and generate collaboration for change. They also engaged in a reflection and a commitment to the development of self and others to generate increased capacity for lifelong learning. Nurse leaders identified the importance of being visionary; that is, having the capacity for creative risk taking, thinking strategically, and setting the direction for change. Two leadership challenge themes also were

identified, leadership dissonance and leading through ambiguity. Leadership dissonance was described as the process of, “ethical decision making among nurses working in complex health care environments where organizational priorities conflict with individual professional values” (Reyes et al., 2014, p. 347). Nurse leaders in this study described a sense of obligation to lead despite a lack of clarity and certainty about the future, a theme the researchers identified as leading through ambiguity.

In a survey study of key challenges faced by hospital CNOs in leading change through the implementation of new care delivery models, participants identified their role in leading change as: (a) making a sensible business case for change, (b) effectively communicating with internal and external stakeholders, and (c) organizational agility (Morjikian, Kimball, & Joynt, 2007). Making a business case for change included completing an analysis of key assumptions, determining resource requirements, and conducting financial analysis. It also included building a strategy, operating plan and tactics, evaluation plan, and contingency plans. Communicating effectively included such things as providing enough information to enable others to do their jobs, communicating in a timely fashion, remaining approachable, building rapport, and most importantly, listening. Organizational agility was described as understanding how the organization works, how to get things done, and understanding the organizational culture (Morjikian et al., 2007).

Only one study was identified in the literature that focused on understanding the process of leading change to achieve Magnet<sup>®</sup> designation. Several themes emerged from focus group interviews with CNOs and Magnet<sup>®</sup> coordinators, including securing buy-in from key stakeholders; celebrating (at kick-off and throughout the application process); using external consultants; putting the structure in place; communicating frequently; educating; mentoring by

staff from other Magnet<sup>®</sup> hospitals; telling the story; and paying the costs (e.g., time, budget, and personnel) (Havens & Johnston, 2004). Interestingly, chief executive officers (CEOs) and physicians in this study were relatively easy groups for CNOs from which to get buy-in. It was the staff nurses who were their greatest challenge. CNOs in this study expressed that the journey to Magnet<sup>®</sup> was an entire organizational effort, facilitated by external consultants, clear and frequent communication, celebrations, and “telling your story with one strong voice” (Havens & Johnston, 2004, p. 587).

Collectively, the few qualitative studies identified in the literature are beginning to paint the picture of nursing’s role in leading change. These studies highlight the necessity of nurse leaders’ ability to adapt responsively to the situation at hand by varying their leadership style to thrive in the complexity of their environment. In addition, nurse leaders must be able to communicate effectively and strategically manage the change process. However, only one study focused on leading change to achieve Magnet<sup>®</sup> designation (Havens & Johnston, 2004). This study was more than a decade old, and therefore may not be representative of leading change to achieve Magnet<sup>®</sup> today. Furthermore, all of the studies were from the perspective of executive level leaders only. Further research is needed to understand more fully how nurses at all levels of a hospital system collectively lead change, not just nurses in formal leadership roles.

### **Magnet<sup>®</sup> as a Model for Excellence in Care Delivery**

Magnet<sup>®</sup> hospitals are widely recognized for their excellent nursing practice environments and superior quality outcomes. In fact, the name *Magnet* originated in 1982 as a means to describe and recognize 41 acute care hospitals that were able to attract and retain nurses while hospitals around them were experiencing high nursing shortages (Havens & Johnston,

2004). Since then, evidence has continued to build around the superior outcomes of Magnet<sup>®</sup> hospitals.

Magnet<sup>®</sup> hospitals have been linked empirically to a variety of better patient outcomes, including decreased mortality rates and failure-to-rescue (Aiken, Smith, & Lake, 1994; Kutney-Lee et al., 2015; McHugh et al., 2013); decreased pressure ulcer rates (Bergquist-Beringer, Dong, He, & Dunton, 2013), decreased fall rates (Everhart et al., 2014); and improved patient safety and quality (Armstrong, Laschinger, & Wong, 2009). Magnet<sup>®</sup> hospitals also have been associated with positive nurse outcomes, including higher registered nurse (RN)-perceived managerial and unit support (Lacey et al., 2007); decreased burnout (Kelly, McHugh, & Aiken, 2011); decreased RN turnover (Gardner, Thomas-Hawkins, Fogg, & Latham, 2007; Staggs & Dunton, 2012); increased RN-perceived quality of care (Stimpfel, Rosen, & McHugh, 2014); increased RN job satisfaction (Lacey et al., 2007); and increased opportunities to influence decisions about workplace organization and shared governance participation (Hess, DesRoches, Donelan, Norman, & Buerhaus, 2011). Furthermore, Magnet<sup>®</sup> and Magnet<sup>®</sup>-seeking hospitals have been found to have significantly higher patient satisfaction scores than non-Magnet hospitals (Smith, 2014), a factor that has become increasingly important as healthcare reimbursement shifts towards a value-based purchasing model. These studies collectively supported that Magnet<sup>®</sup> hospitals are achieving many of the improvement changes called for in the *FON* report.

Although evidence of the association between Magnet<sup>®</sup> status and superior outcomes has been well established, less is known about the transformational effect of applying for Magnet<sup>®</sup> designation. In a pre-post study, staff RN ratings of their practice environment were found to be significantly improved ( $p < .001$ ) following a two-year Magnet<sup>®</sup> application period (Aiken,

Buchan, Ball, & Rafferty, 2008). In a longitudinal comparison study, Magnet<sup>®</sup>-seeking hospitals demonstrated significantly greater improvements in staff RN work environments, job satisfaction, and 30-day surgical mortality and failure-to-rescue rates as compared to non-Magnet hospitals (Kutney-Lee et al., 2015).

Studies of Magnet<sup>®</sup> hospitals supported that these healthcare systems were achieving many improvement changes that have been called for by the IOM over the past decade. Collectively, these studies suggested that much might be learned by looking to Magnet<sup>®</sup> as a model for nurses leading change to achieve excellence in the delivery of care. Yet, less than 7% of hospitals in the U.S. have achieved Magnet<sup>®</sup> designation (ANCC, 2014). Studies to date have focused largely on comparing outcomes of Magnet<sup>®</sup> and non-Magnet hospitals. Thus, a gap remains in understanding the change process that hospitals go through to achieve Magnet<sup>®</sup>.

It has been suggested that Magnet<sup>®</sup> hospitals may be guided by a shared set of principles that define positive nursing practice environments, which result in improved organizational outcomes (Hess et al., 2011). New longitudinal data are beginning to emerge that suggest that hospitals undergo a transformation through the pursuit to achieve Magnet<sup>®</sup> that significantly improves patient and nurse outcomes, and the organization at large (Kutney-Lee et al., 2015). More studies are needed to further substantiate these findings and to explore underlying patterns that can describe effective principles for leading change to advance nurse, patient, and organizational outcomes in acute care hospitals across all levels of an organization.

### **State of the Science**

Nurses have been called to lead change to transform our current healthcare system to advance patient, organization, and system outcomes (IOM, 2011). Despite a multitude of initiatives, transforming hospitals to provide more efficient, effective, and patient-centered care

has remained an elusive goal for many. This may be due, in part, to a multitude of frameworks for understanding the types and nature of change as well as the lack of conceptual clarity in the distinction between leading, managing, and directing. Leadership theories that have influenced nursing care in hospital environments predominately have focused on a single factor, the leader, and their ability to move followers through change. These theoretical frameworks are proving inefficient to explain the complex realities of leadership today (Uhl-Bien & Marion, 2011).

Furthermore, little is known about how nurses understand their role in leading change. The few studies to date that have explored this phenomenon describe nurses' perception of leading change as *balancing paradox*, making sense of competing views and moving beyond contradiction to manage effectively the business side of care, while simultaneously building relationships that foster a practice culture characterized by respect and confidence in frontline staff (Morjikian et al., 2007; Reyes et al., 2014; Salmela et al., 2012).

Magnet<sup>®</sup> hospitals have become a universal symbol for high quality nursing care. Empirical evidence supports that these exceptional hospitals consistently are achieving superior patient, nurse, and organizational outcomes; outcomes that have been the goal of many calls for change (IOM, 2000, 2001, 2004, 2011). While much is known about the superior outcomes of Magnet<sup>®</sup> organizations, little is known about how nurses lead change to achieve the outcomes associated with Magnet<sup>®</sup>. New data are emerging that suggest hospitals undergo a transformation in their pursuit of Magnet<sup>®</sup> designation, and it is this transformation that leads to significantly improved patient, nurse, and organizational outcomes (Kutney-Lee et al., 2015). However, only one study to date (Havens & Johnston, 2004) has explored the journey to Magnet<sup>®</sup> as a leading change process, and this study was investigated from the perspective of only CNOs and Magnet<sup>®</sup> coordinators. Leading change is a dynamic, interactive, social process

(Nelson, Batalden, & Godfrey, 2007; Parry, 2011b; Uhl-Bien, Marion, & McKelvey, 2007). Yet, studies to date have explored change efforts largely from the singular perspective of those in formal leadership positions. Thus, a gap remains in understanding the collective efforts of nurses at all levels of a hospital system in leading change.

The need for change is clear, yet the pathway to get there remains underexplored (Nelson et al., 2007). New interventions are needed that can prepare and enable nurses at all levels, from the bedside to the boardroom, to lead change successfully to advance patient, nurse, and organizational outcomes (IOM, 2011). Therefore, the purpose of this study was threefold: (a) to gain clarity around the concept of leading change, (b) to understand holistically how leading change was actualized in one independent critical access hospital that was successful in achieving Magnet<sup>®</sup> designation, and (c) to use the findings to develop recommendations that can prepare and enable nurses at all levels of a hospital system to successfully lead change to advance organizational outcomes.

### **Research Questions**

Three primary research questions were used to guide the study:

1. What is the meaning of the concept of leading change as evidenced in the literature using a concept analysis approach?
2. Using the findings of the concept analysis of leading change as a guiding framework, how do nurses individually and collectively lead change to achieve Magnet<sup>®</sup> designation?
3. What elements should be considered to better prepare and enable nurses to lead change in advancing rural critical access hospital outcomes?

## Theoretical Framework

Recent leadership research demonstrates a shift away from an examination of leader traits towards the underlying *context* and *processes* of leadership. These emerging theories have shown promise in developing sound explanations of leadership's contribution to organizational change (Parry, 2011a). One such theory, complexity leadership theory (CLT), developed by Uhl-Bien et al. (2007), was used to guide this study.

Leadership theories historically have been grounded in management principles that view organizations as machines with powerful, all knowing leaders that exert their authority, charisma, or influence to control, maintain, or drive processes that govern organizations. These theories worked well in the Industrial Era, when the focus was on clearly delineated, hierarchical and departmentalized roles and functions. However, they are proving ineffective for explaining leadership in the Knowledge Era characterized by globalization, rapid technology, distributed intelligence, and services performed by complex and interactive systems (Uhl-Bien & Marion, 2009).

CLT originated as a new model for explaining leadership in this Knowledge Era. Theoretical assumptions of CLT include: (a) leadership is enmeshed within a bureaucratic superstructure of planning, organizing, and missions, (b) informal dynamics are embedded in context, and (c) leadership is socially constructed, occurs throughout the organization, and in the presence of adaptive challenges; challenges that require new learning, innovation, and new patterns of behavior. The premise underlying CLT is that within knowledge-driven organizations (e.g., acute care hospitals), leaders should enable, rather than suppress or align, the informal dynamics that advance outcomes (Uhl-Bien et al., 2007).

CLT identifies three types of leadership functions or roles: administrative, adaptive, and enabling. Administrative leadership is defined as formal acts that serve to coordinate and structure the organization's macro-structures and activities (e.g., developing reporting relations, policies, and vision building; and garnering resources) (Uhl-Bien et al., 2007). In a hospital system, this most commonly is the role of the formal administrative leadership team (e.g., CNO, DON) (Warshawsky, Rayens, Lake, & Havens, 2013).

Adaptive leadership is defined as a generative dynamic that underlies emergent, collaborative change processes that occur in complex adaptive systems (CASs), or microsystems, throughout the organization (Uhl-Bien et al., 2007). CASs are interdependent networks bonded together in a structure of multiple overlapping hierarchies, linked by a common purpose (Uhl-Bien et al., 2007). The nursing unit microsystem is one CAS in a hospital organization (Mohr, Batalden, & Barach, 2004). Adaptive leadership most frequently is enacted by frontline nurses who continuously learn, adapt, and develop new processes in response to changes in the organization's strategic direction (Warshawsky et al., 2013).

Enabling leadership is defined as leadership that optimizes the conditions for creative problem solving, adaptability, and learning of the CAS (Uhl-Bien et al., 2007). Nurse managers (NMs) are most commonly the enabling leaders within a hospital system. They are the champions of change that operate in a semi-permeable mesosystem defined by interactions that help disseminate innovation to and from administrative leaders and shape conditions that catalyze adaptive leadership at the frontline (Uhl-Bien et al., 2007; Warshawsky et al., 2013). CLT explains how successful enabling leaders balance the stability of the superstructure provided by administrative leadership and the dynamic conditions needed for creative problem solving by adaptive leaders at the frontline (Uhl-Bien et al., 2007; Warshawsky et al., 2013).

The enabling leaders, by embedding themselves within their CAS, become attractors of energy fields, amplifying positive and/or negative feedback loops to enable the conditions that ultimately move the system away from static equilibrium towards a state of co-evolutionary change (Weberg, 2012).

The complexity leader understands that leading complex relationships is multi-dimensional and ambiguous, and that these relationships resist management by typical problem solving approaches (Gambino, 2008). Complexity leaders understand that change requires learning, which requires courage, an often difficult prospect for professional practice experts reluctant to admit that they could do better if they only knew more (Anderson & McDaniel, 2000). Human organizational behaviors are manifested through informal networks, displayed through minute-by-minute social interactions within the organization. The complexity leader develops a connectedness to these agents in the system and uses those connections to formulate the parameters that influence change (Weberg, 2012). As such, CLT was a fitting framework for examining how nurses at all levels of a hospital system individually and collectively lead change.

### **Purpose, Scope, and Methods for Manuscripts**

This study's primary research questions were explored and reported through a series of three manuscripts. Each manuscript's purpose, scope, and method are outlined below.

#### **Manuscript 1**

##### **Purpose**

The purpose of this analysis was to clarify the concept of leading change as evidenced in the literature, and to provide a theoretical definition and conceptual model of leading change to advance nursing leadership education, practice, and research.

## Methods

The Walker and Avant (2011) method was used to conduct a concept analysis of leading change. The analysis followed an iterative 8-step process that included: selecting the concept, determining the purpose of the analysis, identifying uses of the concept from a variety of literary sources, determining key attributes, constructing model and related cases, and identifying antecedents, consequences, and empirical referents of leading change. Following the recommendations of Walker and Avant (2011), a broad search that included peer-reviewed primary research studies, literature reviews, theoretical papers, books, and expert discussion articles from nursing, medicine, business, organizational studies, sociology, psychology, and education was performed in order to achieve full representation of all uses of the concept of leading change. Literature focused on biological change or leadership not specific to change was excluded. The literature search was conducted using PubMed, CINAHL, PsycINFO, Psychology and Behavior Sciences Collection, Business Source Premier, and Health Business Elite electronic databases. Manual searches also were conducted using Google Scholar and reference lists from relevant articles. The search was limited to literature written or translated in English from 2001 to 2015. Search terms included: leading change, leadership, change, transformation, and reform. Thirty-five articles and book chapters were selected for final analysis based on their primary focus on the process of leading change and their ability to inform nursing.

This manuscript has been submitted to the *Journal of Advanced Nursing* for publication consideration. Results of the analysis, including theoretical definition and conceptual model are reported in Chapter 2 (see p. 49).

## Manuscript 2

### Purpose

The purpose of this qualitative, index case study was to understand how nurses at all levels of one critical access hospital (CAH) led change to achieve Magnet<sup>®</sup> designation. The study used the findings of the concept analysis (Nelson-Brantley, Ford, & Frank-Ragan, 2016) to explore: (a) why this hospital was successful in leading change to achieve Magnet<sup>®</sup> designation, and (b) how nurses at all levels of the organization individually and collectively led change to achieve Magnet<sup>®</sup> designation.

### Philosophical Framework

Case study is a complex methodology that focuses on the collection and holistic interpretation of a small number of detailed observations, rather than a specific philosophical undergirding (Creswell, 2007). As such, case study uses a variety of philosophical approaches. It is, therefore, essential that the researcher align the philosophy of their specific case study with the nature of the research question to be answered (Stewart, 2014; Yin, 2014). For this study, the conceptual model of leading change (Nelson-Brantley et al., 2016), undergirded by systems thinking, was used as the philosophical framework.

The concept analysis identified five defining attributes of leading change: (a) individual and collective leadership, (b) operational support, (c) fostering relationships, (d) organizational learning, and (e) balance. Antecedents included an external or internal driving force, and organizational readiness. Consequences of leading change included improved organizational performance and outcomes, and a new organizational culture and values.

The conceptual model of leading change (Nelson-Brantley et al., 2016) developed from the concept analysis findings was used to guide this study (see Figure 2.3, p. 69). This model

illustrates how external or internal driving forces and organizational readiness act as antecedents to leading change. External or internal driving forces (e.g., pressures from national regulation and quality performance organizations, or hospital administration setting a goal of achieving Magnet<sup>®</sup> designation) bring about awareness of the need for change. Organizational readiness can be defined as ‘the extent to which organizational members are psychologically and behaviorally prepared to implement organizational change’ (Weiner, Amick, & Lee, 2008, p. 381). Assessing and ensuring organizational readiness is a necessary antecedent to the start of any organizational change process because it signals the presence of an adaptive system primed for change (Bouckenooghe, Devos, & Van den Broeck, 2009; Hemp & Stewart, 2004).

From there, leading change is a complex process where nurses individually and collectively balance paradoxical priorities to provide operational support, foster relationships, and facilitate organizational learning (Nelson-Brantley et al., 2016). Operational support is characterized by the allocation and assurance of resources, adaptation of workflow processes, decision-making and strategic planning, and providing meaningful reward systems to support the change. Fostering relationships can be defined as providing psychological safety for letting go of old ways as well as trying something new, using effective communication with internal and external stakeholders, assuring consistent messaging with congruence between words and actions, and ‘telling the story’ in a unified voice. Nurses at any level of the organization may serve as change champions who generate enthusiasm and new knowledge for the change, which is then distributed throughout the organization in all directions in a way that fosters collective leadership and action.

Organizational learning occurs throughout the leading change process, beginning with one or two individuals who generate the initial change idea (intuiting) and share it with a few

others who then internalize and process it (interpreting). These individuals then embed the change within their own microsystem (integrating). Due to the interdependent nature of these microsystems, change is spread to other microsystems until it emerges as a way of operating throughout the organization (institutionalizing) (Vera & Crossan, 2004). Balance between radical and incremental change, and between focusing on the structural side (operational support) and human side (fostering relationships) is an essential attribute of leading change that requires mindfulness to the situation at hand and leadership style flexing. Done well, these five attributes of leading change (individual and collective leadership, operational support, fostering relationships, organizational learning, and balance) result in improved organizational performance and outcomes, and a new organizational culture and values.

Systems thinking is a conceptual and methodological approach for studying and understanding how organizations function (Patton, 2015). First formalized by Ludwig Von Bertalanffy (1956), systems thinking has been used widely by classic organization scholars such as Anatol Rapoport and James Miller, as well as more contemporary organizational development scholars, including Gharajedaghi and Ackoff, and Peter Senge. Systems thinking is grounded in a holistic ontology and epistemology that asserts a system is greater than the sum of its parts. Within this framework, every living organism is an open system, maintained by a continuous inflow and outflow of negative and positive feedback loops (von Bertalanffy, 1975). Causality is not linear, but rather is the result of a multi-lateral interaction among all parts of a system, and among systems and their environments (von Bertalanffy, 1975).

According to systems thinking, the performance of a system is viewed as the product of the interactive efforts of its subunit participants and may be influenced by its external environment. As such, it is not sufficient to study a system's individual parts in isolation (von

Bertalanffy, 1975). In order to understand how the system functions, the researcher must study the *networks* (the set of relationships, personal interactions, and connections among participants who have personal reasons to connect) and the *community* (a shared identity around a topic or set of challenges) that shape the system (Patton, 2015).

## **Methods**

**Design.** This study used a qualitative, single significant case study design. Case study, as a research method, can be defined as an empirical inquiry that investigates a contemporary phenomenon in depth, within its real-world context (Yin, 2014). With this approach, the investigator explores a bounded system (single case) or multiple bounded systems (multiple case) over time (Creswell, 2007). Case study design is one of the most complex approaches a researcher can select and may include qualitative and quantitative methods for the purposes of exploration, description, and/or explanation (Creswell, 2007; Yin, 2014). Case study has distinct advantages over other research methods when asking *how* or *why* questions about a contemporary set of events, especially when the researcher has little or no control over the variables of interest and when the boundaries between phenomenon and context are not clearly evident (Yin, 2014). The researcher collects multiple sources of information (e.g., interviews, observations, documents, reports, audiovisual material) that converge in a triangulating fashion for the purpose of achieving an in-depth understanding of how or why a phenomenon of interest occurs (Creswell, 2007; Stewart, 2014; Yin, 2014).

Case study is a broad methodology with historical origins in anthropology and sociology dating back to Malinowski's (1913) study of Australian Aborigines (Stewart, 2014). It is a distinguished approach that has been applied in many traditional academic fields, including economics, law, history, and politics, as well as more practice-oriented fields such as medicine,

education, nursing, evaluation, social work, business, and urban planning (Creswell, 2007; Stewart, 2014; Yin, 2014). In the classic anthropological sense, the researcher is deeply embedded in the data collection and interpretation process of case study. It is, therefore, generally regarded as an interpretivist-nominalist approach, where knowledge is relativistic and the world exists only in one's interaction with it (Stewart, 2014).

Case studies are distinguished by the size of their bounded case, ranging from a single individual to a group, a program, an activity, an organization, or multiple organizations. For this study, the case was defined as a single critical access hospital. Furthermore, a single case study may involve units of analysis at more than one level. This is known as embedded single case study design (Yin, 2014), and was the design used in this study. A hospital is a dynamic system, made up of micro, meso, and macro-level units that are interactive and interdependent (Anderson, Crabtree, Steele, & McDaniel, 2005; Nelson et al., 2007). As such, an embedded single case study approach enables the researcher to observe how nurses at all levels (micro, meso, and macro) interact both within and across levels to collectively lead change of the hospital system as a whole.

Case studies also are defined by their intent of analysis. Single significant case studies are selected for the purpose of gaining a rich and deep understanding that may include breakthrough insights of the phenomenon of interest. They are selected because the case has distinct, standout importance (Patton, 2015); thus, making the single significant case study an appropriate design for the purpose of gaining an in-depth understanding of how nurses at all levels of a CAH individually and collectively led change to achieve Magnet<sup>®</sup> designation.

**Sampling and setting.** This study used purposive sampling, specifically positive deviance, to identify one Midwestern CAH that recently (2014) achieved Magnet<sup>®</sup> designation.

Positive deviance sampling focuses on selecting individuals, communities, or organizations that have solved a problem of interest when the norm is for the problem to remain unsolved (Patton, 2015). These cases are information-rich because they offer rare insights into understanding challenging phenomena from the perspective of outstanding success (Patton, 2015).

Positive deviance is an appropriate sampling method when the aim of the study is to find solutions (e.g., effective principles for leading change) gleaned from an exemplary case. Magnet<sup>®</sup> designation is a distinguished recognition for hospitals that have achieved superior patient, nurse, and organizational outcomes. The study of these exceptional hospitals began in 1981 with the identification of 41 hospitals that were able to attract and retain nurses at a time when hospital organizations around them were experiencing high nursing shortages (McClure, Poulin, Sovie, & Wandelt, 1983). In 1993, the Magnet Recognition Program<sup>®</sup> was established as a formal mechanism for recognizing hospitals that meet ANCC's high standards of nursing excellence, quality patient care, and innovations in professional nursing practice (ANCC, 2014). Less than 7% of hospitals in the U.S. have successfully achieved Magnet<sup>®</sup> status (ANCC, 2014), making the selection of one of these hospitals a fitting choice for the positive deviance sampling method in this study. Furthermore, the critical access Magnet<sup>®</sup>-designated hospital identified for this study was the first independent CAH ever to achieve Magnet<sup>®</sup> designation (Waverly Health Center, 2015). In case study, this special case is known as an *index case*, the first occurrence of a particular phenomenon (Patton, 2015). Index cases often become a classic historical case, such as the first human landing on the moon, or the first female head of government in the modern world (Patton, 2015).

As described, this study took place in one Midwestern Magnet<sup>®</sup>-designated CAH. Following an initial phone conversation, a letter of invitation was sent to the hospital CNO

explaining the purpose and methodology of the study and inviting their organization to participate (see Appendix A). From there, gaining access to the participant hospital was facilitated through email and a visit to the site from the researcher. The researcher met with the CNO, DON, and the Nursing Education Manager to establish rapport and explore the hospital's interest in participation. All parties expressed interest and a follow up email was sent from the CNO to the researcher to confirm the organization's interest in participating in the study (see Appendix B).

Hospitals that received Magnet<sup>®</sup> designation prior to 2014 were deemed not eligible for this study. This criterion was suggested to support more accurate recall by study participants of events that occurred during the Magnet<sup>®</sup> application time period. Also, hospitals that had achieved Magnet<sup>®</sup> re-designation were deemed not eligible, because the focus of this study was on leading change efforts rather than maintaining excellence. Finally, Magnet<sup>®</sup>-seeking hospitals were deemed ineligible because the effectiveness of their efforts to lead change are yet unknown.

The researcher coordinated with the CNO and DON to identify individuals within the case hospital that were invited to participate in the study. Participants included administrative staff (e.g., CNO, DON, hospital Board, non-nursing care providers), managerial staff (e.g., nursing and education managers), direct-care employees (e.g., staff nurses), interprofessional care providers (e.g., advanced practice registered nurses [APRNs], physicians, social work, and ambulance service providers), and the Magnet<sup>®</sup> consultant. The total number of participants was estimated to be 20-30, and would include representation from all areas of patient care (e.g., emergency department, medical-surgical, complex care, birthing center, and outpatient clinics); all levels of nursing leadership (e.g., staff nurses, NMs, DON, and CNO); and others deemed to

have pertinent information regarding the organization's efforts to lead change to achieve Magnet<sup>®</sup> (e.g., hospital Board, physicians, and the Magnet<sup>®</sup> consultant). Inclusion of each of these participant types was proposed to facilitate a holistic perspective of the organization.

Inclusion criteria for individual participants were as follows: licensed nurses and other hospital employees who worked full or part-time (at least .50 full time equivalent [FTE] for direct-care employees; at least .70 FTE for managerial and administrative staff); and had been consistently employed by the hospital for at least 4 months prior to the hospital achieving Magnet<sup>®</sup> designation. These criteria ensured that participants were able to provide sufficient knowledge regarding the change processes that occurred during the Magnet<sup>®</sup> application time period. Individuals that were recruited by the hospital and served as external consultants to assist with the Magnet<sup>®</sup> application process also were eligible. Employees who worked less than the minimum FTE, were agency employed, or did not maintain employment by the hospital for at least 4 months prior to the hospital achieving Magnet<sup>®</sup> were not eligible for this study. Informed consent was obtained from each study participant by the researcher prior to data collection (see Appendices C and D). Each participant was given the opportunity to ask study-related questions with the researcher prior to signing the consent form.

**Data collection.** Data collection consisted of in-depth, semi-structured interviews, focus groups, unstructured observation, document collection, and artifact collection. The researcher conducted in-depth, individual interviews and focus groups with administrative staff, managerial staff, and direct-care employees in order to provide a rich description of nurse leadership from a variety of formal and informal leadership roles within the organization. See Appendices E and F for interview guides. Interviews were conducted either in person or via phone and were semi-structured in design, consisting of open-ended questions with follow-up, probing questions to

elicit a greater depth of understanding and description (Patton, 2015). Focus groups consisted of a homogenous group of three to nine participants, as recommended by Patton (2015). A scribe was present to take notes during focus group sessions, which enabled the researcher to focus on moderating the session. All interviews were audio recorded and transcribed verbatim by a professional transcriptionist.

Unstructured direct observation of staff nurses, NMs, the DON, and the CNO took place throughout the data collection period. Direct observation of interactions between nurses and others throughout the organization illuminated important nonverbal communication behaviors that were not evident in interviews alone (Onwuegbuzie, Leech, & Collins, 2010). Direct observation enabled the researcher to understand and more fully describe the social environment by observing the ways in which people organize themselves into groups and subgroups (e.g., who controls the conversation, who follows, and who is not heard) (Patton, 2015). Furthermore, observations about the physical environment (e.g., the location of nursing supplies, the placement and look of patient rooms [private or semi-private], location of the NMs' offices, amenities available to patients' families, the location of the CNO's office) provided important context for understanding how the system works (Patton, 2015).

Documents and artifacts relevant to the Magnet<sup>®</sup> application time period also were collected as rich sources of information to supplement interviews and observations (Patton, 2015). Documents and records targeted in this study included: Magnet<sup>®</sup> application files; hospital mission, vision statement, and strategic plan; executive Board and nursing practice council meeting minutes; and nursing and hospital annual reports. Targeted artifacts included Magnet<sup>®</sup> informational and promotional buttons, banners, pins, and/or hospital newsletters distributed during the Magnet<sup>®</sup> application time period. Collectively, these multiple methods of

data collection were proposed to offer a greater depth and dimensionality of understanding the process of leading change in CAHs (Mills, 2014). The time required for data collection was estimated to be 6 – 12 days, completed over 2 – 3 site visits.

### **Data Analysis**

Qualitative thematic analysis was used to analyze the core content from observation field notes and interviews of participants of the case. Data analysis began early and continued in an iterative fashion as the researcher moved back and forth between data collection, data analysis, and developing strategies for additional data collection (Polit & Beck, 2012; Thorne, 2000). The researcher began by checking the accuracy of each transcribed interview against its corresponding audio recording. The researcher then immersed herself in the data, reading each interview transcript and all field notes several times to gain a sense of the whole (Elo & Kyngäs, 2008).

An embedded case study consists of many smaller subunits of analysis, nested within the larger bounded case (Patton, 2015; Yin, 2014). The subunits in this study included stories and observations collected from individual interviews, and stories and observations collected from the focus group interviews. Following the recommendations of Patton (2015) and Yin (2014), each interview was analyzed first as its own subunit, and then cross analyzed and integrated into an analysis and interpretation of the larger case. Each interview was deconstructed into meaning units, condensed meaning units, and codes. Similar codes then were grouped into categories through the process of convergence and divergence, leading ultimately to themes (Patton, 2015). Codes were organized into common themes that describe the process of leading change to achieve Magnet<sup>®</sup> designation from all levels of the organization.

NVivo software was used to assist the researcher by facilitating efficient and organized data storage, coding, retrieval, comparing, and linking. The researcher used this qualitative data analysis software (QDAS) to highlight text, build codebooks, index, categorize, create memos, and identify subtle relationships in the data (QSR.International, 2015). As with all QDAS, the researcher was responsible for actually performing the analysis; that is, for deciding what was important to highlight when generating meaning units, what codes went together to form a theme, what to name the codes and themes, what meanings to extract from the case, and what to include and how much when telling the story (Patton, 2015).

### **Trustworthiness and Methodological Rigor**

Rigor, broadly speaking, is the means by which the researcher demonstrates integrity, competence, and in turn, legitimacy of the research process (Tobin & Begley, 2004). Within the qualitative paradigm, rigor is achieved through goodness, trustworthiness, and authenticity. Goodness describes the overall quality of the study, and was embedded throughout this study as the congruence between research questions; methodology; data collection, analysis, and interpretation; and reporting of the case study (Tobin & Begley, 2004). Trustworthiness was supported through five criteria: credibility, dependability, confirmability, transferability, and authenticity (Guba & Lincoln, 1994; Lincoln & Guba, 1985).

**Credibility.** Credibility can be understood as the degree of fit between the participants' views or realities and the researcher's representation of them (Lincoln & Guba, 1985). Credibility was supported in this study in several ways: persistent observation, data triangulation, peer debriefing, and member checking. Case study evidence can come from many sources. It is, therefore, imperative that the researcher stay focused on collecting evidence that is relevant, and not extraneous, to the research questions to be answered (Yin, 2014). Persistent observation

helps focus the researcher to the pursuit of evidence most salient to the phenomenon of interest (Lincoln & Guba, 1985). Persistent observation was used in this study to ensure that the data collected and included in analysis was relevant to answering the study's questions.

Data triangulation, or the collection of multiple types of data, also was used to support credibility. Each type of data (e.g., interview, observation, documents and artifacts) has inherent strengths and weaknesses. Observational data are subject to the possibility that participants may behave in atypical ways if they know they are being observed, and the observer may unknowingly select only certain observations, thereby distorting the data. Interview data are subject to potential distortion of responses due to personal bias, self-serving desires, anger, anxiety, politics, desire to please the interviewer, or simple lack of understanding of what is being asked. Documents and artifacts may be incomplete or inaccurate (Patton, 2015). Individually, these weaknesses can be problematic and raise doubts about the credibility of study findings. By including multiple data sources, the researcher was able to crosscheck the data, thereby increasing the credibility of the study findings (Patton, 2015).

Peer debriefing is a technique whereby the researcher shares the data collected and their initial interpretation of it with a disinterested party for the purpose of exploring aspects of the inquiry that might otherwise remain implicit in the researcher's mind (Lincoln & Guba, 1985). This technique is especially helpful for researchers who are new to qualitative inquiry. In this study, debriefing sessions with the dissertation co-chairs and qualitative expert took place to support the researcher's analytic process and credibility of the study findings. Member checking occurred at the conclusion of interviews. The researcher summarized what was discussed in the interview and asked participants to either validate the summary or provide additional clarity. In

addition, the researcher shared the final themes and subthemes with the CNO and DON and offered opportunity to verify or clarify the findings.

**Dependability.** Dependability is achieved through a logical, traceable, and clearly documented account of the research process (Lincoln & Guba, 1985). Dependability was demonstrated through an audit trail that included a record of research activities, changes in research direction, and rationale for decisions made (Lincoln & Guba, 1985; Mills & Birks, 2014; Tobin & Begley, 2004). A key component of this audit trail was reflexivity, captured through an audio-recorded reflexive journal.

Reflexivity is the process the researcher uses to ensure sensitivity to the ways in which they themselves and the research process have shaped data collection and interpretation (Mays & Pope, 2000). The researcher engaged in deep introspection to raise awareness of how decisions about what to sample in the field, decisions made during analysis, and in reporting of the findings were being shaped by prior assumptions, experiences, and personal characteristics such as age, gender, social class, and professional status. Reflexivity was guided by a series of questions focused on: (a) myself as the inquirer, (b) people in the hospital being studied, and (c) audiences who will eventually read the study's report. These questions included a critical examination of: (a) how I know what I know and what shapes my perspective; (b) how participants know what they know, what shapes their perspectives, and how they perceived me; and (c) how the audience will make sense of what I give them, what perspectives do they bring to the findings (Patton, 2015).

**Confirmability.** Confirmability is concerned with the extent to which the findings are grounded in the data (Lincoln & Guba, 1985). This criterion supports objectivity, and was

achieved through careful attention to maintaining an audit trail and reflexive journal.

Confirmability was supported by the audit trail and reflexive journal discussed previously.

**Transferability.** Case study is first-and-foremost an analysis of a case. As such, it is imperative that the researcher presents a descriptive story in a way that makes accessible to the reader all information necessary to understand the case in all its uniqueness (Patton, 2015). The goal of transferability is to present the case fully enough within its context such that a determination by interested parties can be made as to the level of congruence with their own context (Lincoln & Guba, 1985); that is, the degree of transferability between sufficiently congruent contexts. For this study, a holistic story built from thick description and balanced interpretation was reported to enable readers, if and when applicable, to transfer findings to their own settings.

**Authenticity.** Authenticity is concerned with the degree of fairness achieved in data collection, analysis, and reporting. Fairness is a quality of balance, which is achieved through the representation of all stakeholder views, perspectives, values, claims, concerns, and voices (Guba & Lincoln, 1994). Authenticity was supported through the representation of participants' unique experiences, and the inclusion of stakeholders' voices from all levels of the organization. Authenticity further was supported by a reporting of the case in a way that generated a holistic story by balancing description and interpretation.

### **Ethical Considerations**

Approval was obtained from a Midwestern academic medical center Human Subjects Committee (HSC) (Study ID # 3532) prior to the start of the study. Participants' names were kept confidential with pseudonyms used for reporting purposes. The researcher obtained permission to use the hospital site name for documentation as well as any possible future

presentations and publications from the CNO (see Appendix G). The researcher obtained informed consent from all study participants. Participants were informed of the study purpose, the voluntary nature of their participation, confidential nature of information collected, and right to withdrawal at any time. Participants were informed further that their participation would have no bearing on their relationship with the hospital organization. The researcher addressed all participant questions prior to obtaining informed consent. Demographic data, including age, gender, ethnicity, professional title, tenure, and highest educational degree completed were collected for purposes of sample description and were reported as aggregate data only. Interview transcripts were de-identified by the researcher using a coding system according to participant and interview number. All audio interview recordings, de-identified transcripts, and demographic data were retained on a secure network server at the Midwestern academic medical center in accordance with HSC regulations.

This manuscript will be submitted to the *Journal of Nursing Administration* for consideration of publication. Completed study with findings is reported in Chapter 3 (see pg. 81).

### **Manuscript 3**

#### **Purpose**

The purpose of this manuscript was three-fold: (a) to outline the historical development and performance of critical access hospitals (CAHs), (b) to synthesize the literature regarding current challenges faced by rural nurse executives (NEs) in the U.S., and (c) to draw from the findings of the case study (Manuscript 2) to develop recommendations for preparing and enabling nurses in rural CAHs to lead change to advance organizational outcomes. Four research questions were proposed:

1. What legislative acts have shaped the historical development of CAHs?
2. How do CAHs compare to other rural and urban hospitals in terms of hospital performance and quality outcomes?
3. Based on a review of the literature, what are the most significant challenges currently faced by rural NEs in the U.S.?
4. Based on the findings of Manuscript 2, what elements should be considered to better prepare and enable nurses to lead change in advancing CAH outcomes?

## **Methods**

A review of the literature was conducted to synthesize the historical development and performance of CAHs in the U.S, as well as to identify current challenges faced by rural NEs. The review included peer-reviewed journal articles, rural or CAH-specific newsletters published by leading rural/CAH authorities, rural/CAH expert opinion articles, government and other authoritative reports, webpages, and documents, published or translated in English between 2007 and 2016. This timeline was proposed to encompass two significant time points in recent U.S. history that have had a substantial influence on the U.S. health care industry: (a) the economic downturn driven by the market exchange and housing market crisis of 2007-2008, and (b) the implementation of the Patient Protection and Affordable Care Act. A broad selection of literary sources was proposed to capture a greater understanding of the historical development and performance of CAHs, and the challenges faced by rural NEs.

Literature was obtained from CINAHL and PubMed databases and publications posted on the Rural Health Information Hub website (Rural Health Information Hub, 2015). A manual search using Google Scholar and reference lists from retrieved articles also was performed. Search terms included: critical access hospital and rural nursing. The following terms were

combined with the previous search terms using the “AND” operator: finance, resources, education, recruitment, retention, leadership development, research, quality, and patient outcomes. Article selection for inclusion in this review was based on its relevance to: (a) performance measures and quality outcomes in CAHs (b) current challenges faced by rural NEs, (c) and nursing leadership in CAHs. Articles not centered on rural or CAH performance or nursing quality care were excluded from this review. Recommendations for preparing and enabling nurses to lead change in advancing rural CAH outcomes were offered. The recommendations were informed by the literature review and developed from findings of the case study (Manuscript 2).

This manuscript will be submitted to the *Journal of Rural Health* for consideration of publication. Complete study findings and recommendations are reported in Chapter 4 (see pg. 114).

### **Assumptions**

The following assumptions were made by the researcher for this study:

1. Leadership is a process, or set of behaviors that occurs at all levels of an organization.
2. Leading change is a social, dynamic process.
3. Applying for Magnet<sup>®</sup> designation requires leadership and change on the part of the hospital applicant.
4. Participants will openly and honestly share their experiences during the interview process.
5. Participants will behave as they normally would during participant observations.
6. The participating hospital will share openly and honestly all documents and artifacts relevant to the Magnet<sup>®</sup> application time period.

7. Participants have pertinent knowledge regarding change processes that occurred during the pursuit of Magnet<sup>®</sup> designation.

### **Definition of Terms**

The following terms were used for the purpose of this study:

**Community:** a shared identity around a topic or set of challenges that shape a system (Patton, 2015).

**Critical access hospital:** a hospital certified under a set of Medicare Conditions of Participation, including having no more than 25 inpatient beds; maintaining an annual average length of stay of no more than 96 hours for acute inpatient care; offering 24-hour, 7-day-a-week emergency care; and being located in a rural area, at least 35 miles drive away from any other hospital or CAH (U.S. Department of Health and Human Services, n.d.-b).

**Fostering relationships:** the process of providing psychological safety for letting go of old ways as well as trying something new, using effective communication with internal and external stakeholders, assuring consistent messaging with congruence between words and actions, and ‘telling the story’ in a unified voice (Nelson-Brantley et al., 2016).

**Leading change:** to guide in direction, course, action, opinion, or otherwise, the passing from one place, state, form, or phase to another (Nelson-Brantley et al., 2016).

**Networks:** the set of relationships, personal interactions, and connections among participants who have personal reasons to connect (Patton, 2015).

**Operational support:** the allocation and assurance of resources, adaptation of workflow processes, decision making and strategic planning, and provision of meaningful reward systems that support change (Nelson-Brantley et al., 2016).

**Organizational learning:** the process of change in thought and action embedded in and affected by the institutions of the organization (Vera & Crossan, 2004).

**Organizational readiness:** the extent to which organizational members are psychologically and behaviorally prepared to implement organizational change (Weiner et al., 2008).

**Rural:** a city with a population of less than 50,000 (U.S. Department of Health and Human Services, n.d.-a).

### Summary

Leading change is a complex, significant phenomenon of concern for nursing. Nurses have been called to lead change to achieve an integrated, patient-centered health care system in the U.S. Yet, understanding how nurses effectively lead change at all levels of a hospital system, “from the bedside to the boardroom” (IOM, 2011, p. 221), remains an underexplored area of research. In Chapter 1, the problem and its significance were identified. Based on a review of the literature, three investigations (comprising three separate manuscripts) were proposed that collectively offer the potential to further our understanding of the phenomenon of leading change in CAHs. Manuscript 1 was a concept analysis of leading change using the Walker and Avant (2011) method. This analysis provided a theoretical definition and conceptual model of leading change in nursing through the identification of five defining attributes (individual and collective leadership, operational support, fostering relationships, organizational learning, and balance). A case study was proposed for Manuscript 2, with the aim of understanding how nurses at all levels of a hospital system led change to achieve Magnet<sup>®</sup> designation. A comprehensive story developed from the analysis and convergence of evidence, including in-depth individual interviews, focus groups, unstructured observation, documents and artifacts from the Magnet<sup>®</sup> application time period was proposed. Manuscript 3 is a review of the literature related to the

historical development and performance of CAHs, and challenges faced by rural NEs. Based on this review and findings from the case study (Manuscript 2), recommendations are proposed to better prepare and enable nurses to lead change in advancing rural CAH outcomes. Collectively, this study adds to the body of nursing leadership knowledge through a greater understanding of the phenomenon of leading change in rural CAH settings.

## References

- Aiken, L. H., Buchan, J., Ball, J., & Rafferty, A. M. (2008). Transformative impact of Magnet designation: England case study. *Journal of Clinical Nursing, 17*(24), 3330-3337.
- Aiken, L. H., Smith, H. L., & Lake, E. T. (1994). Lower medicare mortality among a set of hospitals known for good nursing care. *Medical Care, 771-787*.
- American Association of Critical Care Nurses. (2005). AACN standards for establishing and sustaining healthy work environments: A journey to excellence. *American Journal of Critical Care, 14*(3), 187-197.
- American Nurses Credentialing Center. (2014). Magnet recognition program overview. Retrieved from <http://nursecredentialing.org/Magnet/ProgramOverview>
- American Nurses Credentialing Center. (2015a). *Average Magnet organization characteristics*. Retrieved from <http://nursecredentialing.org/Magnet/ProgramOverview>
- American Nurses Credentialing Center. (2015b). Magnet model. Retrieved from [http://nursecredentialing.org/Magnet/ProgramOverview/New-Magnet-Model - TransformationalLeadership](http://nursecredentialing.org/Magnet/ProgramOverview/New-Magnet-Model-TransformationalLeadership)
- Anderson, R. A., Crabtree, B. F., Steele, D. J., & McDaniel, R. R. (2005). Case study research: The view from complexity science. *Qualitative Health Research, 15*(5), 669-685.
- Anderson, R. A., & McDaniel, R. R., Jr. (2000). Managing health care organizations: Where professionalism meets complexity science. *Health Care Management Review, 25*(1), 83-92.
- Armstrong, K., Laschinger, H., & Wong, C. (2009). Workplace empowerment and Magnet hospital characteristics as predictors of patient safety climate. *Journal of Nursing Care Quality, 24*(1), 55-62.

- Bass, B. M., & Riggio, R. E. (2006). *Transformational leadership* (2nd ed.). New York, NY: Psychology Press, Taylor & Francis Group.
- Bergquist-Beringer, S., Dong, L., He, J., & Dunton, N. (2013). Pressure ulcers and prevention among acute care hospitals in the United States. *Joint Commission Journal on Quality and Patient Safety*, 39(9), 404-414.
- Bouckenooghe, D., Devos, G., & Van den Broeck, H. (2009). Organizational change questionnaire—climate of change, processes, and readiness: Development of a new instrument. *The Journal of Psychology*, 143(6), 559-599.
- Burns, J. M. (2003). *Transforming leadership: A new pursuit of happiness*. New York, NY: Grove Press.
- Caza, A., & Jackson, B. (2011). Authentic leadership. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE handbook of leadership* (pp. 352-364). London EC1Y 1SP: SAGE Publications Ltd.
- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches* (2nd ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- de Koning, H., Verver, J. P. S., van den Heuvel, J., Bisgaard, S., & Does, R. J. M. M. (2006). Lean six sigma in healthcare. *Journal for Healthcare Quality*, 28(2), 4-11.  
doi:10.1111/j.1945-1474.2006.tb00596.x
- Diaz-Saenz, H. R. (2011). Transformational leadership. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE handbook of leadership* (pp. 299-310). London EC1Y 1SP: SAGE Publications Ltd.

- Duffield, C. M., Roche, M. A., Homer, C., Buchan, J., & Dimitrelis, S. (2014). A comparative review of nurse turnover rates and costs across countries. *Journal of Advanced Nursing*, 70(12), 2703-2712. doi:10.1111/jan.12483
- Dyess, S., & Sherman, R. (2011). Developing the leadership skills of new graduates to influence practice environments: A novice nurse leadership program. *Nursing Administration Quarterly*, 35(4), 313-322.
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107-115. doi:10.1111/j.1365-2648.2007.04569.x
- Everhart, D., Schumacher, J. R., Duncan, R. P., Hall, A. G., Neff, D. F., & Shorr, R. I. (2014). Determinants of hospital fall rate trajectory groups: A longitudinal assessment of nurse staffing and organizational characteristics. *Health Care Management Review*, 39(4), 352.
- Gambino, M. L. (2008). Complexity and nursing theory: A seismic shift. In C. Lindberg, S. Nash, & C. Lindberg (Eds.), *On the edge: Nursing in the age of complexity* (pp. 49-71). Bordentown, NJ: Plexus Press.
- Gardner, J. K., Thomas-Hawkins, C., Fogg, L., & Latham, C. E. (2007). The relationships between nurses' perceptions of the hemodialysis unit work environment and nurse turnover, patient satisfaction, and hospitalizations. *Nephrology Nursing Journal*, 34(3), 271-282.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: SAGE.

- Havens, D. S., & Johnston, M. A. (2004). Achieving Magnet hospital recognition: Chief nurse executives and Magnet coordinators tell their stories. *Journal of Nursing Administration, 34*(12), 579-588.
- Hemp, P., & Stewart, T. A. (2004). Leading change when business is good. (cover story) (Vol. 82, pp. 60-70): Harvard Business School Publication Corp.
- Hess, R., DesRoches, C., Donelan, K., Norman, L., & Buerhaus, P. I. (2011). Perceptions of nurses in Magnet<sup>®</sup> hospitals, non-Magnet hospitals, and hospitals pursuing Magnet status. *Journal of Nursing Administration, 41*(7/8), 315-323.
- Institute of Medicine. (2000). *To err is human: Building a safer health system*. Washington, D.C.: The National Academies Press.
- Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, D.C.: The National Academies Press.
- Institute of Medicine. (2003). *Health professions education: A bridge to quality*. Washington, D.C.: The National Academies Press.
- Institute of Medicine. (2004). *Keeping patients safe: Transforming the work environment of nurses*. Retrieved from <http://www.iom.edu/Reports/2003/Keeping-Patients-Safe-Transforming-the-Work-Environment-of-Nurses.aspx>
- Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. Washington, D.C.: The National Academies Press.
- Kan, M. M., & Parry, K. W. (2004). Identifying paradox: A grounded theory of leadership in overcoming resistance to change. *The Leadership Quarterly, 15*(4), 467-491.  
doi:<http://dx.doi.org/10.1016/j.leaqua.2004.05.003>

- Kelly, L. A., McHugh, M. D., & Aiken, L. H. (2011). Nurse outcomes in Magnet<sup>®</sup> and non-Magnet hospitals. *Journal of Nursing Administration*, 41(10), 428-433.
- Kutney-Lee, A., Stimpfel, A. W., Sloane, D. M., Cimiotti, J. P., Quinn, L. W., & Aiken, L. H. (2015). Changes in patient and nurse outcomes associated with Magnet hospital recognition. *Medical Care*, 53(6), 550-557.
- Lacey, S. R., Cox, K. S., Lorfing, K. C., Teasley, S. L., Carroll, C. A., & Sexton, K. (2007). Nursing support, workload, and intent to stay in Magnet, Magnet-aspiring, and non-Magnet hospitals. *Journal of Nursing Administration*, 37(4), 199-205.
- Laschinger, H. K. S., Borgogni, L., Consiglio, C., & Read, E. (2015). The effects of authentic leadership, six areas of worklife, and occupational coping self-efficacy on new graduate nurses' burnout and mental health: A cross-sectional study. *International Journal of Nursing Studies*, 52(6), 1080-1089. doi:<http://dx.doi.org/10.1016/j.ijnurstu.2015.03.002>
- Lincoln, Y. S., & Guba, E. G. (1985). Establishing trustworthiness. *Naturalistic inquiry* (pp. 289-331). Beverly Hills, California: SAGE Publications, Inc.
- Lindberg, C., & Lindberg, C. (2008). Nurses take note: A primer on complexity science. In C. Lindberg, S. Nash, & C. Lindberg (Eds.), *On the edge: Nursing in the age of complexity* (pp. 23-48). Bordentown, NJ: Plexus Press.
- Luthans, F., & Avolio, B. (2003). Authentic leadership development. In J. E. Dutton, R. E. Quinn, & K. Cameron (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 241-261). San Francisco, CA: Berrett-Koehler Publishers.
- Mays, N., & Pope, C. (2000). Qualitative research in health care: Assessing quality in qualitative research. *British Medical Journal*, 320(7226), 50-52. doi:10.2307/25186737

- McClure, M. L., Poulin, M. A., Sovie, M. D., & Wandelt, M. A. (1983). Magnet hospitals: Attraction and retention of professional nurses. American Academy of Nursing Task force on nursing practice in hospitals.
- McHugh, M. D., Kelly, L. A., Smith, H. L., Wu, E. S., Vanak, J. M., & Aiken, L. H. (2013). Lower mortality in Magnet hospitals. *Medical Care*, *51*(5), 382-388.
- Mills, J. (2014). Methodology and methods. In J. Mills & M. Birks (Eds.), *Qualitative methodology: A practical guide* (pp. 31-47). London EC1Y 1SP: SAGE Publications Ltd.
- Mills, J., & Birks, M. (2014). Quality in qualitative research. In J. Mills & M. Birks (Eds.), *Qualitative methodology: A practical guide* (pp. 221-236). London EC1Y 1SP: SAGE Publications Ltd.
- Mohr, J., Batalden, P., & Barach, P. (2004). Integrating patient safety into the clinical microsystem. *Quality and Safety in Health Care*, *13*(suppl 2), ii34-ii38.
- Morjikian, R. L., Kimball, B., & Joynt, J. (2007). Leading change: The nurse executive's role in implementing new care delivery models. *Journal of Nursing Administration*, *37*(9), 399-404.
- Nelson, E. C., Batalden, P. B., & Godfrey, M. M. (2007). *Quality by design: A clinical microsystems approach*. San Francisco, CA: Jossey-Bass.
- Nelson-Brantley, H. V., Ford, D. J., & Frank-Ragan, E. (2016). *Leading change: A concept analysis*. Manuscript submitted for publication.
- Northouse, P. G. (2013a). Authentic leadership. *Leadership theory and practice* (6th ed., pp. 253-286). Thousand Oaks, CA: SAGE Publications, Inc.
- Northouse, P. G. (2013b). Transformational leadership. *Leadership theory and practice* (6th ed., pp. 185-218). Thousand Oaks, CA: SAGE Publications, Inc.

- Onwuegbuzie, A., Leech, N., & Collins, K. M. T. (2010). Innovative data collection strategies in qualitative research. *Qualitative report, 15*(3), 696-726.
- Parry, K. W. (2011a). Leadership and organization theory. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE handbook of leadership* (pp. 54-70). London EC1Y 1SP: SAGE Publications Ltd.
- Parry, K. W. (2011b). Leadership and organizational theory. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE handbook of leadership* (pp. 53-70). London EC1Y 1SP: SAGE Publications Ltd.
- Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Polit, D. F., & Beck, C. T. (2012). *Nursing research: Generating and assessing evidence for nursing practice* (9th ed.). Philadelphia, PA: Wolters Kluwer Lippincott Williams & Wilkins.
- QSR.International. (2015). Nvivo 10 for windows. Retrieved from [http://www.qsrinternational.com/products\\_nvivo.aspx](http://www.qsrinternational.com/products_nvivo.aspx)
- Reyes, D. J., Bekemeier, B., & Issel, L. M. (2014). Challenges faced by public health nursing leaders in hyperturbulent times. *Public Health Nursing, 31*(4), 344-353.  
doi:10.1111/phn.12078
- Rural Health Information Hub. (2015). Critical access hospitals (CAHs) publications. Retrieved from <https://www.ruralhealthinfo.org/topics/critical-access-hospitals/publications>
- Salmela, S., Eriksson, K., & Fagerstrom, L. (2012). Leading change: A three-dimensional model of nurse leaders' main tasks and roles during a change process. *Journal of Advanced Nursing, 68*(2), 423-433. doi:10.1111/j.1365-2648.2011.05802.x

- Smith, S. A. (2014). Magnet hospitals: Higher rates of patient satisfaction. *Policy, Politics, & Nursing Practice, 15*(1-2), 30-41.
- Spence, Wong, C. A., & Grau, A. L. (2013). Authentic leadership, empowerment and burnout: A comparison in new graduates and experienced nurses. *Journal of Nursing Management, 21*(3), 541-552. doi:10.1111/j.1365-2834.2012.01375.x
- Staggs, V. S., & Dunton, N. (2012). Hospital and unit characteristics associated with nursing turnover include skill mix but not staffing level: An observational cross-sectional study. *International Journal of Nursing Studies, 49*(9), 1138-1145.  
doi:http://dx.doi.org/10.1016/j.ijnurstu.2012.03.009
- Stewart, A. (2014). Case study. In J. Mills & M. Birks (Eds.), *Qualitative methodology: A practical guide* (pp. 145-159). London EC1Y 1SP: SAGE Publications Ltd.
- Stimpfel, A. W., Rosen, J. E., & McHugh, M. D. (2014). Understanding the role of the professional practice environment on quality of care in Magnet<sup>®</sup> and non-Magnet hospitals. *Journal of Nursing Administration, 44*(1), 10-16.  
doi:10.1097/NNA.0000000000000015
- Thorne, S. (2000). Data analysis in qualitative research. *Evidence Based Nursing, 3*(3), 68-70.  
doi:10.1136/ebn.3.3.68
- Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of Advanced Nursing, 48*(4), 388-396. doi:10.1111/j.1365-2648.2004.03207.x
- U.S. Department of Health and Human Services. (n.d.-a). How is rural defined? Retrieved from <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/defined.html>

- U.S. Department of Health and Human Services. (n.d.-b). What are critical access hospitals (CAH)? Retrieved from <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/critical.html>
- Uhl-Bien, M., & Marion, R. (2009). Complexity leadership in bureaucratic forms of organizing: A meso model. *The Leadership Quarterly*, 20(4), 631-650.  
doi:<http://dx.doi.org/10.1016/j.leaqua.2009.04.007>
- Uhl-Bien, M., & Marion, R. (2011). Complexity leadership theory. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE handbook of leadership* (pp. 468-479). London EC1Y 1SP: SAGE Publications Ltd.
- Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly*, 18(4), 298-318. doi:<http://dx.doi.org/10.1016/j.leaqua.2007.04.002>
- Vera, D., & Crossan, M. (2004). Strategic leadership and organizational learning. *Academy of Management Review*, 29(2), 222-240.
- von Bertalanffy, L. (1975). General system theory (reprint of 1956). In B. D. Ruben & J. Y. Kim (Eds.), *General systems theory and human communication* (pp. 6-20). Rochelle Park, NJ: Hayden Book Company, Inc.
- Walker, L. O., & Avant, K. C. (2011). Concept analysis. *Strategies for theory construction in nursing* (5th ed., pp. 157-179). Upper Saddle River, NJ: Pearson Prentice Hall.
- Warshawsky, N. E., Rayens, M. K., Lake, S. W., & Havens, D. S. (2013). The nurse manager practice environment scale: Development and psychometric testing. *Journal of Nursing Administration*, 43(5), 250-257.

- Waverly Health Center. (2015). About us. Retrieved from [https://www.waverlyhealthcenter.org/about\\_us/accreditation\\_quality.aspx](https://www.waverlyhealthcenter.org/about_us/accreditation_quality.aspx)
- Weberg, D. (2012). Complexity leadership: A healthcare imperative. *Nursing Forum*, 47(4), 268-277. doi:10.1111/j.1744-6198.2012.00276.x
- Weiner, B., Amick, H., & Lee, S.-Y. (2008). Conceptualization and measurement of organizational readiness for change: A review of the literature in health services research and other fields. *Medical Care Research and Review*, 65(4), 379-436. doi:10.1177/1077558708317802
- Witlock, J. (2009). Transformational change and development. In J. A. Johnson (Ed.), *Health organizations: Theory, behavior, and development* (pp. 291-310). Sudbury, MA: Jones and Bartlett Publishers.
- Wolf, G. (2008). Magnet recognition program: The next generation. *The Journal of Nursing Administration*, 38(4), 200-204. doi:10.1097/01.NNA.0000312759.14536.a9
- Wong, C. A., & Laschinger, H. K. S. (2013). Authentic leadership, performance, and job satisfaction: The mediating role of empowerment. *Journal of Advanced Nursing*, 69(4), 947-959. doi:10.1111/j.1365-2648.2012.06089.x
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: SAGE Publications, Inc.

## CHAPTER 2

### **Leading Change: A Concept Analysis**

This manuscript is a concept analysis of leading change using the Walker and Avant (2011) method that provides a theoretical definition and conceptual model of leading change. The manuscript has been submitted to the *Journal of Advanced Nursing* for publication consideration. The primary author is Heather V. Nelson-Brantley and co-authors include Debra J. Ford and Elaine Frank-Ragan.

## Abstract

**Aim.** To report an analysis of the concept of leading change.

**Background.** Nurses have been called on to lead change to advance the health of individuals, populations, and systems. Conceptual clarity about leading change within the context of nursing and healthcare systems provides an empirical direction for future research and theory development that can advance the science of leadership studies in nursing.

**Design.** Concept analysis.

**Data sources.** Literature for this concept analysis was collected from May through October 2015 using CINAHL, PubMed, PsycINFO, Psychology and Behavioral Sciences Collection, Health Business Elite, and Business Source Premier databases. Nursing, medicine, organizational studies, business, education, psychology, and sociology literature were included.

**Methods.** Walker and Avant's (2011) method was used to identify descriptions, antecedents, consequences, and empirical referents of the concept. Model and related cases were developed.

**Results.** Leading change is a complex process where nurses individually and collectively balance paradoxical priorities to provide operational support, foster relationships, and facilitate organizational learning to achieve improved performance and outcomes and new organizational culture and values. Antecedents include external or internal driving forces and organizational readiness.

**Conclusion.** Conceptual clarity of leading change in nursing can contribute to the advancement of leading change practices, education, theory, and research. From this, empirically derived interventions that prepare and enable nurses to lead change to advance health may be realized.

**Keywords:** concept analysis, leadership, leading change, nursing, nursing administration, organizational change, systems

## Summary Statement

### Why is this research or review needed?

- New demands are being placed on nurses globally to lead change to advance the health of individuals, communities, populations, and systems.
- Leading change remains one of the most difficult tasks of leadership with published estimates indicating a 40% to 80% failure rate.
- To advance nursing theory, research, and leading change practices, nurses must be able to identify key attributes of leading change and distinguish them from managing or directing change.

### What are the key findings?

- The defining attributes of leading change are: (a) individual and collective leadership, (b) operational support, (c) fostering relationships, (d) organizational learning, and (e) balance.
- Organizational readiness is an essential antecedent to leading change that is often overlooked by organizational leaders.
- Leading change is a system-wide effort that requires leadership and interaction at all levels.

### How should the findings be used to influence policy/practice/research/education?

- Nurse researchers should use the conceptual model as a framework for investigating the phenomenon of leading change in health care.
- Nursing administrative leaders should use the findings to focus their efforts on ensuring organizational readiness and meaningful engagement of all stakeholders in leading change.

- Nurse educators should use the conceptual model to design leadership courses and programs that better prepare nurses to lead change in a wide array of healthcare contexts.

## Introduction

Nurses, in collaboration with other health professionals and community partners, have been called to lead change and transform healthcare delivery systems to provide higher quality, safer, more affordable, and more accessible care (Institute of Medicine [IOM], 2011). In times of change, leadership has been significantly associated with quality improvement, optimal organizational performance and outcomes, and population health outcomes (Bhandari, Scutchfield, Charnigo, Riddell, & Mays, 2010; Kan & Parry, 2004; Reyes, Bekemeier, & Issel, 2014). Nurses are the largest segment of the health care industry and operate from a holistic, health-oriented ontology and epistemology. As such, nurses are perfectly positioned to lead the redesign of the health care system and its many practice environments, including hospitals, homes, health clinics, battlefields, and public health centers (IOM, 2011).

Many U.S. and European countries are challenged to restructure their healthcare systems in the midst of increasing demands for efficiency and cost reductions fueled by recent worldwide economic challenges (IOM, 2011; Salmela, Eriksson, & Fagerstrom, 2012). As a result, new demands are being placed on nurses globally as leaders of change (Salmela et al., 2012). To become effective, efficient, and satisfying to its members, organizations need to change (Anderson, 2015). Yet, leading change remains an elusive concept and one of the most difficult tasks of leadership (Karp, 2006). Conceptual clarity about leading change within the context of nursing and healthcare systems is needed to provide empirical direction for future research and theory development that can advance the science of leadership studies in nursing. This paper is a report of a concept analysis of leading change with a proposed conceptual model for nursing.

## Background

The catalyst for change in healthcare stems from a monumental report which indicated that as many as 98,000 people a year were dying as the result of preventable medical errors (IOM, 2000). In 2001, the groundwork for leading change was set with the release of the IOM's *Crossing the Quality Chasm: A New Health System for the 21<sup>st</sup> Century*. This report called for large-scale change, including building organizational supports for change, a new mental model of healthcare systems as complex adaptive systems, and aligning payment policies with quality improvement (IOM, 2001). Despite multiple initiatives (IOM, 2001, 2003, 2004), leading change in healthcare has remained elusive. The need for change is clear, yet the pathway to get there remains underexplored (Nelson, Batalden, & Godfrey, 2007).

Technological advances, the Medicare/Medicaid program, and the start of investor-owned companies in the 1960s have transformed healthcare delivery from a locally controlled effort to a highly fragmented national system faced with constant and unpredictable change (Witlock, 2009). Nursing care within the hospital setting has moved from caring for individuals with acute illness episodes to caring for individuals with multiple complex, chronic health concerns embedded in dynamic family and living circumstances. Specialized care teams work in often-uncoordinated silos, resulting in a duplication of processes, increased costs and workload. Fast-paced, demanding work environments have led to increased medical errors (Lindberg & Lindberg, 2008); nurse burnout (Spence, Wong, & Grau, 2013); and nurse turnover rates ranging from 15.1% in Australia to 19.9% in Canada, 26.8% in the U.S, and 44.3% in New Zealand (Duffield, Roche, Homer, Buchan, & Dimitrelis, 2014). Consequently, in 2011, the IOM once again raised the call for change in its landmark report, *The Future of Nursing: Leading Change*,

*Advancing Health*, only this time, nurses at all levels, “from the bedside to the boardroom” (p. 221), have been called to lead change.

Published estimates indicate that 40% to 80% of traditional change efforts fail (Weiner, Amick, & Lee, 2008). This may be due, in part, to the multiple frameworks for understanding the types and nature of change as well as a lack of conceptual clarity around leading, managing, and directing. Leading change has been difficult to operationalize due to the multitude of frameworks about how organizations work (Anderson, 2015). Despite its extensive use in the literature, the term lacks the conceptual clarity necessary for advancing theory, research, and leading change practices in nursing. Given the considerable resources dedicated to change efforts and the continued drive to transform health care delivery systems, a clearer understanding of the concept of leading change could strengthen organizational efforts (Weiner et al., 2008) and better prepare and enable nurses to meet the IOM’s (2011) recommendation for nurses to lead change to advance health. Therefore, the purpose of this concept analysis was to clarify the concept of leading change and situate it within the context of nursing and health care.

### **Concept Analysis Method**

Walker and Avant’s (2011) method was used for this concept analysis of leading change. This method is an 8-step iterative process, which includes the following: selecting a concept, determining the purpose of the analysis, identifying uses of the concept, determining its defining attributes, developing cases to distinguish the presence of the concept, identifying antecedents and consequences, and defining empirical referents for measuring the concept.

### **Data Sources**

A review of the literature was performed using the following databases: CINAHL, PubMed, PsycINFO, Psychology and Behavioral Sciences Collection, Health Business Elite, and

Business Source Premier. Search terms included: leading change, transformation, reform, leadership, and change. In an attempt to achieve representation of all uses of the concept of leading change, as recommended by Walker and Avant (2011), the search included primary research studies, literature reviews, theoretical papers, and expert discussion articles in peer-reviewed journals as well as books and reference lists from identified articles. Due to the newness of this field of inquiry in nursing, the search was expanded beyond nursing to include the disciplines of medicine, organizational studies, business, education, psychology, and sociology. Articles that described pure biological or evolutionary change or leadership not centered on change were excluded. The timeline included in the search was from 2001 through 2015. The year 2001 was selected because this was the year of the release of the IOM's *Crossing the Quality Chasm*. Classic literature was included if deemed still relevant to the concept of interest today.

An initial search resulted in 898 articles (see Figure 2.1). One hundred forty-seven articles were retained after title scans for relevance, duplication, and ability to be retrieved. Abstracts were reviewed and 51 articles were retained for full-text review. A total of 35 articles and book chapters were selected for final inclusion based on their primary focus on the process of *leading* change and their ability to inform nursing.

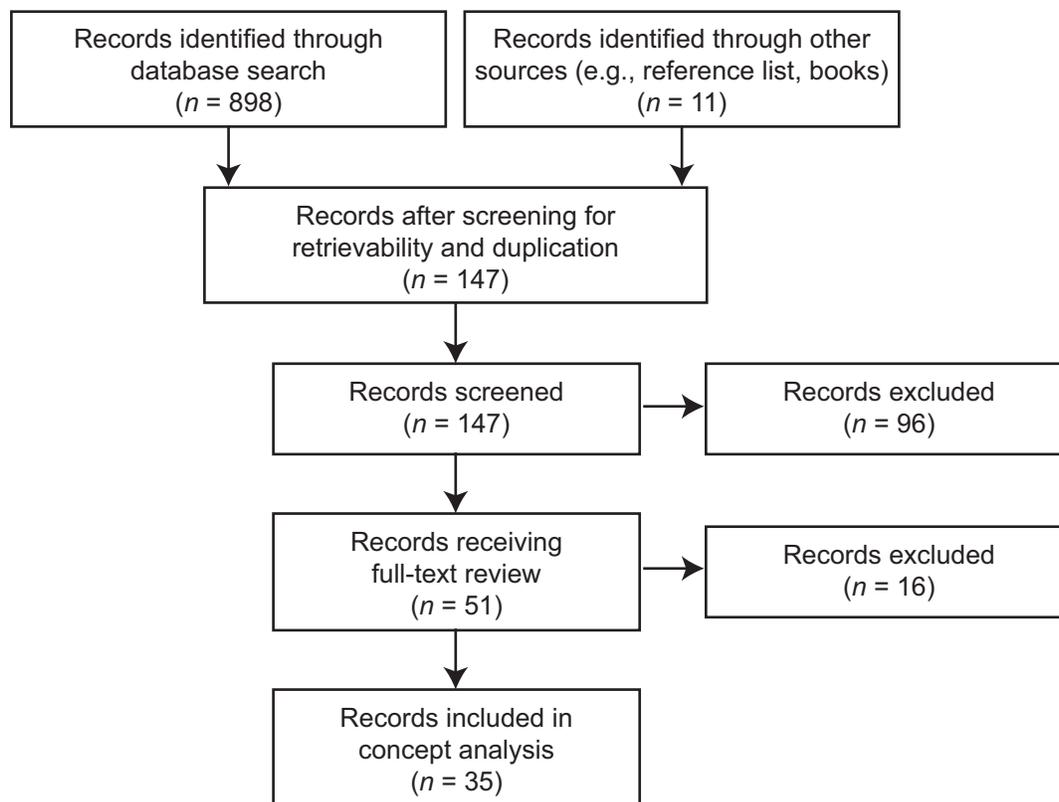


Figure 2.1. Data selection process.

## Results

### Uses of the Concept

Walker and Avant (2011) recommend that dictionaries, thesauruses, colleagues, and other valuable sources be consulted to identify as many uses of the concept as can be found. This stage of concept analysis provides the evidence base that helps support the selection of defining attributes (Walker & Avant, 2011). This concept analysis studied the combination of two concepts, leading and change, to understand the processual concept of leading change. According to Webster's Encyclopedic Unabridged Dictionary of the English Language (1996b), leading, as a verb used with an object, is 'to guide in direction, course, action, opinion, etc.; bring'. Change, in the noun form, is defined as 'the passing from one place, state, form, or phase to another' (Webster's Encyclopedic Unabridged Dictionary of the English Language, 1996a).

When combined, a working definition of leading change becomes: to guide in direction, course, action, opinion, or otherwise, the passing from one place, state, form, or phase to another.

The concept of change can be clarified further by an examination of the types (transitional versus transformational) and nature (planned versus emergent) of change relevant to nursing. Transitional change is making small, incremental adjustments to a process. These types of change occur within subsystems of an organization, such as hospital nursing units leading quality improvement efforts. Conversely, transformational changes are broad in nature and represent complex radical shifts that result in the reinvention of the organization itself (Witlock, 2009). Planned change originates from an organization revising its mission, creating a vision, or responding to predictable internal or external forces (Maxwell, 2009). Emergent change arises from unanticipated conditions that create a need for quick, adaptive action (Weick & Sutcliffe, 2007), such as a patient that suddenly deteriorates on a nursing unit, or an EF5 tornado rapidly approaching a major medical center.

### **Defining Attributes**

According to Walker and Avant (2011), identifying defining attributes involves clustering attributes that are most commonly associated with the concept in a parsimonious way. Defining attributes of leading change that emerged from this concept analysis include: individual and collective leadership, operational support, fostering relationships, organizational learning, and balance (see Figure 2.2). The frequency with which each defining attribute is discussed in the included literature is presented in Table 2.1.

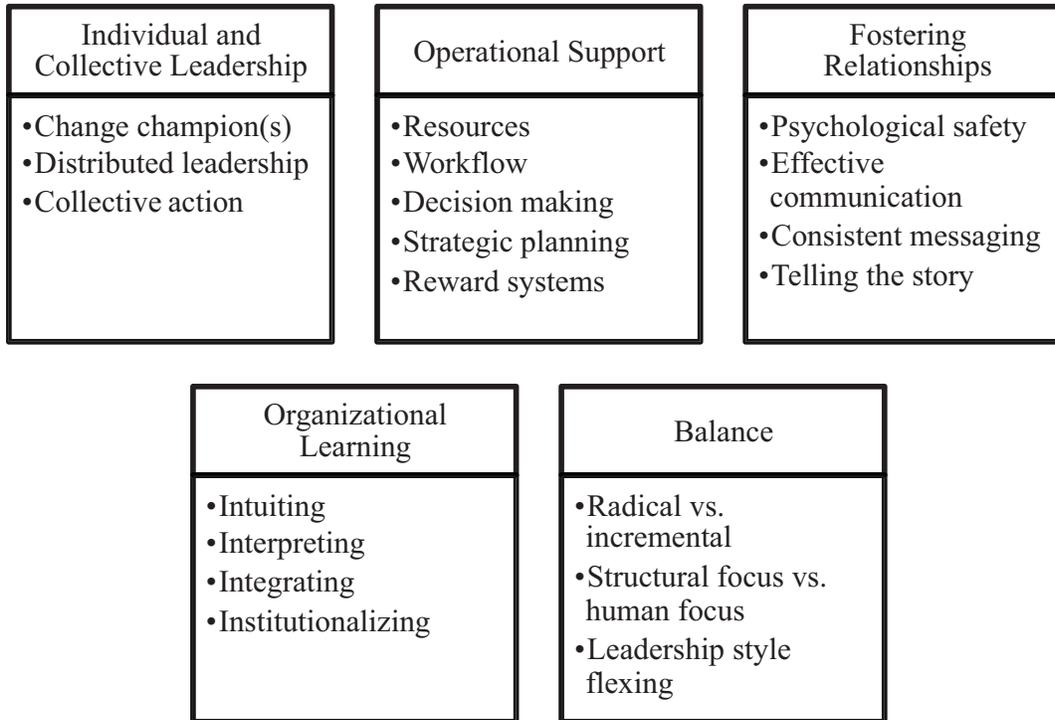


Figure 2.2 Defining attributes of leading change and their associated characteristics.

Table 2.1

*Number of Literature Sources That Discuss Each Defining Attribute*

Defining attribute of leading change	Frequency
Individual and collective leadership	35
Operational support	30
Fostering relationships	33
Organizational learning	28
Balance	22

*Note.* Frequency describes the number of literature sources that explicitly or implicitly discuss the defining attribute.

**Individual and collective leadership.** Leading change requires both individual and collective leadership. Often an administrative level leader will recognize the need for change and work to communicate a clear vision of the change to both internal and external stakeholders (Reyes et al., 2014). Even in the context of collaborative partnerships where formal leadership positions are not clearly defined, specific individuals do and often must emerge to assume more prominent leadership roles (Alexander, Comfort, Weiner, & Bogue, 2001; Boswell & Cannon, 2005; Nowell & Harrison, 2010). From there, leading change is a collective effort where momentum is built by a coalition of change champions (Kotter, 2007; R. L. Morjikian, Kimball, & Joynt, 2007), and ultimately distributed throughout all levels of the organization (Harris, 2006; Havens & Johnston, 2004; Hemp & Stewart, 2004; R. Morjikian & Bellack, 2005; Parry, 2011; Shanley, 2007; Witlock, 2009).

Collective leadership is a defining attribute of leading change because knowledge expertise to problem solve is not something held by just those in formal leadership roles. It exists throughout the organization, especially by those who are closest to it (Nelson et al., 2007; Witlock, 2009). While leading change may begin with the recognition or vision of one leader, each member of the system becomes a leader of change by contributing their individual knowledge, skills, and commitment to the collective action of the whole.

**Operational support.** Leading change requires multiple, simultaneous adjustments in staffing, work flow, decision making, and reward systems (Weiner et al., 2008). Providing operational support was described as one of the core roles of leading change among nurse managers and nursing directors (Havens & Johnston, 2004; Salmela et al., 2012) in the acute care setting as well as public health leaders in collaborative partnerships (Nowell & Harrison, 2010).

Operational support entails garnering resources, developing strategic plans for carrying out tasks, identifying issues and opportunities, and monitoring progress (Nowell & Harrison, 2010).

**Fostering relationships.** With change comes uncertainty and loss (Shanley, 2007). Leading change requires leaders to create an atmosphere of psychological safety where individuals feel safe to let go of previously held understandings and engage in new behaviors to test the waters of a newly emerging culture (Kavanagh & Ashkanasy, 2006). Therefore, a defining attribute of leading change is fostering relationships, deliberately orchestrating opportunities to build social trust, or an interconnectedness of individuals within and outside the organization (Harris, 2006; Havens & Johnston, 2004). This attribute enables members to work as a team, empowering them to make decisions and achieve collective accountability (Bowen & Inkpen, 2009).

Embedded within the attribute of fostering relationships is effective communication. Internal stakeholders need open and honest communication, factual information, and a system that supports questions and answers effectively through multiple avenues of exchange (Schifalacqua, Costello, & Denman, 2009). Communication needs to be consistent in both words and behaviors (Kotter, 2007). Nurse executives need to demonstrate commitment by being visible, asking for progress reports, and sharing information transparently with the organization (Schifalacqua et al., 2009). In addition, the use of inclusive language, such as referring to the change project as ‘our project’ rather than ‘my project’ goes a long way towards building ownership of the change initiative, enhancing empowerment of team members, engaging stakeholders in the process, and ensuring the change’s sustainability and impact (Karp, 2006; R. Morjikian & Bellack, 2005). ‘Telling the story’ in a unified voice is essential for

fostering relationships with internal and external stakeholders (Havens & Johnston, 2004; R. L. Morjikian et al., 2007; Ridenour & Trautman, 2009).

**Organizational learning.** The attribute of organizational learning was consistently identified with leading change in the literature (Daft & Weick, 1984; Harris, 2006; Parry, 2011; Reyes et al., 2014; Salmela et al., 2012; Senge, Ross, Smith, Roberts, & Kleiner, 1994; Vera & Crossan, 2004; Witlock, 2009). According to Crossan, Lane, and White (1999), organizational learning is defined as the process of change in thought and action, embedded in and affected by the institutions of the organization. It includes four processes: intuiting, interpreting, integrating, and institutionalizing. Learning begins as a subconscious process at the individual level (intuiting), moves to the conscious and is shared with the group (interpreting), who in turn integrate it as a collective understanding. Learning is then finalized when it moves across the organization and is embedded in its systems, structures, routines, and practices (institutionalizing) (Vera & Crossan, 2004).

**Balance.** Leading change inherently presents paradoxical challenges, alternatives where choosing one alternative acts to negate the other (Peters, 2012). Consequently, a defining attribute of leading change is balance. The challenges of the 21<sup>st</sup> century underscore the need for balance between radical reform and incremental changes to move the organization forward (Witlock, 2009). Leading change in nursing was commonly described as a balancing act (Bunker, 2006; Kavanagh & Ashkanasy, 2006; Reyes et al., 2014; Salmela et al., 2012). Nurses lead change by adapting their leadership style to the situation at hand (Salmela et al., 2012). Nurses that lean too heavily on either the structural side (operational support) or the human side (fostering relationships) of leading change destabilize foundations and erode trust (Bunker, 2006).

Nurses leading change must balance creating a sense of urgency with having realistic patience; being tough with being empathetic; exuding optimism with realism; and using self-reliance with trusting others in the work (Bunker, 2006). Particularly challenging for nurses is balancing being tough with being empathetic. Nursing has historically been viewed as a profession that takes direction rather than leading. To effectively lead change, nurses must balance their ability to be caring and supportive with taking a more proactive role in ensuring their voice is heard at the table of change efforts (Bunker, 2006). The Robert Wood Johnson (RWJ) Nurse Executive Fellows Program identified the ability to use different leadership styles to motivate and inspire others as a core competency for inspiring and leading change (Morjikian & Bellack, 2005). Furthermore, Vera and Crossan (2004) contend that at certain times organizational learning thrives best under the guidance of transformational leadership (inspirational, intellectually stimulating, and individually considerate), and at other times under the direction of transactional leadership (setting goals, articulating expectations, and keeping everyone on task), and that both styles of leadership co-exist within a single individual. A mixture of top-down and bottom-up, compliance and commitment, and individual and team efforts is essential for successfully leading change (Karp, 2006).

### **Constructed Cases**

**Model Case.** Carol G., nurse manager of the emergency department (ED) at an urban-based academic medical center (AMC) is plagued by the fact that her ED is frequently on diversion and by extensive wait times for patients not in distress. One evening she sees the story of Dr. Jeffrey Brenner and his revolutionary approach to decreasing ED utilization in Camden, NJ (RWJ, 2012). She wonders if a similar strategy might work in her organization. Carol shares her idea with the chief nursing officer (CNO), who grants her permission to access the hospital's

billing data. Carol works with an academic researcher from the associated school of nursing to analyze the data and discovers that 23% of the patients at her AMC were contributing to 88% of the hospital's costs. Furthermore, this subpopulation of patients averaged 126 visits each to the ED in one year.

Carol shared this information with her unit staff and a community nurse colleague, who then collaborated to generate plans for a care coalition—a team of care providers that would go out into the community to provide preventative care and treatment to those who would otherwise access care through the ED. Carol and a team of change champions presented the data and their idea for a care coalition to the hospital CNO, Chief Executive Officer (CEO), and hospital board. The hospital board was enthusiastic about the possibility and provided additional resources and approval to move forward with project planning. Carol worked with the academic researcher and garnered a Centers for Medicare & Medicaid Services (CMS) State Innovation grant (CMS, 2014) to fund a pilot project to test their proposed change before fully implementing it. This is a model case that includes all of the defining attributes the concept (Walker & Avant, 2011) of leading change: individual and collective leadership, operational support, fostering relationships, organizational learning, and balance.

**Related Case.** Mrs. Smith, a 73-year-old female, was admitted to a medical-surgical unit following wedge resection with thoracotomy. On post-op day three, Mrs. Smith experienced a sudden decline. A rapid response was initiated and Mrs. Smith was transferred to an intensive care unit where she died two days later of septic shock related to urosepsis. A chart review was performed. The physician had entered the standardized order set for a nurse-driven removal of the Foley catheter as soon as the patient was able to ambulate. The computerized charting system had nursing care plans and interventions for a catheterized patient that were never

initiated or documented. The Director of Quality Improvement (DQI) concluded that the nurses involved demonstrated indisputable deficiency in caring for the catheterized patient. Mandatory education on best practices for decreasing catheter-associated urinary tract infection and subsequent urosepsis was provided to all medical-surgical staff via peer-reviewed journal articles and a computerized quiz. In addition, a goal to decrease average patient catheter days was established by the DQI and the medical-surgical unit manager.

As a related case, this exemplar contains some of the defining attributes of leading change (individual leadership, operational support, and organizational learning), but is missing several others (collective leadership, fostering relationships, and balance) (Walker & Avant, 2011). The DQI did not communicate with any of the nurses involved, resulting in a premature conclusion that the root cause was lack of education. Furthermore, the frontline nurses were not involved in establishing the goal, resulting in a lack of collective leadership. The DQI in this case lacked balance, leaning too heavily on individual leadership and operational support, which may result in an erosion of trust with her staff nurse colleagues for future problem solving. This case is an example of the related concept, directing change. While change may be accomplished in the short term, sustaining the change may be difficult.

### **Antecedents and Consequences**

The next step in concept analysis is identifying antecedents (events or incidents that occur prior to the occurrence of the concept) and consequences (outcomes of the concept) (Walker & Avant, 2011).

**Antecedents.** This analysis revealed two antecedents to leading change: external and internal driving forces, and organizational readiness. External or internal driving forces vary widely and are often embedded in multi-layered contexts, but uniformly they bring about an

awareness of the need for change (Witlock, 2009). Examples of external driving forces include mergers (Kavanagh & Ashkanasy, 2006; Salmela et al., 2012); economic forces (Bowen & Inkpen, 2009; Shanley, 2007); or pressures from informed healthcare consumers and national regulation and quality performance organizations, such as the National Quality Forum, the Leapfrog Group, and the Joint Commission (Bingham & Main, 2010). These outside organizations can be effective antecedents for leading change by allowing leaders to shift more quickly from focusing on *why* a change is needed to discussions of *how* best to implement the change (Bingham & Main, 2010).

Many other driving forces exist that may be embedded in multi-layered contexts. For example, an unanticipated H1N1 outbreak that occurred concurrently with significant shortages in funds and supplies became a catalyst for leading change from a direct care model to population-based interventions for six county public health departments in two states in the northwest (Reyes et al., 2014). Examples of internal driving forces include: a hospital committing to lead change to achieve Magnet<sup>®</sup> designation (Havens & Johnston, 2004), staff nurses leading change in the creation of a hospital wellness program to promote a healthy work environment (Sanders, Krugman, & Schloffman, 2013), and frontline nurse leaders implementing quality improvement projects on maternity units (Bingham & Main, 2010).

Organizational readiness is a second antecedent for leading change. Approximately half of all change initiatives fail because organizational leaders neglect to establish sufficient readiness for change (Kotter, 1996). Organizational readiness for change is defined as ‘the extent to which organizational members are psychologically and behaviorally prepared to implement organizational change’ (Weiner et al., 2008, p. 381). The need for assessing organizational readiness is evidenced in nursing through the RWJ Executive Nurse Leaders

Fellow Program. This program asserts that the start of any change process should begin with comprehensive scanning, a review of the internal and external landscape, examination of trends and opportunities, and an assessment of the organization's readiness for change (Morjikian & Bellack, 2005). An organization that exhibits readiness for change is an adaptive system (Hemp & Stewart, 2004) primed to embrace change (Bouckenooghe, Devos, & Van den Broeck, 2009).

**Consequences.** The consequences of leading change include improved organizational performance and outcomes, and new organizational culture and values. Improved organizational performance is specific to the aims of the change effort. Healthcare organizations that successfully lead change see improved organizational outcomes such as increased quality of care, increased efficiency, retained valuable employees, increased patient satisfaction, reduced costs, and gains in market share (Weiner et al., 2008). For example, a significant reduction in race-based mortality disparities was achieved when clinicians were responsible for leading change in local health department services (Bekemeier, Grembowski, Yang, & Herting, 2012). Grassroots efforts to lead change have resulted in new state laws that expand opportunities for nurses to practice to the full extent of their education and training and increased numbers of baccalaureate-prepared nurses entering the workforce (Future of Nursing: Campaign for Action, 2015).

A second consequence of leading change consistently identified in the literature was the institutionalization of a new organizational culture and values (Bowen & Inkpen, 2009; Harris, 2006; Hemp & Stewart, 2004; Kotter, 2007; Salmela et al., 2012; Witlock, 2009). Having successfully been immersed in the leading change process, the organization adopts a new culture that may be more long-term focused, innovation seeking, and primed to see risks as opportunities for advancement (Bowen & Inkpen, 2009). The institutionalization of the change initiative is

achieved when it moves from being perceived as an *innovation* to becoming *just the way we operate*. Leading change in nursing has led to new cultural values and norms such as justice, respect, and evidence-based practice (Salmela et al., 2012).

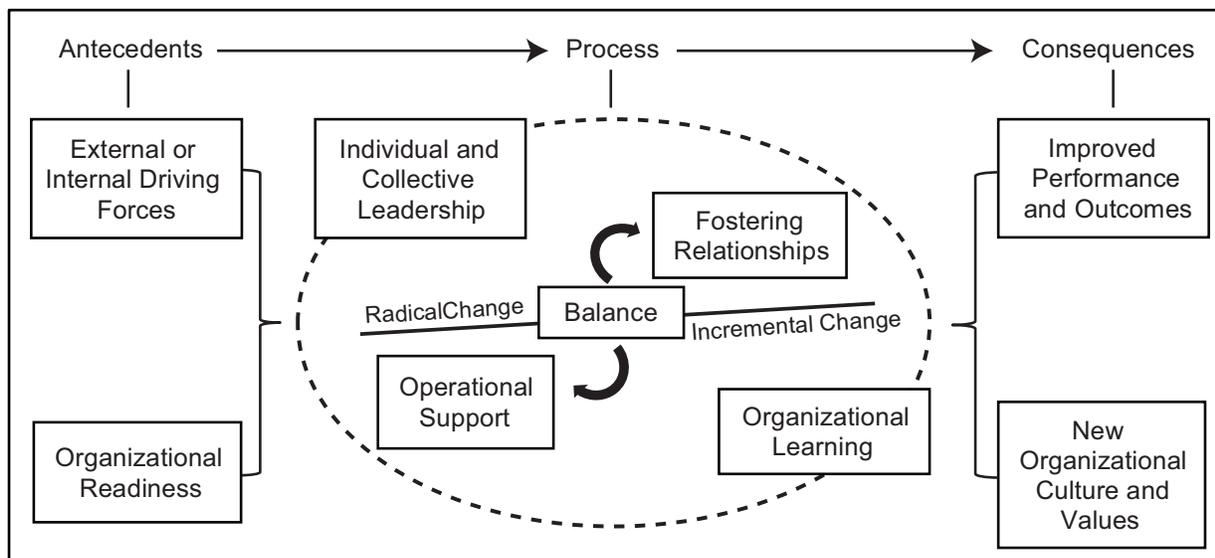
### **Empirical Referents**

The final step the in Walker and Avant (2011) method of concept analysis is identifying empirical referents. The Multifactor Leadership Questionnaire (MLQ) is suited particularly well to measuring organizational learning (Vera & Crossan, 2004), a defining attribute of leading change. The MLQ is one of the most widely used instruments for measuring transformational/transactional leadership (Diaz-Saenz, 2011). It can be used to measure which type of leadership is present and to what degree during the process of leading change. Because leading change involves guiding in direction, course, action, opinion, or otherwise, it also is important to measure stakeholders' commitment to the change process in order to more effectively lead. Herscovitch and Meyer (2002) developed the Commitment to Change instrument that measures affective commitment (supporting the change because you believe in its benefits), continuance commitment (supporting the change because you recognize there will be repercussions if you do not), and normative commitment (supporting the change because it's the right thing to do) (Herscovitch & Meyer, 2002). This instrument was developed through testing with nurses and has demonstrated high internal consistency and reliability.

### **Discussion**

This paper analyzed the concept of leading change and situated it within the context of nursing and healthcare systems. Based on this concept analysis, a conceptual model of leading change is proposed in Figure 2.3. Leading change is a complex process where nurses individually and collectively balance paradoxical priorities to provide operational support, foster

relationships, and facilitate organizational learning to achieve improved performance and outcomes and new organizational culture and values. Leading change originates from external or internal driving forces and requires organizational readiness characteristic of adaptive systems. This analysis contributes to the development of a mid-range descriptive theory that can bridge the gap between theory and nursing practice (Peterson & Bredow, 2013).



*Figure 2.3.* Conceptual model of leading change. Dotted line denotes the dynamic, fluid, nonlinear process of leading change. Curved arrows and diagonal lines denote a balancing gyroscope.

Leadership and change, while at first may appear to be inextricably intertwined, can be disentangled when one considers the antonyms of change, remain and permanence (Webster's Encyclopedic Unabridged Dictionary of the English Language, 1996a). While leadership frequently centers on change, it also is required to achieve permanence in positive outcomes or to remain grounded in the mission of the organization, community, or system. Leadership is about guiding both to *change* and *maintain* the direction, course, action, opinion, and thus, operational life of a system. This requires change *and* permanence (e.g., the permanence of a safety culture). Leadership is a 'yes and' rather than an 'either or'. Thus, the concept of leading change can be

situated within a broader leadership theoretical framework that describes, explains, or predicts how change and permanence are achieved, sometimes consecutively but more often concurrently.

Many leadership theories to date have predominately focused on a single factor, the leader, and their ability to exert their authority, charisma, or influence to linearly move followers through change (Shanley, 2007). These theoretical frameworks are proving insufficient in describing and explaining the complex realities of leadership today (Uhl-Bien & Marion, 2011); an idea supported by the findings of this concept analysis. The concept of leading change incorporates a diverse set of leadership skills that must be effectively balanced throughout the change initiative if the process is to succeed (Salmela et al., 2012; Witlock, 2009). Several leadership scholars are calling for a paradigm shift from studies of who a leader *is* (e.g., authentic, transformational, charismatic) to what a leader *does* (the behavioral processes that generate change). Leading change in health care is a system-wide effort that requires leadership and interaction at all levels, from the bedside to the boardroom. These findings fit well within the theoretical frameworks of organizational theory (Parry, 2011) and complexity leadership theory (Uhl-Bien, Marion, & McKelvey, 2007).

According to organizational theory, leadership may be understood as the result of relationships between people and the social processes that shape organizations (Parry, 2011). When individuals identify themselves as part of a collective, they endorse group values, goals, and behaviors, which enhance their motivation to contribute to the greater organizational good. Much of traditional change management literature has focused on resistance to change. However, resistance to change does not have to be a given, or a defining attribute. When those

who are affected by the change are involved in the process, engagement and learning increase, as does the quality of the outcome (Nelson et al., 2007; Witlock, 2009).

Complexity leadership theory posits that leadership is socially constructed, occurs throughout the organization, and in the presence of adaptive challenges, challenges that require new learning, innovation, and new patterns of behavior (Uhl-Bien et al., 2007). This theory describes the three leadership functions that exist in knowledge producing, bureaucratic-based systems such as health care: administrative leadership, enabling leadership, and adaptive leadership. Administrative leaders serve to coordinate the organization's macro-structures and activities (e.g., developing reporting relations, policies, and vision building; garnering organizational resources). Adaptive leadership is enacted by frontline leaders who continuously learn, adapt, and generate new processes in the face of continuously emerging challenges. At the meso level, enabling leaders create the container for change by balancing the stability of the superstructure provided by administrative leadership and the dynamic conditions needed for creative problem solving by adaptive leaders at the frontline (Uhl-Bien et al., 2007).

### **Limitations**

A limitation of this concept analysis was that it was largely driven from the perspective of those in formal leadership roles (e.g., nurse managers, nursing directors, CNOs, and CEOs). While the literature consistently identified collective leadership as a defining attribute of leading change, only two studies (Bingham & Main, 2010; Sanders et al., 2013) examined the concept of leading change from the perspective of frontline nurse leaders or the system as a whole. Additionally, this analysis included expert discussion in addition to empirical studies. While this approach provided a broader understanding of the concept of leading change, restricting the analysis to empirical literature only may have supported more objective findings.

## **Conclusion**

Nurses comprise the largest segment of the healthcare workforce. As a discipline that operates from a holistic ontology and epistemology, nursing is concerned with determinants of health across the continuum of care. Therefore, nursing is poised to lead change in a wide array of healthcare contexts, including organizational change, social change, and policy change at unit, organization, community, national, and global levels. Organizations, whether manufacturing or service-oriented in nature, are inherently social systems comprising work, people, and formal and informal systems (Kavanagh & Ashkanasy, 2006). Leading change is, by its very nature, a social, dynamic, and interactive process. As such, the concept of leading change may be best understood by examining the individual and collective actions of nurses at the micro, meso, and macro level of a system. The literature included in this analysis described the executive level nurse's perspective on how the organization leads change, giving credit to individuals at all levels, but falling short of including their actual voices. Future qualitative studies are recommended that explore the concept of leading change at all levels, from both an individual nurse perspective and the collective whole. This understanding would further the advancement of leading change practices, education, theory, and research. From this, empirically derived policies and programs that prepare and enable nurses to lead change to advance the health of individuals, communities, populations, and systems may be realized.

### **Acknowledgements**

The authors thank Dr. Marjorie J. Bott for her valuable insight in recommending the addition of the conceptual model of leading change to this manuscript.

## References

- Alexander, J. A., Comfort, M. E., Weiner, B. J., & Bogue, R. (2001). Leadership in collaborative community health partnerships. *Nonprofit Management and Leadership, 12*(2), 159-175.
- Anderson, D. L. (2015). *Organizational development: The process of leading organizational change* (3rd ed.). Thousand Oaks, CA: Sate Publications, Inc.
- Bekemeier, B., Grembowski, D., Yang, Y., & Herting, J. R. (2012). Leadership matters: Local health department clinician leaders and their relationship to decreasing health disparities. *Journal of Public Health Management and Practice, 18*(2), E1-E10.
- Bhandari, M. W., Scutchfield, F. D., Charnigo, R., Riddell, M. C., & Mays, G. P. (2010). New data, same story? Revisiting studies on the relationship of local public health systems characteristics to public health performance. *Journal of Public Health Management and Practice, 16*(2), 110-117.
- Bingham, D., & Main, E. K. (2010). Effective implementation strategies and tactics for leading change on maternity units. *The Journal of Perinatal & Neonatal nursing, 24*(1), 32-42.
- Boswell, C., & Cannon, S. (2005). New horizons for collaborative partnerships. *OJIN: The Online Journal of Issues in Nursing, 10*(1).
- Bouckenooghe, D., Devos, G., & Van den Broeck, H. (2009). Organizational change questionnaire—climate of change, processes, and readiness: Development of a new instrument. *The Journal of Psychology, 143*(6), 559-599.
- Bowen, D. E., & Inkpen, A. C. (2009). Exploring the role of “global mindset” in leading change in international contexts. *The Journal of Applied Behavioral Science, 45*(2), 239-260.
- Bunker, K. A. (2006). Leading change: A balancing act. *Nurse Leader, 4*(1), 43-45.  
doi:<http://dx.doi.org/10.1016/j.mnl.2006.01.004>

- Centers for Medicare & Medicaid Services. (2014). State innovation models initiative round 2 fact sheet. Retrieved from <http://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2014-Fact-sheets-items/2014-05-22.html>
- Crossan, M. M., Lane, H. W., & White, R. E. (1999). An organizational learning framework: From intuition to institution. *Academy of Management Review*, 24(3), 522-537.
- Daft, R. L., & Weick, K. E. (1984). Toward a model of organizations as interpretation systems. *Academy of Management Review*, 9(2), 284-295.
- Diaz-Saenz, H. R. (2011). Transformational leadership. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE handbook of leadership* (pp. 299-310). London EC1Y 1SP: SAGE Publications Ltd.
- Duffield, C. M., Roche, M. A., Homer, C., Buchan, J., & Dimitrelis, S. (2014). A comparative review of nurse turnover rates and costs across countries. *Journal of Advanced Nursing*, 70(12), 2703-2712. doi:10.1111/jan.12483
- Future of Nursing: Campaign for Action. (2015). 2015 campaign progress - dashboard indicators. Retrieved from <http://www.slideshare.net/consumernursing/2015-dashboard-final-52715>
- Harris, A. (2006). Leading change in schools in difficulty. *Journal of Educational Change*, 7(1-2), 9-18. doi:10.1007/s10833-006-0009-0
- Havens, D. S., & Johnston, M. A. (2004). Achieving Magnet hospital recognition: Chief nurse executives and Magnet coordinators tell their stories. *Journal of Nursing Administration*, 34(12), 579-588.
- Hemp, P., & Stewart, T. A. (2004). Leading change when business is good. (cover story) (Vol. 82, pp. 60-70): Harvard Business School Publication Corp.

- Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology, 87*(3), 474-487.
- Institute of Medicine. (2000). *To err is human: Building a safer health system*. Washington, D.C.: The National Academies Press.
- Institute of Medicine. (2001). *Crossing the quality chasm: A new health system for the 21st century*. Washington, D.C.: The National Academies Press.
- Institute of Medicine. (2003). *Health professions education: A bridge to quality*. Washington, D.C.: The National Academies Press.
- Institute of Medicine. (2004). *Keeping patients safe: Transforming the work environment of nurses*. Washington, D.C.: The National Academies Press.
- Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. Washington, D.C.: The National Academies Press.
- Kan, M. M., & Parry, K. W. (2004). Identifying paradox: A grounded theory of leadership in overcoming resistance to change. *The Leadership Quarterly, 15*(4), 467-491.  
doi:<http://dx.doi.org/10.1016/j.leaqua.2004.05.003>
- Karp, T. (2006). Transforming organisations for organic growth: The DNA of change leadership. *Journal of Change Management, 6*(1), 3-20. doi:10.1080/14697010600565186
- Kavanagh, M. H., & Ashkanasy, N. M. (2006). The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger. *British Journal of Management, 17*(S1), S81-S103.
- Kotter, J. P. (1996). *Leading change*. Boston, MA: Harvard Business School Press.
- Kotter, J. P. (2007). Leading change why transformation efforts fail. *Harvard Business Review, 92*-107.

- Lindberg, C., & Lindberg, C. (2008). Nurses take note: A primer on complexity science. In C. Lindberg, S. Nash, & C. Lindberg (Eds.), *On the edge: Nursing in the age of complexity* (pp. 23-48). Bordentown, NJ: Plexus Press.
- Maxwell, P. D. (2009). Resistance to change and change management. In N. Borkowski (Ed.), *Organizational behavior, theory, and design in health care* (pp. 355-382). Sudbury, MA: Jones and Bartlett Publishers.
- Morjikian, R., & Bellack, J. (2005). The RWJ executive nurse fellows program, part 1: Leading change. *Journal of Nursing Administration*, 35(10), 431-438.
- Morjikian, R. L., Kimball, B., & Joynt, J. (2007). Leading change: The nurse executive's role in implementing new care delivery models. *Journal of Nursing Administration*, 37(9), 399-404.
- Nelson, E. C., Batalden, P. B., & Godfrey, M. M. (2007). *Quality by design: A clinical microsystems approach*. San Francisco, CA: Jossey-Bass.
- Nowell, B., & Harrison, L. M. (2010). Leading change through collaborative partnerships: A profile of leadership and capacity among local public health leaders. *Journal of Prevention & Intervention in the Community*, 39(1), 19-34.
- Parry, K. W. (2011). Leadership and organizational theory. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE handbook of leadership* (pp. 53-70). London EC1Y 1SP: SAGE Publications Ltd.
- Peters, L. (2012). The rhythm of leading change: Living with paradox. *Journal of Management Inquiry*, 21(4), 405-411. doi:10.1177/1056492612454456
- Peterson, S. J., & Bredow, T. S. (Eds.). (2013). *Middle range theories: Application to nursing research* (3rd ed.). Philadelphia, PA: Wolters Kluwer Lippincott Williams & Wilkins.

- Reyes, D. J., Bekemeier, B., & Issel, L. M. (2014). Challenges faced by public health nursing leaders in hyperturbulent times. *Public Health Nursing, 31*(4), 344-353.  
doi:10.1111/phn.12078
- Ridenour, N., & Trautman, D. (2009). A primer for nurses on advancing health reform policy. *Journal of Professional Nursing, 25*(6), 358-362.  
doi:http://dx.doi.org/10.1016/j.profnurs.2009.10.003
- Robert Wood Johnson Foundation (Writer). (2012). Jeffrey Brenner's revolutionary approach to improving health care delivery [YouTube Video]. In Robert Wood Johnson Foundation (Producer).
- Salmela, S., Eriksson, K., & Fagerstrom, L. (2012). Leading change: A three-dimensional model of nurse leaders' main tasks and roles during a change process. *Journal of Advanced Nursing, 68*(2), 423-433. doi:10.1111/j.1365-2648.2011.05802.x
- Sanders, C. L., Krugman, M., & Schloffman, D. H. (2013). Leading change to create a healthy and satisfying work environment. *Nursing Administration Quarterly, 37*(4), 346-355.  
doi:10.1097/NAQ.0b013e3182a2fa2d
- Schifalacqua, M., Costello, C., & Denman, W. (2009). Roadmap for planned change, part 1: Change leadership and project management. *Nurse Leader, 7*(2), 26-52.  
doi:http://dx.doi.org/10.1016/j.mnl.2009.01.003
- Senge, P., Ross, R., Smith, B., Roberts, C., & Kleiner, A. (1994). *The fifth discipline fieldbook: Strategies and tools for building a learning organization*. New York, NY: Doubleday.
- Shanley, C. (2007). Management of change for nurses: Lessons from the discipline of organizational studies. *Journal of Nursing Management, 15*(5), 538-546.

- Spence, Wong, C. A., & Grau, A. L. (2013). Authentic leadership, empowerment and burnout: A comparison in new graduates and experienced nurses. *Journal of Nursing Management*, 21(3), 541-552. doi:10.1111/j.1365-2834.2012.01375.x
- Uhl-Bien, M., & Marion, R. (2011). Complexity leadership theory. In A. Bryman, D. Collinson, K. Grint, B. Jackson, & M. Uhl-Bien (Eds.), *The SAGE handbook of leadership* (pp. 468-479). London EC1Y 1SP: SAGE Publications Ltd.
- Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly*, 18(4), 298-318. doi:http://dx.doi.org/10.1016/j.leaqua.2007.04.002
- Vera, D., & Crossan, M. (2004). Strategic leadership and organizational learning. *Academy of Management Review*, 29(2), 222-240.
- Walker, L. O., & Avant, K. C. (2011). Concept analysis. *Strategies for theory construction in nursing* (5th ed., pp. 157-179). Upper Saddle River, NJ: Pearson Prentice Hall.
- Webster's Encyclopedic Unabridged Dictionary of the English Language. (Ed.) (1996a)  
Webster's Encyclopedic Unabridged Dictionary of the English Language (Deluxe ed.).  
Avenel, NJ: Gramercy
- Webster's Encyclopedic Unabridged Dictionary of the English Language. (Ed.) (1996b)  
Webster's Encyclopedic Unabridged Dictionary of the English Language (Deluxe ed.).  
Avenel, NJ: Gramercy
- Weick, K. E., & Sutcliffe, K. M. (2007). *Managing the unexpected: Resilient performance in an age of uncertainty* (2nd ed.). San Francisco, CA: Jossey-Bass.
- Weiner, B., Amick, H., & Lee, S.-Y. (2008). Conceptualization and measurement of organizational readiness for change: A review of the literature in health services research

and other fields. *Medical Care Research and Review*, 65(4), 379-436.

doi:10.1177/1077558708317802

Witlock, J. (2009). Transformational change and development. In J. A. Johnson (Ed.), *Health organizations: Theory, behavior, and development* (pp. 291-310). Sudbury, MA: Jones and Bartlett Publishers.

## CHAPTER 3

### **Leading Change: A Case Study of First Independent Critical Access Hospital to Achieve Magnet<sup>®</sup> Designation**

This manuscript is a case study report of the first independent critical access hospital (CAH) to achieve Magnet<sup>®</sup> designation and their efforts to lead change to achieve Magnet<sup>®</sup> standards. The manuscript will be submitted to the *Journal of Nursing Administration* for publication consideration. The primary author will be Heather V. Nelson-Brantley and co-authors will include Debra J. Ford, Karen L. Miller, Kristin Stegenga, Bob Lee, and Marjorie J. Bott.

### Abstract

**Objective.** To understand how nurses in one Midwestern 25-bed hospital led change to become the first independent critical access hospital (CAH) to achieve Magnet<sup>®</sup> designation.

**Background.** Approximately 21% of the U.S. population lives in rural areas served by CAHs. Nurse leaders in CAHs are particularly challenged with limited resources.

**Methods.** Positive deviance was used for this index case study. Individual interviews, focus groups, observation, documents and artifacts were collected and qualitative thematic analysis used to identify themes.

**Results.** Nine themes emerged to support a conceptual model of leading change: driving forces, organizational readiness, individual and collective leadership, organizational learning, operational support, fostering relationships, balance, improved performance and outcomes, and new organizational culture and values.

**Conclusions.** The journey to Magnet<sup>®</sup> leads to improved nurse and patient outcomes, and new organizational values of shared governance, evidence-based practice, and higher education.

Magnet<sup>®</sup> standards should be every nurse executive's goal, whether leading a 25-bed hospital or a 1,500-bed hospital.

## Introduction

Calls for improving the safety and quality of patient care in hospitals abound since the release of the landmark Institute of Medicine's (IOM) (2000) report, *To Err Is Human*, which identified that as many as 98,000 people a year were dying as a result of preventable medical error. More recently, nurses have been called to take a prominent role in leading change to transform hospitals to provide more efficient, effective, and patient-centered care (IOM, 2011). This is an especially challenging goal for nurses in rural critical access hospitals (CAHs). The Magnet<sup>®</sup>-designated hospital has become a universal symbol for high quality nursing care and superior outcomes (Lacey et al., 2007), yet little is known about how nurses lead change to achieve Magnet<sup>®</sup> standards. This is a study report of the first independent CAH to achieve Magnet<sup>®</sup> designation. Understanding *how* and *why* this hospital was successful may offer new insights for other CAHs seeking to improve patient, nurse, and organizational outcomes.

## Background

Approximately 21% of the U.S. population lives in rural areas (United States Census Bureau, 2014). Small CAHs (defined as having 25 or fewer inpatient beds) account for 61% of all rural hospitals (Moss, Holmes, & Pink, 2015) and are essential to the provision of health care in these areas (Doeksen, St. Clair, & Eilrich, 2012). Yet nurses in CAHs face numerous challenges in their ability to provide high quality care, including financial constraints (Ona & Davis, 2011), limited resources and knowledge (Flex Monitoring Team, 2004), staffing shortages (Moscovice & Stensland, 2002), recruitment and retention (Collins, 2016), and frequent chief executive officer (CEO) turnover (Leibert & Leaming, 2010).

A wealth of evidence supports that Magnet<sup>®</sup>-designated hospitals provide exceptional nursing care with superior patient (Aiken, Smith, & Lake, 1994; Bergquist-Beringer, Dong, He,

& Dunton, 2013; Everhart et al., 2014; Kutney-Lee et al., 2015; McHugh et al., 2013), nurse (Gardner, Thomas-Hawkins, Fogg, & Latham, 2007; Hess, DesRoches, Donelan, Norman, & Buerhaus, 2011; Kelly, McHugh, & Aiken, 2011; Lacey et al., 2007; Stimpfel, Rosen, & McHugh, 2014), and organizational outcomes (Smith, 2014). It has been suggested that hospitals undergo transformational changes in their journey to achieve Magnet<sup>®</sup> designation that leads to superior outcomes (Hess et al., 2011). Yet understanding how nurses lead change to achieve the outcomes associated with Magnet<sup>®</sup> remains an underexplored area of research.

Hospitals seeking Magnet<sup>®</sup> designation must pass a rigorous application and evaluation process that includes providing approximately 100 sources of evidence to the American Nurses Credentialing Center (ANCC) in the areas of: (a) transformational leadership, (b) structural empowerment, (c) exemplary professional practice, (d) new knowledge, innovations, and improvements, and (e) empirical outcomes (ANCC, 2013). Less than 7% (approximately 420) of hospitals in the U.S. have achieved Magnet<sup>®</sup> status (ANCC, 2014). While this may seem like a significant achievement for midsize and larger hospitals, it becomes almost an unimaginable feat for CAHs. The 25-bed CAH in this study was the first, and to the researchers' knowledge, remains the only independent CAH to achieve Magnet<sup>®</sup> designation (Waverly Health Center, 2015b).

### **Purpose**

The purpose of this qualitative, index case study was to understand how nurses at all levels of one 25-bed CAH led change to become the first independent CAH to achieve Magnet<sup>®</sup> designation. The primary research questions were:

1. How did nurses at all levels of the organization individually and collectively lead change to achieve Magnet<sup>®</sup> designation?

2. Why was this CAH successful in leading change to become the first independent CAH to achieve Magnet<sup>®</sup> designation?

### **Conceptual Framework**

This study was guided by the conceptual model of leading change (Nelson-Brantley, Ford, & Frank-Ragan, 2016) and underpinned by general systems theory (von Bertalanffy, 1975). The conceptual model of leading change describes how internal and external driving forces bring about an awareness of the need or opportunity for organizational change. A system must exhibit organizational readiness, the psychological and behavioral capacity for change, before engaging in the change process. From there, the process of leading change includes five key attributes: (a) individual and collective leadership, (b) organizational learning, (c) operational support, (d) fostering relationships, and (e) balance. Done successfully, leading change results in improved performance and outcomes and new organizational culture and values. General systems theory is grounded in a holistic ontology and epistemology that asserts a system is greater than the sum of its parts (von Bertalanffy, 1975). To understand how the system functions, one must study the *networks* (the set of relationships, personal interactions, and connections among participants) and the *community* (a shared identity around a topic or set of challenges) that shapes it (Patton, 2015).

### **Methods**

#### **Design and Sampling**

This qualitative, index case study (Patton, 2015) used an embedded case study design to explore the phenomenon of leading change from multiple levels within and outside the organization. Case study is the preferred research method for answering *how* or *why* questions about a specific contemporary event, or set of events, especially when the researcher has little or

no control over the variables of interest (Yin, 2014). A hospital is a dynamic, social system made up of micro, meso, and macro levels that are interactive and interdependent (Anderson, Crabtree, Steele, & McDaniel, 2005; Nelson, Batalden, & Godfrey, 2007). An embedded case study design enables the researcher to explore the hospital case from multiple levels or perspectives (Yin, 2014) (e.g., frontline staff, managers, and administrative leaders) to understand how nurses individually and collectively lead change of the hospital as a whole.

Positive deviance purposive sampling was used to identify the Midwestern CAH. Positive deviant cases are information-rich because they offer rare insights into understanding challenging phenomena from the perspective of outstanding success (Patton, 2015). Inclusion criteria included rural (population < 50,000) hospitals that received initial Magnet<sup>®</sup> designation in 2014 or more recently. Hospitals that achieved Magnet<sup>®</sup> re-designation were not eligible, because the focus of this study was on leading change rather than maintaining excellence. Magnet<sup>®</sup>-seeking hospitals were ineligible because the effectiveness of their efforts to lead change are unknown. Using the inclusion criteria led to the identification of the index case.

### **Study Site**

Waverly Health Center is a 25-bed CAH located in the Midwestern U.S. At the time of Magnet<sup>®</sup> designation (2014), the hospital had 444 employees, including 131 registered nurses (RNs), and 297 volunteers. That year, the hospital had 1,998 ambulance calls, 260 newborn admissions, 140 inpatient surgeries, 1,917 outpatient surgeries, 6,939 emergency department visits, 55,877 total outpatients, and 901 inpatients. Average daily operations costs were \$132,003 (Waverly Health Center, 2014, 2015a).

While many rural hospitals have been forced to close their doors or turn over control to larger hospital systems, Waverly Health Center has remained independently owned and operated

for over 100 years. This is a factor they find critical to ensuring their ability to provide health care services that meet the needs of the local community, including a birthing center; family, walk-in and women's health clinics; medical spa; cardiac rehabilitation; complementary integrative therapies (e.g., aromatherapy, massage therapy, music therapy, pet therapy, Reiki); and community service programs (e.g., diabetes support group, health screenings, tobacco prevention). The hospital is situated within a 435-square mile town with a population of 9,874. The town is home to one college with 1,900+ students, of which 1,700 live on campus (Waverly Health Center, 2013).

### **Recruitment and Data Collection**

Access to the site was granted following the researcher establishing rapport through an in-person meeting with nursing administrative leaders. The researcher coordinated with the chief nursing officer (CNO) and director of nursing (DON) to identify and invite individuals to participate. Inclusion criteria for individual participants were: licensed nurses and other hospital employees who worked full or part-time and were consistently employed by the hospital for at least four months prior to the hospital achieving Magnet<sup>®</sup> designation. Individuals that were recruited by the hospital and served as external consultants to assist with the Magnet<sup>®</sup> application process also were eligible.

Data were collected from January through March 2016 from in-depth individual interviews ( $N = 6$ ); focus groups ( $N = 3$ ); unstructured observation (21 hours); documents (e.g., Magnet<sup>®</sup> application files, re-designation survey, National Database of Nursing Quality Indicators<sup>®</sup> [NDNQI<sup>®</sup>] data, hospital and nursing annual reports); and artifacts (e.g., Magnet<sup>®</sup> headband). A full description of the case was the primary goal rather than data saturation; therefore, data were collected from all available and willing participants. Unstructured

observation data were collected from all hospital units (medical-surgical, birthing center, emergency department [ED], and surgery complex) and clinics (family medicine, orthopedic, cardiac, and women's health), as well as CNO and DON meetings and activities.

Following approval by the researchers' Midwestern academic medical center Human Subjects Committee, interviews and focus groups were conducted that were semi-structured with broad open-ended questions (see Table 3.1) to ensure that bias from the conceptual framework was not introduced into the data. Six individual interviews were conducted in person ( $n= 3$ ) or over the phone ( $n = 3$ ) at a place of the participant's choosing. Focus groups were conducted in person in a private meeting room located within the hospital to accommodate participant work schedules. All interviews and focus groups were approximately one hour in length, were audio recorded and transcribed verbatim by a professional transcriptionist. Informed consent was obtained by the primary researcher from all study participants. To protect confidentiality, participant names were replaced with pseudonyms known only by the researchers.

Table 3.1

*Interview Guide Questions*

- 
1. Think back to the time when your hospital was seeking Magnet<sup>®</sup> designation. Tell me about what that experience was like from your perspective. (Probes: Tell me your Magnet<sup>®</sup> journey story.)
  2. Describe your role in achieving Magnet<sup>®</sup>. (Probe: What or how did you contribute?)
  3. Describe your greatest challenge during the pursuit for Magnet<sup>®</sup> designation. (Follow up: What strategies, if any, did you use to address this challenge?)
  4. Tell me about why you think your hospital was successful in achieving Magnet<sup>®</sup> designation.
  5. What was the most important thing you learned from the experience of applying for Magnet<sup>®</sup>? (Follow up: Why was this important to you?)
  6. In what way(s), if any, were you changed professionally as a result of the journey to Magnet<sup>®</sup>? (Follow up: In what way(s), if any, has your organization changed?)
  7. Tell me about what gains, if any, you experienced during the Magnet<sup>®</sup> application time period.
  8. Tell me about what losses, if any, you experienced during the Magnet<sup>®</sup> application time period.
  9. Tell me about how the costs of applying for Magnet<sup>®</sup>, both in terms of application fee and organizational change processes, were viewed by others in the organization (e.g., CEO, CFO, hospital board, physicians, staff). (Follow up: How were they viewed by you?)
- 

*Note.* CEO = Chief executive officer. CFO = Chief financial officer.

**Data Analysis**

Qualitative thematic analysis was used to analyze interview and focus group data. Data analysis occurred concurrently with data collection and continued in an iterative fashion (Polit & Beck, 2012; Thorne, 2000). Transcribed interviews were checked for accuracy against their corresponding audio recording. Following the recommendations of Patton (2015) and Yin (2014) for embedded case study analysis, each interview and focus group was analyzed first as its own subunit and then cross-analyzed and integrated into an analysis and interpretation of the

larger case. Each transcript was deconstructed into meaning units, condensed meaning units, and codes. Similar codes were grouped into categories and themes (Patton, 2015). NVivo (QSR International, 2015) was used to assist the researcher in establishing an organized audit trail of the coding and analysis process.

Trustworthiness and methodological rigor were supported through careful adherence to credibility, dependability, confirmability, transferability, and authenticity criteria (Guba & Lincoln, 1994; Lincoln & Guba, 1985). The inclusion of multiple types of data reduced the inherent weakness of any individual data source (Patton, 2015). A single researcher completed all interviews, followed by peer debriefing with two experienced qualitative researchers. Member checking occurred at the end of interviews and focus groups, and in sharing themes and subthemes with the CNO and DON. The primary researcher engaged in reflexivity, critically examining how her personal values, beliefs, and experiences as well as those of the participants influenced data collection, analysis and interpretation (Patton, 2015). Transferability was supported by a holistic story built from thick description and balanced interpretation (Lincoln & Guba, 1985). Authenticity was supported by the inclusion of stakeholder voices from all levels of the organization (Guba & Lincoln, 1994).

## **Results**

Twenty-seven individuals participated in individual interviews ( $n = 6$ ) or focus groups ( $N = 3$ ) (see Table 3.2). Participants included staff nurses, nurse managers, interprofessional care providers, and hospital administration with representation from all areas of patient care. All participants were Caucasian and predominately female (24/27; 88.9%). Highest educational degrees were as follows: (a) 60% (3/5) of staff nurses held baccalaureate degrees, and one was seeking a baccalaureate degree; (b) all nurse managers (9/9) were baccalaureate-prepared with

one seeking a master's degree; (c) 28.6% (2/7) of interprofessional care providers held doctoral degrees, 42.6% (3/7) held master's degrees, and 28.6% (2/7) held baccalaureate degrees; and (d) 33.3% (2/6) of hospital administrative leaders held doctoral degrees with the remaining 66.7% (4/6) being master's-prepared. Participants in administrative leader positions had 3->30 years of experience in leadership.

Table 3.2

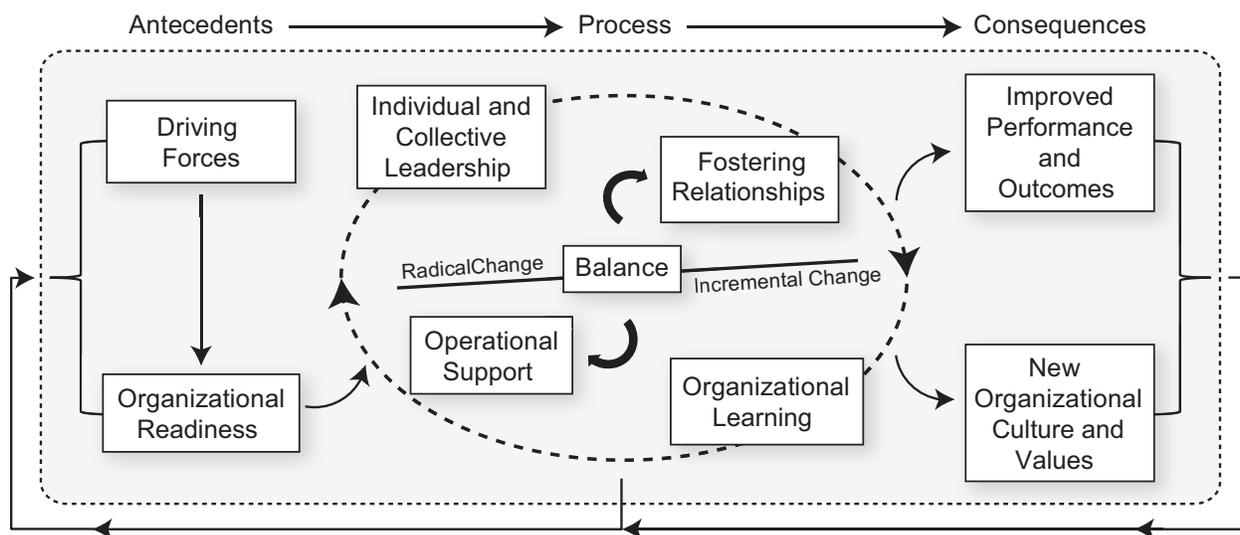
*Participant Demographics (N = 27)*

Position	<i>n</i>	Age <i>M (Range)</i>	Years in Practice <i>M (Range)</i>	Years Employed <i>M (Range)</i>
Staff nurse	5	39.2 (26-57)	11.6 (3-25)	10.5 (3-22)
Nurse manager	9	46.2 (28-72)	22.1 (5.5-43)	13.6 (4-37.5)
Interprofessional care provider	7	44.6 (31-57)	19.9 (5.5-36)	4.6 (1*-9)
Hospital administration	6	57.2 (37-71)	34.7 (16-45)	13.15 (2.75-31)

*Note.* Interprofessional care provider included: advanced practice registered nurse (APRN), obstetrics and gynecology physician, surgeon, family medicine physician, certified registered nurse anesthetist, and ambulance service provider. Hospital administration included: chief nursing officer (CNO), director of nursing (DON), nursing education manager, hospital Board of Directors, and Magnet<sup>®</sup> consultant. \* Participant was employed in current position for one year, but was included in study based on previous position in the hospital during Magnet<sup>®</sup> application time period.

## Themes

Nine themes emerged from the data to support a refined conceptual model of leading change (see Figure 3.1): (a) driving forces, (b) organizational readiness, (c) individual and collective leadership, (d) organizational learning, (e) operational support, (f) fostering relationships, (g) balance, (h) improved performance and outcomes, and (i) new organizational culture and values. The shaded background was added to the model to denote the multilayered, dynamic context that leading change is embedded in. New directional arrows also have been added to describe more fully the fluid process of leading change. Directional arrows at the bottom of the model have been added to illustrate how each of the five process themes and two consequences themes act as positive or negative feedback loops that impact the driving forces and organizational readiness for future change. Revisions to the model were based on findings of this study. Findings are reported next by conceptual model theme with subthemes (see Table 3.3).



*Figure 3.1.* Conceptual model of leading change (revised from Nelson-Brantley et al., 2016). Outside shaded area denotes multilayered, dynamic context. Interior dotted oval denotes the fluid, nonlinear process of leading change. Curved arrows with diagonal lines inside the oval denote a balancing gyroscope.

Table 3.3

*Themes and Subthemes*

Themes	Subthemes
Driving forces	<ul style="list-style-type: none"> <li>• External forces</li> <li>• Internal forces</li> </ul>
Organizational readiness	<ul style="list-style-type: none"> <li>• Leadership support</li> <li>• Shared philosophy</li> <li>• Building the structures</li> </ul>
Individual and collective leadership	<ul style="list-style-type: none"> <li>• Change champion</li> <li>• Distributed leadership</li> <li>• Collective action</li> </ul>
Organizational learning	<ul style="list-style-type: none"> <li>• Intuiting</li> <li>• Interpreting</li> <li>• Integrating</li> <li>• Institutionalizing</li> <li>• Applying new knowledge to future change</li> </ul>
Operational support	<ul style="list-style-type: none"> <li>• Decision making</li> <li>• Allocation and assurance of resources</li> <li>• Adaptation of workflows</li> <li>• Strategic planning</li> <li>• Meaningful rewards</li> </ul>
Fostering relationships	<ul style="list-style-type: none"> <li>• Communicating with stakeholders</li> <li>• Providing psychological safety</li> <li>• Telling the story</li> </ul>
Balance	<ul style="list-style-type: none"> <li>• Leadership style flexing</li> <li>• Radical vs. incremental change</li> <li>• Structural vs. human focus</li> </ul>
Improved performance and outcomes	<ul style="list-style-type: none"> <li>• Patient outcomes</li> <li>• Staff outcomes</li> <li>• Organizational performance</li> </ul>
New organizational culture and values	<ul style="list-style-type: none"> <li>• Evidence and standards</li> <li>• Higher education</li> <li>• Professional practice model</li> <li>• Leadership development</li> </ul>

**Driving forces.** External and internal driving forces brought about an awareness of the need and opportunity to lead change at Waverly Health Center. The leading change process, defined in this study as the journey to Magnet<sup>®</sup>, began in 2008 when the CNO attended a Magnet<sup>®</sup> conference. “Initially the thought was it would be really good for recruiting nurses because everybody was desperately short way back when, and we still are, but you know really desperately” (Board of Directors). Nurse recruitment may have been the initial impetus for attending the conference, but the CNO’s vision and belief that her CAH could achieve Magnet<sup>®</sup> became a powerful internal driving force for leading change. As the Nursing Education Manager explained, “She came back to our hospital and was really excited. She thinks that even though we were small, we were mighty and could do just as great things as what the larger hospitals could do.”

**Organizational readiness.** Organizational readiness describes Waverly’s psychological and behavioral capacity to engage in the change process. Three subthemes emerged within this theme: leadership support, building the structures, and shared philosophy. Participants at all levels shared how important it was that they had strong support from administrative leaders. The Board of Directors uses two questions to guide every Waverly decision: 1) does it support quality patient care, and 2) does it support quality staff? Obtaining Magnet<sup>®</sup> clearly supported both. The CEO fully supported the decision to seek Magnet<sup>®</sup>, understanding without question that the potential benefits outweighed any associated costs. Magnet<sup>®</sup>-designated hospitals are expected to have shared governance structures, produce research, and have empirical evidence of high quality patient and nurse outcomes. Building these structures took three years of dedication, ingenuity and networking with external supports. “There was a lot to learn and a lot to develop” (DON).

A shared philosophy of patient-centered care, interprofessional collaboration, innovation, and excellence coalesced to give Waverly a belief that together they could accomplish anything. The expectation at Waverly was that each employee cares for each other in the same way that they care for patients, families, and their community. Waverly Health Center has a rich history of success, including being the ninth hospital in the world to achieve Planetree<sup>®</sup> designation (Planetree, 2014). Despite numerous pressures from other rural CNOs to pursue Pathway to Excellence<sup>®</sup> (ANCC, 2016), the CNO stood firm in her belief that her CAH could achieve Magnet<sup>®</sup> stating, “Why would we go for the bronze if we could go for the gold.”

**Individual and collective leadership.** The journey to Magnet<sup>®</sup> was led by individual change champions, distributed leadership, and collective action. The DON unanimously was identified as *the* change champion who poured her heart and soul into the journey to Magnet<sup>®</sup>. She was credited with designing the hospital’s new professional practice model and building the shared governance structures. A staff nurse shared, “I worked second shift at that time and I would leave at 11:30 pm and she would still be in her office working on it.” Her dedication inspired others, which was essential because it took the whole hospital to make it happen. In larger hospitals, one or more individuals often are hired as full-time Magnet<sup>®</sup> coordinators, dedicated to preparing the hospital and the documentation files for Magnet<sup>®</sup>. Being a 25-bed CAH, Waverly did not have the resources to dedicate a full-time position to working on Magnet<sup>®</sup>. Instead, Waverly used a distributed leadership approach (Spillane, Halverson, & Diamond, 2004) where the nursing unit and clinic managers worked together as a team to collect all of the sources of evidence and write the documents for Magnet<sup>®</sup>.

**Organizational learning.** Organizational learning describes how learning rippled out from individual, to group, to organization during Waverly’s journey to Magnet<sup>®</sup>. Learning

became institutionalized through a creative and fun educational team that referred to themselves as the Magneteers. “We had little horseshoe magnets [sticking] out of antennas on a headband. All of us took turns wearing those walking around the hospital and doing little educational series with whoever we’d run into” (Nursing Education Manager). This institutionalized knowledge is now serving as a positive feedback loop whereby nurses are applying lessons learned to preparations for Magnet<sup>®</sup> re-designation. As part of their strategic planning, Waverly sent out a survey to all employees that included the costs associated with Magnet<sup>®</sup>, asking if they should re-designate. The majority (64%; 70/109) of respondents supported it. As a result, costs for Magnet<sup>®</sup> re-designation have been added to the Waverly Health Center 5-year budget.

**Operational support.** Operational support describes how nurse administrators engaged in decision making and strategic planning to garner resources, make necessary adaptations to workflows and keep the focus on meaningful rewards throughout the journey to Magnet<sup>®</sup>. While the financial costs of Magnet<sup>®</sup> were substantial for this CAH, nursing leaders were able to explain that the costs were well worth the investment:

What we pay Magnet<sup>®</sup>, even with including some consultation, if you look at the annual salary of a nurse it’s probably pretty comparable. So, if we can retain a nurse because we have a strong professional practice environment then that kind of eliminates some of that discussion about cost. (DON)

After receiving administrative support to pursue Magnet<sup>®</sup>, the CNO and DON spent one year conducting a thorough gap analysis and developing a calculated strategic plan. “We did not want to have what we had heard from Magnet<sup>®</sup> organizations about the war rooms and the sleepless nights the last month before submitting” (CNO). One effective strategy unanimously identified by the nurse managers was having a *taskmaster* to keep everyone organized and

accountable for meeting deadlines. “You have to have someone that’s really good at it. Don’t just tell me it might be due on the 1<sup>st</sup> of May and then...hold me accountable” (nurse manager).

Nursing units at Waverly are staffed with 2-4 nurses. The CNO recognized that it would be impossible for those nurses to leave patient care to participate in shared governance councils. In response, Waverly created an adapted workflow that paid staff nurses to attend scheduled practice council days. When it became clear that the nurse managers would not be able to write the Magnet<sup>®</sup> application while at work due to frequent day-to-day interruptions, Waverly adapted the nurse manager workflow to dedicate one 8-hour day per week to working together offsite. The nurse managers reported that this was very effective, and “the only way it got done.”

Every participant shared how the journey to Magnet<sup>®</sup> was never about “the plaque on the wall,” and the CNO helped her organization focus on that. “One big thing that I loved that [our CNO] said was even if we don’t get Magnet<sup>®</sup> we’ve done things that are right for our patients and our staff” (Nursing Education Manager). By focusing on this intrinsic reward rather than extrinsic monetary or recognition rewards, nursing leaders were able to support their staff and collectively unite them in leading change.

**Fostering relationships.** Fostering relationships is a theme that describes the relational process Waverly used in communicating with stakeholders, providing psychological safety, and telling their story through a strong unified voice. As the CNO shared:

The most important thing of any change, really of life itself is communication. You have to have that open communication, that transparency, just to get buy-in. And if they see the passion, if they see the rationale, if they understand the benefits as well as the downfalls, people will be willing to participate.

Staff nurses and interprofessional care providers expressed how they always felt well informed and a part of the process. An interprofessional care provider shared that she completed her residency at a large hospital that was seeking Magnet<sup>®</sup> and stated how the process differed significantly from Waverly, “It was kind of like you showed up one day and there’s a big old plastic billboard and they’re saying, we got Magnet<sup>®</sup>. Oh, okay, didn’t know we were doing it.” All administrative leaders expressed how they made a sincere effort to lift the entire organization collectively, because there can be the perception that nurses get everything. “That’s my only caveat. Let’s celebrate your success, but let’s also include [everyone else]” (Board of Directors). Fostering relationships was taxing at times on the CNO, but she stayed consistent in her messaging as demonstrated here:

I felt like I had to be the cheerleader. I don’t believe that ever once did I let them know my discouragement. I was always, okay, we can do this; maybe we need to take a step back and do it a different way, but we can do this.

Several staff nurses shared that they initially had a lot of anxiety over the pending Magnet<sup>®</sup> site visit, because they thought it was going to be like Joint Commission accreditation. The nurse managers provided psychological safety for their staff, assuring them that the Magnet<sup>®</sup> site visit was a non-judgmental, friendly process, and that ANCC already thought they were great. “That’s why we even get a site visit. We already got this far; they think you’re great, so just...don’t be afraid to share experiences” (multiple staff nurses).

One of the greatest challenges for Waverly was telling their story. Magnet<sup>®</sup> requires approximately 100 sources of evidence told through a series of specific stories or exemplars from a variety of unit types. Finding enough stories was a monumental task given their limited number of units and departments. The nurse managers held brainstorming sessions and sought

stories from frontline staff. Staff nurses stated that this approach helped them appreciate how significant their everyday work is. It was also a source of bonding for the nurse managers; it increased their awareness and appreciation of the work that was occurring on other units.

**Balance.** Throughout the journey to Magnet<sup>®</sup> leaders at Waverly had to balance paradoxical priorities. They had to balance a push for radical change with a more incremental approach. As the CNO described, “Our CEO was really pushing me to get it done. He got excited about it and was just a mover and a shaker.” She had to help him see that the journey would take several years. Nurses at the executive level also had to balance giving careful consideration to staff concerns that Magnet<sup>®</sup> was eating into dollars needed for patient care, with remaining committed to the bigger picture that Magnet<sup>®</sup> may actually decrease costs through improved staff recruitment and quality outcomes. At the nurse manager level, they had to balance commitments to Magnet<sup>®</sup> work with being able to meet the needs of staff and patient care. “When it comes to critical access and being small, you’re obviously not going to have large departments. So, you’re pulled in many directions and sometimes have to wear many hats” (interprofessional care provider).

**Improved performance and outcomes.** The journey to Magnet<sup>®</sup> for Waverly Health Center has led directly to improved patient and staff outcomes and organizational performance. One of their greatest concerns prior to Magnet<sup>®</sup> was patient fall rates. Since the time of their Magnet<sup>®</sup> application submission, Waverly has outperformed the NDNQI<sup>®</sup> mean fall rate in CAHs for eight consecutive quarters. In 2015, Waverly Health Center had zero hospital acquired infections, pressure ulcers, or restraint usage; patient satisfaction scores above the state and national mean in all 11 categories; and nurse satisfaction scores above the NDNQI<sup>®</sup> mean for all participating hospitals. Physician, nurse, and student recruitment also has increased. “We are

getting more requests than we can handle, which is great. We always say that our biggest challenge is to get someone to come in the door, but once they do they love us and they want to stay” (Nursing Education Manager). Nurses have completed and published two research studies, and have a third one currently underway. The Magnet<sup>®</sup> consultant stated, “I had told them that their quality document that they used to document their QI projects was a best practice. I mean it really is something that any organization could use, big or small.”

**New organizational culture and values.** A new organizational culture is emerging at Waverly, driven by the professional practice model developed during their journey to Magnet<sup>®</sup>. This professional practice model has three pillars: (a) shared decision making, (b) evidence-based practice, and (c) patient-centered care. “We used to make changes or do things just because we thought it needed changing, and now we’re more focused on evidence. When you’re on committees and such you’re really encouraged to say, okay, let’s look at the evidence” (staff nurse). Staff nurses are directly involved in inputting, retrieving, and analyzing Waverly’s NDNQI<sup>®</sup> data. They use this information to develop strategies for improving nurse-driven quality indicators. For example, staff nurses worked with nurse managers and the DON to evaluate the MORSE Fall Scale (Agency for Healthcare Research and Quality, 2013) and then adapted it to implement a Within Arm’s Reach intervention to decrease patient falls.

There is a new value for higher education. In 2014, 17 (13%) RNs were seeking advanced education, including nine working towards a baccalaureate degree and eight towards a master’s. The DON proudly shared that they are exceeding the state average of baccalaureate-prepared nurses, and now have 100% of their nurse managers prepared at the baccalaureate level. In January 2016, Waverly moved to a preferential hiring of baccalaureate-prepared nurses at the staff nurse level. All new hires must have a baccalaureate in nursing, or sign a contract

indicating that they will complete their baccalaureate degree within four years with tuition-reimbursement support from the hospital.

The journey to Magnet<sup>®</sup> also gave Waverly a new appreciation for the importance of leadership development and succession planning. They now have a nurse residency program for new graduate nurses and an Emerging Leaders Program that focuses on leadership development for nurses who have been nominated as a person with leadership potential. As the Nursing Education Manager shared, “It also personally helped me grow into a mentor. Now myself and the other educator in the office are mentors for nurses who are going back to get their bachelor’s degree.” The DON has completed a state-sponsored Hospital Executive Academy program.

### **Discussion**

Leading change is a socially constructed, dynamic process that cannot be understood fully without exploring the context in which it is embedded. While the outcomes associated with Magnet<sup>®</sup> designation have been widely examined, less is known about how nurses, in collaboration with others, lead change to achieve Magnet<sup>®</sup> standards. This case study is the first to offer an in-depth, rich understanding of leading change to achieve Magnet<sup>®</sup> status from all levels of a hospital organization. We found the themes that emerged from this hospital’s journey to Magnet<sup>®</sup> to be consistent with the conceptual model of leading change (Nelson-Brantley et al., 2016) built from a larger body of literature on leading organizational change.

Similar to a study of CNO and DON perceptions of leading change during a hospital merger in Canada (Salmela, Eriksson, & Fagerstrom, 2012), the CNO and DON in our study fostered relationships; led coordinated, strategic efforts; and generated an open, confirming, and evidence-based culture. The CNO provided clear, transparent, consistent, and frequent communication with stakeholders, acting as a cheerleader or coach when her staff and

administrative colleagues were feeling uncertain. Similar to the Canadian study (Salmela et al., 2012), the CNO in our study served as a strong advocate for her staff, garnering time and finances to support staff nurse participation in shared governance councils and an adapted nurse manager workflow that enabled them to work together offsite to complete the monumental task of Magnet<sup>®</sup> documentation. The DON in our study, similar to those in the Canadian merger study (Salmela et al., 2012), served as a steward and resource linker in generating a new evidence-based practice culture as she motivated others and walked alongside them in building a new professional practice model.

Similar to DONs in a study of leading change in six county local health departments (Reyes, Bekemeier, & Issel, 2014), nursing administrative leaders (e.g., CNO, DON, and Nursing Education Manager) in our study used participatory strategies to mobilize internal stakeholders (e.g., nurse managers, staff nurses, and interprofessional care providers) and generate collaboration for leading change. Similar to nurse leaders in the local health department study (Reyes et al., 2014), the CNO in our study was credited with having a vision that included not only the belief that her CAH could achieve Magnet<sup>®</sup>, but also a roadmap of how to get there. This included effectively making a sensible business case for change, communicating with internal and external stakeholders, and having a strong sense of how her organization works, how to get things done, and tapping in to the existing organizational culture that valued team-oriented, patient-centered care. This study finding supports the findings of a study that investigated key challenges faced by hospital CNOs leading change to implement new care delivery models (Morjikian, Kimball, & Joynt, 2007).

Furthermore, we found the journey to Magnet<sup>®</sup> for Waverly Health Center to have striking similarities to a qualitative focus group study of CNO and Magnet<sup>®</sup> coordinators'

experiences of the journey to Magnet<sup>®</sup> (Havens & Johnston, 2004), including: (a) strong support from the Board of Directors, CEO, and interprofessional care providers (e.g., physicians); (b) challenges related to gaining nurse manager and staff nurse buy-in; (c) careful attention to the perception that nurses get everything, referred to in the Havens and Johnston (2004) study as “the Society for the Prevention of Nursing Getting Everything” (p. 581); (d) building the structures; (e) frequent communication and education of staff; (f) balancing Magnet<sup>®</sup> work with job responsibilities; (g) telling the story; and (h) Magnet<sup>®</sup> being a whole hospital effort and recognition. The fact that we found such similarities with a study that is more than a decade old and included a variety of hospital sizes suggests that there may be effective principles for leading change to achieve Magnet<sup>®</sup> standards that transcend time and context. By focusing on those underlying patterns (individual and collective leadership, organizational learning, operational support, fostering relationships, and balance), other CAHs more effectively may lead change to achieve improved organizational outcomes.

Similar to a focus group study of staff nurses’ experience of the journey to Magnet<sup>®</sup> (Urden, Ecoff, Baclig, & Gerber, 2013), staff nurses in our study expressed the importance of having frequent and visible communication from the CNO and DON. In addition, staff nurses in our study also identified the important role they had in the hospital achieving Magnet<sup>®</sup> by providing stories of the great work they were doing day-in and day-out (Urden et al., 2013). Similar to staff nurses in the Urden et al. (2013) study, staff nurses in our study were inspired to achieve higher levels of education and felt that they truly were able to have a voice in leading change through their participation on shared governance councils.

Urden et al. (2013) reported that staff nurses in their study expressed that after their organizations achieved Magnet<sup>®</sup> many of the valuable gains they had experienced (e.g., open

communication from nursing administrators and participation in shared decision making) had disappeared, a phenomenon they referred to as “Magnet<sup>®</sup> slippage” (p. 407). At the time of this study, study participants did not report or provide evidence of Magnet<sup>®</sup> slippage at Waverly Health Center. This difference may be due, in part, to Waverly’s focus on truly meaningful rewards. Waverly engaged everyone in the hospital to lead change by focusing them on what they truly valued—improving patient care and caring for each other. There was a unanimous expression from all participants in our study that the journey to Magnet<sup>®</sup> was never about the ‘plaque on the wall,’ whereas the motivation to pursue Magnet<sup>®</sup> identified in other studies is more varied and commonly includes a desire to rank among the elite (Urden et al., 2013). Perhaps intrinsic motivation is a powerful preventive measure for avoiding Magnet<sup>®</sup> slippage. Future studies that explore this possibility are recommended.

Finally, findings from our study support recent longitudinal studies that indicate hospitals undergo significant transformations in their pursuit of Magnet<sup>®</sup> (Kutney-Lee et al., 2015). The journey to Magnet<sup>®</sup> at Waverly Health Center directly led to improved patient outcomes (e.g., decreased patient falls, hospital acquired infections, and restraint usage), nurse outcomes (e.g., increased nurse job satisfaction, education level, and shared governance participation), and improved organizational outcomes (e.g., increased patient satisfaction; increased physician, nurse, and student recruitment; research production and dissemination; evidence-driven practice; and increased quality improvement knowledge, skills, and abilities). This study adds to a newly emerging body of evidence that seeks to understand the transformational effect of the journey to Magnet<sup>®</sup>. Future studies are recommended to further substantiate these findings and generate a greater understanding of how nurses lead change to advance hospital care delivery.

## Limitations

This study examined the leading change process from the perspective of a hospital that had already achieved Magnet<sup>®</sup> status. Following a hospital as it actually goes through the journey to Magnet<sup>®</sup> may have provided different understanding and conclusions than were reached in this study. However, there is no guarantee that a hospital seeking Magnet<sup>®</sup> designation will be successful in reaching its goal. Given this study's aim to understand *effective* principles for leading change, the case was centered on a hospital that was successful in attaining Magnet<sup>®</sup> designation. Although Waverly's designation was recent, participant recall of the journey to Magnet<sup>®</sup> may not have been 100% accurate. The triangulation of multiple types of data (e.g., individual interviews, focus groups, observation, documents, and artifacts) helped minimize this risk and collectively supported a credible representation of the case study.

The financial and human resource costs necessary for seeking Magnet<sup>®</sup> may present significant challenges for many hospitals, including rural CAHs. While this study captured multiple perspectives related to those costs—from the bedside to the boardroom—it did not include the perspective of the chief financial officer directly. Future studies that include this perspective and explore the economic ramifications of Magnet<sup>®</sup> more in depth are recommended.

The single case study method has been criticized for its lack of ability to generalize beyond the case. As Yin (2014) points out, the purpose of case study is to generalize to *theoretical propositions*, not to populations or universes. The findings of this case study support the conceptual model of leading change; thus, supporting a generalized theory of leading change with underlying concepts that prevail despite being embedded in multilayered, dynamic contexts. Future studies that test the conceptual model in larger hospitals and other health care delivery

contexts are recommended to refine a mid-range theory of leading change that can advance nursing leadership research, education, and practice.

### **Conclusions**

Calls for leading change to transform hospitals in providing more efficient, effective, safe, and patient-centered care have been raised for nearly two decades. In that same time period, the Magnet<sup>®</sup>-designated hospital has emerged as the symbol for superior nursing care supported by a strong evidence base of improved patient, nurse, and organizational outcomes. Our study was the first to examine how nurses at all levels lead change to achieve Magnet<sup>®</sup> designation; thus, providing a more complete understanding of how successful organizational change occurs. Furthermore, by examining the journey to Magnet<sup>®</sup> from a case of outstanding success, the first independent CAH to achieve Magnet<sup>®</sup> designation, we learned that hospitals that face exceptional challenges can achieve outstanding success by following the same underlying principles of leading change found in less extreme cases. These findings indicate that while each change effort is embedded in a unique multilayered dynamic context, underlying patterns of effective principles for leading organizational change prevail, including organizational readiness, individual and collective leadership, organizational learning, operational support, fostering relationships, and balance.

The dynamic nature of leading change means that there are likely multiple pathways to success. As such, our study has illuminated multiple patterns, rather than singular solutions. Nurse researchers, educators, and executive leaders should examine the transferability of these findings to their given contexts as they work to advance the IOM's (2011) recommendation to prepare and enable nurses at all levels, from the bedside to the boardroom, to lead change to advance care delivery in acute care hospitals.

### **Acknowledgements**

The authors gratefully acknowledge the Taunton Scholar program and the Delta Chapter of Sigma Theta Tau International for their financial support of this study.

### **Disclaimer**

The primary author received written approval from Waverly Health Center to use their hospital name in this published manuscript.

## References

- Agency for Healthcare Research and Quality. (2013). Tool 3h: Morse fall scale for identifying fall risk factors. Retrieved from <http://www.ahrq.gov/professionals/systems/hospital/fallpxtoolkit/fallpctx-tool3h.html>
- Aiken, L. H., Smith, H. L., & Lake, E. T. (1994). Lower medicare mortality among a set of hospitals known for good nursing care. *Medical Care*, 771-787.
- American Nurses Credentialing Center. (2013). *The Magnet Model® components and sources of evidence: Magnet Recognition Program®* (Revision 1.0 ed.). Silver Spring, MD: American Nurses Credentialing Center.
- American Nurses Credentialing Center. (2014). Magnet recognition program overview. Retrieved from <http://nursecredentialing.org/Magnet/ProgramOverview>
- American Nurses Credentialing Center. (2016). ANCC Pathway to Excellence. Retrieved from <http://www.nursecredentialing.org/Pathway>
- Anderson, R. A., Crabtree, B. F., Steele, D. J., & McDaniel, R. R. (2005). Case study research: The view from complexity science. *Qualitative Health Research*, 15(5), 669-685.  
doi:10.1177/1049732305275208
- Bergquist-Beringer, S., Dong, L., He, J., & Dunton, N. (2013). Pressure ulcers and prevention among acute care hospitals in the United States. *Joint Commission Journal on Quality and Patient Safety*, 39(9), 404-414.
- Collins, C. (2016). Challenges of recruitment and retention in rural areas. *North Carolina Medical Journal*, 77(2), 99-101.

- Doeksen, G. A., St. Clair, C. F., & Eilrich, F. C. (2012). *The economic impact of a critical access hospital on a rural community*. Retrieved from <https://www.ruralhealthinfo.org/publications/documents/8905>
- Everhart, D., Schumacher, J. R., Duncan, R. P., Hall, A. G., Neff, D. F., & Shorr, R. I. (2014). Determinants of hospital fall rate trajectory groups: A longitudinal assessment of nurse staffing and organizational characteristics. *Health Care Management Review, 39*(4), 352.
- Flex Monitoring Team. (2004). *Critical access hospital patient safety priorities and initiatives: Results of the 2004 national cah survey*. Retrieved from <https://www.ruralhealthinfo.org/search/results?q=staffing+challenges+in+CAH>
- Gardner, J. K., Thomas-Hawkins, C., Fogg, L., & Latham, C. E. (2007). The relationships between nurses' perceptions of the hemodialysis unit work environment and nurse turnover, patient satisfaction, and hospitalizations. *Nephrology Nursing Journal, 34*(3), 271-282.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: SAGE.
- Havens, D. S., & Johnston, M. A. (2004). Achieving Magnet hospital recognition: Chief nurse executives and Magnet coordinators tell their stories. *Journal of Nursing Administration, 34*(12), 579-588.
- Hess, R., DesRoches, C., Donelan, K., Norman, L., & Buerhaus, P. I. (2011). Perceptions of nurses in Magnet® hospitals, non-Magnet hospitals, and hospitals pursuing Magnet status. *Journal of Nursing Administration, 41*(7/8), 315-323.

- Institute of Medicine. (2000). *To err is human: Building a safer health system*. Washington, D.C.: The National Academies Press.
- Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. Washington, D.C.: The National Academies Press.
- Kelly, L. A., McHugh, M. D., & Aiken, L. H. (2011). Nurse outcomes in Magnet® and non-Magnet hospitals. *The Journal of Nursing Administration, 41*(10), 428-433.
- Kutney-Lee, A., Stimpfel, A. W., Sloane, D. M., Cimiotti, J. P., Quinn, L. W., & Aiken, L. H. (2015). Changes in patient and nurse outcomes associated with Magnet hospital recognition. *Medical Care, 53*(6), 550-557.
- Lacey, S. R., Cox, K. S., Lorfing, K. C., Teasley, S. L., Carroll, C. A., & Sexton, K. (2007). Nursing support, workload, and intent to stay in Magnet, Magnet-aspiring, and non-Magnet hospitals. *Journal of Nursing Administration, 37*(4), 199-205.
- Leibert, M., & Leaming, L. E. (2010). Critical access hospital chief executive officer turnover: Implications and challenges for governing boards. *Health Care Manager, 29*(1), 22-28. doi:10.1097/HCM.0b013e3181cd8add
- Lincoln, Y. S., & Guba, E. G. (1985). Establishing trustworthiness. *Naturalistic inquiry* (pp. 289-331). Beverly Hills, California: SAGE Publications, Inc.
- McHugh, M. D., Kelly, L. A., Smith, H. L., Wu, E. S., Vanak, J. M., & Aiken, L. H. (2013). Lower mortality in Magnet hospitals. *Medical Care, 51*(5), 382-388.
- Morjikian, R. L., Kimball, B., & Joynt, J. (2007). Leading change: The nurse executive's role in implementing new care delivery models. *Journal of Nursing Administration, 37*(9), 399-404.

- Moscovice, I., & Stensland, J. (2002). Rural hospitals: Trends, challenges, and a future research and policy analysis agenda. *The Journal of Rural Health, 18*(5), 197-210.
- Moss, K., Holmes, M., & Pink, G. H. (2015). *Do current medicare rural hospital payment systems align with cost determinants?* Retrieved from <https://www.ruralhealthinfo.org/publications/documents/10719>
- Nelson, E. C., Batalden, P. B., & Godfrey, M. M. (2007). *Quality by design: A clinical microsystems approach*. San Francisco, CA: Jossey-Bass.
- Nelson-Brantley, H. V., Ford, D. J., & Frank-Ragan, E. (2016). *Leading change: A concept analysis*. Manuscript submitted for publication.
- Ona, L., & Davis, A. (2011). Economic impact of the critical access hospital program on Kentucky's communities. *Journal of Rural Health, 27*(1), 21-28. doi:10.1111/j.1748-0361.2010.00312.x
- Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Thousand Oaks, CA: SAGE Publications, Inc.
- Planetree. (2014). *Planetree designation criteria*. Retrieved from <https://www.google.com/search?q=planetree+designated+hospitals&ie=utf-8&oe=utf-8>
- Polit, D. F., & Beck, C. T. (2012). *Nursing research: Generating and assessing evidence for nursing practice* (9th ed.). Philadelphia, PA: Wolters Kluwer Lippincott Williams & Wilkins.
- QSR.International. (2015). Nvivo 10 for windows. Retrieved from [http://www.qsrinternational.com/products\\_nvivo.aspx](http://www.qsrinternational.com/products_nvivo.aspx)

- Reyes, D. J., Bekemeier, B., & Issel, L. M. (2014). Challenges faced by public health nursing leaders in hyperturbulent times. *Public Health Nursing, 31*(4), 344-353.  
doi:10.1111/phn.12078
- Salmela, S., Eriksson, K., & Fagerstrom, L. (2012). Leading change: A three-dimensional model of nurse leaders' main tasks and roles during a change process. *Journal of Advanced Nursing, 68*(2), 423-433. doi:10.1111/j.1365-2648.2011.05802.x
- Smith, S. A. (2014). Magnet hospitals: Higher rates of patient satisfaction. *Policy, Politics, & Nursing Practice, 15*(1-2), 30-41.
- Spillane, J. P., Halverson, R., & Diamond, J. B. (2004). Towards a theory of leadership practice: A distributed perspective. *Journal of Curriculum Studies, 36*(1), 3-34.
- Stimpfel, A. W., Rosen, J. E., & McHugh, M. D. (2014). Understanding the role of the professional practice environment on quality of care in Magnet® and non-Magnet hospitals. *Journal of Nursing Administration, 44*(1), 10-16.  
doi:10.1097/NNA.0000000000000015
- Thorne, S. (2000). Data analysis in qualitative research. *Evidence Based Nursing, 3*(3), 68-70.  
doi:10.1136/ebn.3.3.68
- United States Census Bureau. (2014). Urban and rural universe: Housing units 2010 census summary file 1. Retrieved from [http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_SF1\\_H2&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_H2&prodType=table)
- Urden, L. D., Ecoff, L. K., Baclig, J., & Gerber, C. S. (2013). Staff nurse perceptions of the Magnet® journey. *Journal of Nursing Administration, 43*(7/8), 403-408.  
doi:10.1097/NNA.0b013e31829d61aa

- von Bertalanffy, L. (1975). General system theory (reprint of 1956). In B. D. Ruben & J. Y. Kim (Eds.), *General systems theory and human communication* (pp. 6-20). Rochelle Park, NJ: Hayden Book Company, Inc.
- Waverly Health Center. (2013). *Magnet documentation 001*.
- Waverly Health Center. (2014). *Report to the community: July 2013 - June 2014*. Retrieved from [https://www.waverlyhealthcenter.org/about\\_us/annual\\_reports.aspx](https://www.waverlyhealthcenter.org/about_us/annual_reports.aspx)
- Waverly Health Center. (2015a). *2014 nursing annual report*. Retrieved from [https://www.waverlyhealthcenter.org/about\\_us/nursing\\_excellence.aspx](https://www.waverlyhealthcenter.org/about_us/nursing_excellence.aspx)
- Waverly Health Center. (2015b). About us. Retrieved from [https://www.waverlyhealthcenter.org/about\\_us/accreditation\\_quality.aspx](https://www.waverlyhealthcenter.org/about_us/accreditation_quality.aspx)
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, CA: SAGE Publications, Inc.

## CHAPTER 4

### **Nurse Executives Leading Change to Improve Critical Access Hospital Outcomes: A**

#### **Literature Review with Research-Informed Recommendations**

This manuscript is a review of the literature of the historical development and performance of critical access hospitals (CAHs) and the challenges faced by rural nurse executives (NEs), with recommendations for rural NEs seeking to lead change to achieve Magnet<sup>®</sup> standards. The manuscript will be submitted to the *Journal of Rural Health* for publication consideration. The primary author will be Heather V. Nelson-Brantley and co-authors will include Debra J. Ford, Karen L. Miller, and Marjorie J. Bott.

### Abstract

**Purpose.** Nurses have been called to lead change to advance high quality care in hospitals. This article explores the historical development and performance of critical access hospitals (CAHs), challenges faced by rural hospital nurse executives, and provides recommendations for leading change to advance CAH outcomes.

**Methods.** A review of the literature was conducted using CINAHL, PubMed, and the Rural Health Information Hub databases. Thirty-four articles were synthesized. Recommendations for nurse executives seeking to lead change to improve CAH outcomes were developed from study findings of the first independent CAH to achieve Magnet<sup>®</sup> designation.

**Findings.** CAH nurse executives face significant challenges in ensuring their organizations are providing safe, efficient, and effective care, including: (a) recruitment, retention, and appropriate staffing ratios, (b) the need for nursing staff who are flexible, confident, and possess multi-specialist knowledge, (c) fewer highly educated nurses, and (d) lack of financial and human resources to support new graduate nurse transition, continuing education, evidence-based practice, and professional development.

**Conclusions.** Nurse executives in rural CAHs may consider the journey to Magnet<sup>®</sup> as a blueprint for leading change to improve organizational outcomes. Particular consideration should be given to: (a) securing administrative leadership support, (b) strategically planning for small, incremental change, (c) building shared governance, quality improvement, research, and education, (d) harnessing collective power, and (e) believing and staying committed to the purpose of improving staff and patient outcomes.

**Keywords.** Critical access hospital, leading change, Magnet<sup>®</sup>, nurse executive, nursing

## Introduction

Nurses have been called to lead the transformation of hospitals and other health care systems to provide more efficient, safe, high quality care (Institute of Medicine [IOM], 2011). Approximately 27.7 million people (21% of the U.S. population) live in rural areas (United States Census Bureau, 2014), defined as a city with a population of less than 50,000 (U.S. Department of Health and Human Services, n.d.-a). Provider shortages, quality deficiencies, access limitations, and the inefficient utilization of health care services have all been linked to a lack of high quality health care for rural residents (Weinhold & Gurtner, 2014). These same factors may present significant challenges for rural hospital nurse executives (NEs) seeking to lead change to advance rural hospital outcomes.

Evidence indicates that Magnet<sup>®</sup>-designated hospitals are achieving many of the improvements called for by the IOM. The name *Magnet* originated in 1982 as a way to describe and recognize 41 hospitals that were able to attract and retain nurses at a time and in locations where hospitals around them were experiencing high nursing shortages and turnover (McClure, Poulin, Sovie, & Wandelt, 1983). Since then, Magnet<sup>®</sup> hospitals have been linked empirically to a multitude of better patient, nurse, and organizational outcomes, including: decreased mortality and failure-to-rescue (Aiken, Smith, & Lake, 1994; Kutney-Lee et al., 2015; McHugh et al., 2013), reduced pressure ulcers (Bergquist-Beringer, Dong, He, & Dunton, 2013), and decreased patient fall rates (Everhart et al., 2014); higher nurse perceived managerial support (Lacey et al., 2007), improved quality of care (Stimpfel, Rosen, & McHugh, 2014), increased job satisfaction (Lacey et al., 2007), and shared governance participation (Hess, DesRoches, Donelan, Norman, & Buerhaus, 2011); decreased nurse burnout (Kelly, McHugh, & Aiken, 2011) and decreased turnover (Gardner, Thomas-Hawkins, Fogg, & Latham, 2007); and higher patient satisfaction

(Smith, 2014). While studies to date have focused largely on the outcomes associated with Magnet<sup>®</sup>, a newly emerging body of evidence suggests that hospitals undergo significant transformations in their journey to Magnet<sup>®</sup>, and it is this transformation that leads to superior outcomes (Hess et al., 2011).

When applying for Magnet<sup>®</sup> designation, organizations must provide evidence that their hospital or health system is achieving superior nurse and patient outcomes, are engaging frontline nursing staff in shared decision-making, and are actively involved in research and quality improvement (QI) projects (American Nurses Credentialing Center [ANCC], 2013). More specifically, Magnet-seeking hospitals must submit evidence of one completed research study, conducted by nurses and approved by an internal review board (IRB). The expectation is that published research is evaluated and used to guide nursing practice, that nurses serve on research review boards, and that knowledge gained through research at the organization is disseminated to the community of nurses (ANCC, 2013). This expectation may be especially difficult for NEs in small, rural hospitals that often do not have doctorally-prepared nurse researchers on staff or access to or funds to support IRB study review and approval. However, as one 25-bed independent CAH learned, the journey to Magnet<sup>®</sup> may be a roadmap to finding effective solutions to their most pressing challenges.

Recent studies indicate that the rate of rural hospital closures in the U.S. is rapidly accelerating. More than double the number of rural, short-term hospitals closed in 2013 and 2014 than in 2011 and 2012 (Kaufman et al., 2016). These closures place an estimated 1.7 million rural residents at an even greater risk of negative health outcomes and economic hardship (Kaufman et al., 2016). Therefore, finding effective solutions to improve quality care in rural

areas is essential for the viability of rural hospitals and assurance of access to health care for rural populations.

Access to safe, quality, affordable, and efficacious health care is a top leadership priority of countries around the world (World Health Organization, 2014). However, understanding the challenges faced by rural hospital NEs and how best to prepare them for leading organizational change remains an underexplored area of research. In a recent meeting of national rural health thought leaders, a recommendation was made to use successful rural health models as exemplars that could be replicated with the aim of transforming rural health care nationally (Gerardi, 2015). Utilizing the first independent CAH to achieve Magnet<sup>®</sup> designation as a successful rural health model may offer insights to other rural NEs seeking to improve nurse, patient, and organizational outcomes in their own hospitals. Therefore, the purpose of this study was three-fold: (a) to outline the historical development and performance of CAHs, (b) to describe challenges faced by rural hospital NEs, and (c) to provide recommendations for leading change to achieve Magnet<sup>®</sup> standards in rural CAHs.

### **Methods**

A literature search was conducted to understand the historical development and performance of CAHs and to identify challenges faced by rural hospital NEs. Literature was collected from November, 2015 – May, 2016 using CINAHL, PubMed, and the Rural Health Information Hub (Rural Health Information Hub, 2015) databases. Data sources included primary studies and systematic reviews from peer-reviewed journals as well as authoritative reports, documents, webpages and commentaries from leading rural and CAH experts. The search was limited to articles published in English between 2007 and 2016. This timeframe was chosen to capture the impact of the economic downturn due to the market exchange and housing

market crisis on health care in the U.S. A manual search using Google Scholar and reference lists of retrieved articles also was performed. Search terms included: *critical access hospital* and *rural nursing*. The following terms were combined with the previous search terms using the “AND” operator: *leadership development, finance, resources, education, recruitment, retention, research, patient outcomes, and quality*. Recommendations for NEs seeking to lead change to improve CAH outcomes were developed from study findings of the first independent CAH to achieve Magnet<sup>®</sup> designation. Complete study findings are reported elsewhere (Nelson-Brantley, Ford, Miller, Stegenga, Lee, & Bott, 2016).

### **Findings**

The literature search and article selection process is outlined in Figure 4.1. An initial database search resulted in 405 articles. After screening for duplication, retrievability, and relevance, 58 articles were retained for full-text review. Thirty-four articles were included in the final literature review.

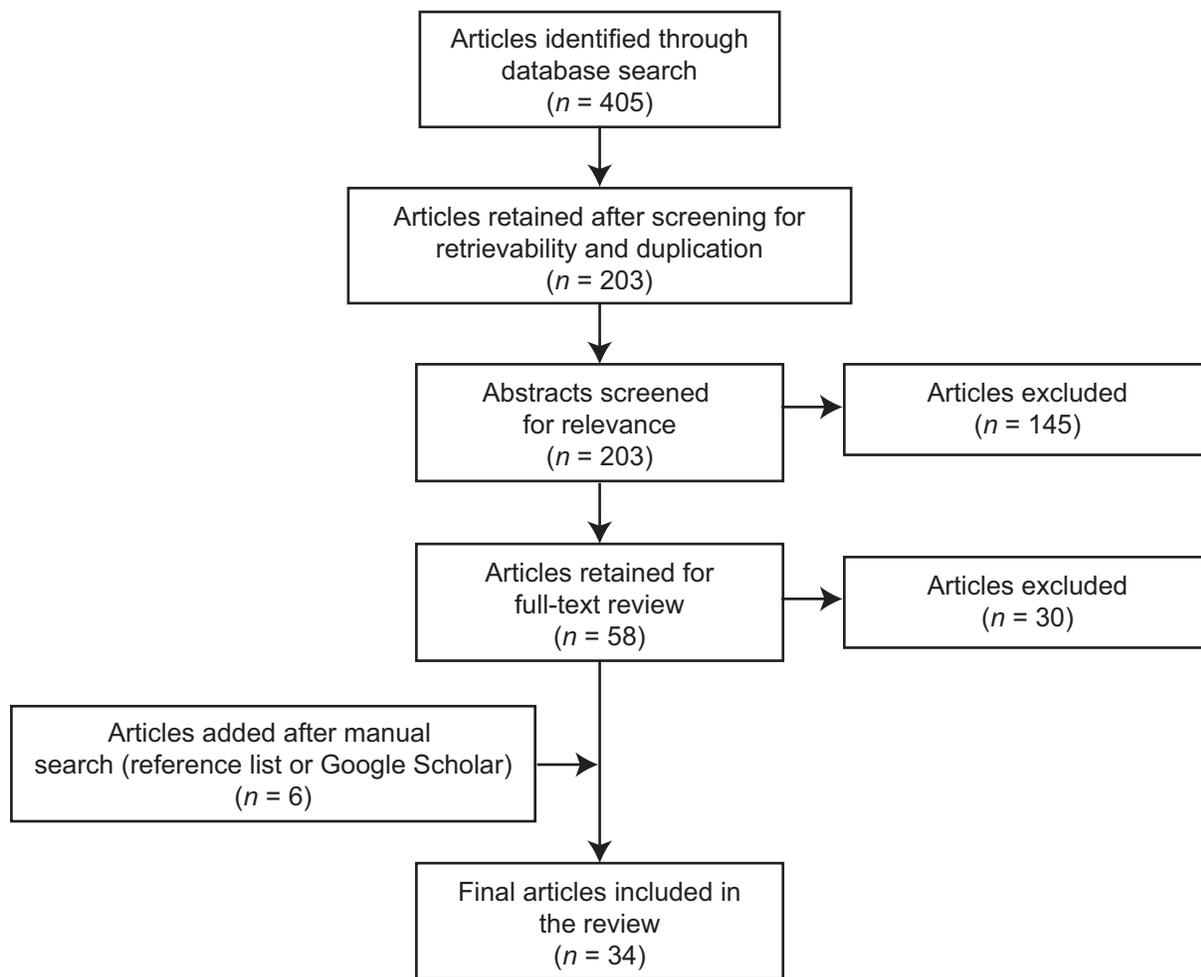


Figure 4.1. Literature search and selection process.

### Critical Access Hospital Legislative History and Performance

The Balanced Budget Act (BBA) of 1997 established the Medicare Rural Hospital Flexibility (Flex) program with the aim of improving access to emergency and preventative health care for rural populations (U.S. Department of Health and Human Services, n.d.-b). Under this act, small rural hospitals could seek federal designation as a CAH, which enabled them to change their Medicare reimbursement structure from a prospective payment system (PPS) to a cost-based system (Li, Schneider, & Ward, 2007). The BBA outlined several requirements that must be met by hospitals seeking CAH designation, including: (a) rural hospital located within a state participating in the Flex program; (b) located 35 miles or more

from any other hospital (or 15 miles in mountainous terrains where only secondary roads are available, or designated by the State as a necessary provider of health care services), (c) maintain no more than 25 inpatient beds; (d) have an average length of stay of 96 hours or less; (e) offer 24/7 emergency care services; (f) and owned by a public or nonprofit entity (American Hospital Association, 2010).

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 increased CAH payment to 101% of reasonable costs, and expanded payment for on-call services to include those provided by physician assistants, nurse practitioners, and clinical nurse specialists. In 2008, the Medicare Improvements to Patients and Providers Act enabled CAHs to receive 101% of reasonable costs for clinical lab services provided to Medicare beneficiaries. In 2009, the American Recovery and Reinvestment Act established payment incentives for CAHs to invest in health information technology by allowing meaningful user designated CAHs to load multiple years of electronic health record depreciation costs into one year (American Hospital Association, 2010).

The number of CAHs has increased from 41 at the origination of the program to 1,332 as of April 2016 (Rural Health Information Hub, 2016). CAHs currently comprise approximately 61% of all hospitals in rural areas, and therefore play a critical role in ensuring access to care for rural residents (Moss, Holmes, & Pink, 2015). The typical CAH employs 141 individuals; has a medical service area population of 14,600; and generates a total annual impact of 248 jobs and \$10.3 million in wages, salaries, and benefits from hospital operations, investment, and construction (Doeksen, St. Clair, & Eilrich, 2012). As such, CAHs also play a significant role in maintaining rural community economies.

While conversion to CAH designation has contributed to the financial viability of many rural hospitals (Holmes, Pink, & Friedman, 2013), CAH status does not guarantee a better financial situation (Rural Health Information Hub, 2016). One study explored differences between all rural and CAHs that remained open from 2010 – 2014 and those that closed. Differences in hospital variables (e.g., liquidity, revenue, utilization, and staffing) were found to be more significant than differences in market variables (e.g., population, socioeconomic status, or distance to other hospitals) between hospitals that closed and those that remained open (Kaufman et al., 2016). Hospitals that remained open had higher days' cash on hand, larger outpatient revenue (e.g., health clinics), higher average daily census and occupancy rates, higher full-time equivalents and staffing salaries, and lower debt levels than hospitals that closed (Kaufman et al., 2016). Because CAHs are small and frequently offer only limited services, rural residents may bypass them in search of larger hospitals or clinics that can meet their specific needs; thus, adding to the financial vulnerability these hospitals already face (Weinhold & Gurtner, 2014). These results are important, because they indicate that variables associated with CAH closure may be modifiable through careful attention by NEs and other hospital administrative leaders.

Although the development of the critical access-designated hospital has been largely successful in providing much needed access to health care for rural residents, attention has now turned to ensuring the care provided by CAHs is safe, efficient, and effective. Patient outcomes in CAHs as compared to other rural and urban PPS hospitals are varied. In a study of 89 hospitals in rural Iowa, CAH conversion was associated with better performance of risk-adjusted rates of iatrogenic pneumothorax, hospital acquired infections, and accidental puncture or laceration, but had no significant impact on low-risk mortality rates, retention of foreign body

during surgery, or pressure ulcer rates (Li et al., 2007). A retrospective review of 500 surgical cases in one Illinois CAH indicated an overall complication rate of 4%, which exceeded all benchmarks found in the surgical literature (Rossi, Rossi, Rossi, & Rossi, 2011). The authors attributed their success to the use of general surgeons as primary care providers, responsible for complete perioperative management.

In a study of all Flex program-participating CAHs, CAHs were found to score lower on most quality patient outcomes measures, including pneumonia, heart failure, and myocardial infarction (Flex Monitoring Team, 2011). These findings were supported further by a retrospective, comparative analysis of 4,738 U.S. CAHs and non-CAHs (Joynt, Harris, Orav, & Jha, 2011). Although patient outcomes were worse in CAHs overall, having adequate personnel, clinical resources, and outpatient care services (e.g., ongoing primary care, post-hospitalization follow-up, rehabilitation, and home-based care) were suggested to attenuate the findings (Joynt et al., 2011). Collectively, these study findings indicate that while CAH-designation has increased access to health care for rural residents in the U.S., substantial challenges remain for CAH NEs seeking to improve quality patient outcomes.

### **Challenges Faced by Rural Hospital Nurse Executives**

Nurse executives in rural areas face considerable challenges as they increasingly are tasked with the management of complex chronic and acute care needs that often extend beyond their facility's capacity and competency (Weinhold & Gurtner, 2014). A review of the literature identified four key areas that particularly are challenging for NEs in rural hospital settings: (a) recruitment, retention, and appropriate staffing ratios, (b) need for nursing staff who are flexible, confident, and possess multi-specialist knowledge, (c) fewer highly educated nurses, and (d) lack

of financial and human resources to support new graduate nurse transition, continuing education, evidence-based practice, and professional development.

**Recruitment, retention, and appropriate staffing ratios.** NEs in rural hospitals face extensive recruitment and retention challenges of nursing staff as well as physicians and other providers (Collins, 2016; Joynt et al., 2011; World Health Organization, 2010). Although approximately 50% of the world's population lives in rural areas, only 38% of nurses and less than 25% of physicians work in these settings (World Health Organization, 2010). Thus, identifying successful strategies for attracting and retaining nurses is one of the greatest challenges faced by NEs in rural hospitals. Factors that contribute to the shortage of nurses and other care providers in rural areas include: resistance within the provider's family to live in a rural area, long travel distances to work, worries of social isolation, and an unsuitable work-life balance (Weinhold & Gurtner, 2014).

NEs in rural CAHs also face unique challenges related to maintaining appropriate staff-to-patient ratios. CAHs maintain 25 inpatient beds or fewer. As such, they are staffed with few nurses, which leave them exposed to significant challenges when faced with fluctuations in patient census (Hunsberger, Baumann, Blythe, & Crea, 2009). To illustrate, an increase or decrease of 4 patients to a 28-bed obstetrics unit at a large academic medical center would generate a 14.3% fluctuation in unit patient census, a relatively manageable change. The same increase or decrease of 4 patients to a 4-bed CAH obstetrics unit would generate a 100% fluctuation, resulting in either an empty unit or one requiring patient overflow that may extend beyond the hospital's ability to provide safe care. To address fluctuating patient census challenges, NEs in rural CAHs often hire a high proportion of part-time staff that work on-call, a

practice that rural staff nurses report as disruptive to their personal lives (Hunsberger et al., 2009).

**Nursing staff with multi-specialist knowledge.** The skill set needed for staff nursing practice in rural settings often is underestimated. While staff nurses in rural hospitals frequently are viewed as *generalists*, they more accurately can be described as requiring multi-specialist knowledge (MacLeod, Browne, & Leipert, 1998) and flexibility to assume numerous roles in caring for complex, diverse patient populations, often with minimal support or resources (Harmon, 2013; Hunsberger et al., 2009). Rural residents in poor health frequently delay or avoid seeking care in anticipation that it may result in the need for additional visits to urban-located clinics, requiring extensive travel and expenses (Buzza et al., 2011; Hauenstein et al., 2014). As a result, rural residents seeking care may present with increased acuity due to ailments that have been left untreated over time. In a study of 422 CAHs in 45 states, approximately 43% reported operating in communities where no mental health services were available, resulting in patients seeking mental health services in CAH emergency rooms that were ill equipped to do so (Hartley et al., 2007). As one of only few nurses on staff, nurses in small, rural hospitals may care for pediatric, geriatric, emergency, critically ill, and psychiatric patients all in the same shift (Harmon, 2013; Hurme, 2009; Seright & Winters, 2015). Collectively, these demands necessitate that the rural nurse be self-confident and proficient in a variety of patient population specialties (Keahey, 2008).

**Fewer highly educated nurses.** Studies have shown that hospitals with higher percentages of baccalaureate (BSN)-prepared registered nurses (RNs) have better patient outcomes and lower mortality rates (Aiken, Clarke, Cheung, Sloane, & Silber, 2003; Estabrooks, Midodzi, Cummings, Ricker, & Giovannetti, 2005; Friese, Lake, Aiken, Silber, & Sochalski,

2008; Tourangeau et al., 2007). Based on this evidence, the IOM (2011) has recommended increasing the number of BSN-prepared RNs in the workforce to 80% by 2020. This is a significant challenge for NEs in rural hospitals. RN workforce analyses indicate that rural areas tend to have fewer highly educated RNs (Baernholdt & Mark, 2009; Brewer & Watkins, 2011; U.S. Department of Health and Human Services, 2010). As with other shortages in rural settings, access to opportunities for nurses to advance their education also are more limited (Baernholdt & Mark, 2009).

However, evidence suggests that rural RNs who return to school are more likely to complete their BSN education than urban-based RNs. In a longitudinal study of 917 associate degree (AD)-prepared RNs, residing in a rural area was a significant ( $P = .002$ , OR = 2.46, 95% CI = 1.37-4.39) and positive predictor of completing a BSN or higher degree upon returning to school (Kovner, Brewer, Katigbae, Djukic, & Fatehl, 2012). Kovner et al. (2012) report that the goal of an 80% BSN-prepared workforce by 2020 mathematically cannot be attained by increasing the number of BSN prelicensure degrees alone; thus, transitioning AD-prepared RNs to BSNs also will be required. Most RNs returning to school need to continue to work while they advance their education, placing an even greater demand on rural NEs as they look for ways to support their staff's pursuits through flexible scheduling (Kovner et al., 2012).

**Financial and human resources.** Compounding these challenges are a lack of financial and human resources to support new graduate nurse transition and continuing education. New graduate nurses in all settings require sufficient time, training, and support to acquire basic skills in providing safe and competent care. These needs may be even greater for nurses starting in rural hospitals. Hospitals in urban settings commonly provide the new graduate nurse with support through nurse residency programs. However, few residency programs exist in rural

hospitals (Keahey, 2008). NEs also face challenges in providing access to continuing education (CE) and professional development opportunities for all staff due to budgetary constraints and lack of adequate staffing to enable nurses to attend CE offerings (McCoy, 2009).

Access to and use of research to inform evidence-based practice is another challenge faced by NEs in rural areas (Jukkala, Greenwood, Ladner, & Hopkins, 2010). Staff nurses in a sparsely populated U.S. western state reported several barriers related to access and use of research to inform their nursing practice, including lack of knowledge of research methods, lack of time and access to computers or the Internet, poor computer literacy skills, diminishing financial support from employers, long travel distances to attend conferences, and a lack of research literature specific to rural practice (Winters et al., 2007). Nurses in this study used the term *research* to refer to a general gathering of information, and their most preferred method of obtaining information was asking a colleague.

Additional challenges faced by rural NEs center on professional practice environment concerns, including poor communication, lack of professionalism, bullying, staff burnout, lack of critical thinking and prioritization skills, patient-centered care, patient safety concerns (e.g., medication administration errors, emergent care/crisis management, lab interpretation errors, falls, pressure ulcers, and creating a non-punitive safety culture), and patient discharge education (Fairchild et al., 2013). As recommended by rural health thought leaders (Gerardi, 2015), the remainder of this article will draw from the findings of a case study (Nelson-Brantley et al., 2016) to offer Waverly Health Center as a successful CAH model for rural NEs seeking to lead organizational change.

### **Waverly Health Center: A Model of Success**

Waverly Health Center is a 25-bed CAH located in a rural Midwestern U.S. town of 9,874 (Waverly Health Center, 2013). In 2014, the hospital became the first independent CAH to achieve Magnet<sup>®</sup> designation. The hospital also is Joint Commission-accredited and was the ninth hospital in the world to receive Planetree<sup>®</sup> (Planetree, 2014) designation (Waverly Health Center, 2015). Waverly is one of the top employers in the community. In 2014, the year they achieved Magnet<sup>®</sup> status, Waverly Health Center had 444 employees, including 131 RNs (Waverly Health Center, 2014). That year the hospital cared for a total of 901 inpatients and 55,877 outpatients, including 260 newborn admissions, 140 inpatient surgeries, and 1,917 outpatient surgeries. The hospital received 1,998 ambulance calls and 6,939 emergency department visits. Daily operations costs averaged \$132,003 (Waverly Health Center, 2014).

Waverly Health Center has remained independently operated for over 100 years, a factor they find critical to ensuring their ability to provide a multitude of health care services (e.g., birthing center, health clinics, cardiac rehabilitation, outpatient surgery, lab services, complementary integrative therapies) that meet the needs of the local community and surrounding areas (Waverly Health Center, 2013). Like the vast majority of CAHs, Waverly still frequently refers patients to other hospitals for services beyond what they can offer. Waverly has used this opportunity to build a strong network of external supports that go beyond patient referral to include educational opportunities for the staff of Waverly. Their network includes a community hospital, a large academic medical center, and the world-renowned Mayo Clinic located just over 2 hours away.

Nurses at Waverly Health Center report better nurse-patient staffing ratios (typically 1:4 on the medical-surgical unit and 1:2 in the birthing center) than other CAHs and even larger

hospitals. Nursing staff and interprofessional care providers alike report that there are true collaboration, mutual support, and a winning mindset that makes their job truly enjoyable. They are able to spend sufficient time providing individualized and comprehensive care to all patients. In addition, the hospital is supported by nearly 300 community volunteers. In 2008, Waverly began what would become a six-year journey to Magnet<sup>®</sup> designation. Table 4.1 shows the improved nurse, patient, and organizational outcomes that have been achieved as a result of their successful journey.

Table 4.1

*Waverly Health Center Patient, Nurse, and Organizational Outcomes Attributed to the Journey to Magnet<sup>®</sup>*

Outcome Level	Outcome
Patient	<ul style="list-style-type: none"> <li>• Outperformed NDNQI<sup>®</sup> mean fall rate in CAHs for 8 consecutive quarters</li> <li>• Zero hospital acquired pressure ulcers in 2015</li> <li>• Zero catheter associated urinary tract infections in 2015</li> <li>• Zero restraint usage in 2015</li> <li>• Zero central line associated blood stream infections in 2015</li> <li>• HCAHPS patient satisfaction scores above the state and national mean in all 11 categories in 2015</li> </ul>
Nurse	<ul style="list-style-type: none"> <li>• Staff RN participation in shared governance: leadership, professional development, practice, and quality councils</li> <li>• Staff RN increased knowledge, skills, and appreciation for QI, research, and EBP</li> <li>• Staff RN satisfaction scores above NDNQI<sup>®</sup> mean for all participating hospitals in 2015</li> <li>• 17 (13%) of RNs seeking advanced education (9 BSN; 8 MSN) in 2014</li> <li>• Exceeding state average of BSN-prepared nurses in 2016</li> <li>• 100% BSN-prepared nurse manager staff as of 2016</li> </ul>
Organization	<ul style="list-style-type: none"> <li>• Increased physician, nurse, and student recruitment</li> <li>• Completed and published 2 research studies; one underway</li> <li>• QI documentation tool recognized as a best practice</li> <li>• Professional practice model centered on shared decision making, EBP, and patient-centered care</li> <li>• Preferential hiring of BSN-prepared staff RNs as of 2016</li> <li>• Tuition reimbursement provided to RNs seeking advanced education</li> <li>• BSN degree added to criteria for reaching Level 2 on Nursing Career Ladder in 2016</li> <li>• Nurse residency program for new graduate RNs</li> <li>• Leadership development and succession planning through Emerging Leaders Program</li> </ul>

*Note.* NDNQI<sup>®</sup> = National Database of Nursing Quality Indicators<sup>®</sup>. CAHs = critical access hospitals. HCAHPS = Hospital Consumer Assessment of Healthcare Providers and Systems. RN = registered nurse. QI = quality improvement. EBP = evidence-based practice. BSN = Bachelor of Science in Nursing. MSN = Master of Science in Nursing.

### **Recommendations for Critical Access Hospital Nurse Executives Considering Magnet<sup>®</sup>**

Waverly frontline staff RNs, nurse managers, interprofessional care providers, administrative nursing leaders, and hospital board were asked a series of questions related to lessons learned from their successful journey to Magnet<sup>®</sup>. Five key recommendations emerged from that discussion: (a) secure administrative leadership support, (b) strategically plan for small, incremental change, (c) build shared governance structures, QI capacities, research networks, and highly educated nursing staff (d) harness collective power through open communication, education, and direct involvement in the change process, and (e) believe and stay committed to the purpose of improving staff and patient care (Nelson-Brantley et al., 2016). See Table 4.2 for specific action steps associated with each recommendation.

Table 4.2

*Recommendations and Action Steps for Critical Access Hospital Nurse Executives Seeking Magnet®.*

Recommendation	Action Step
1) Secure administrative leadership support.	<ul style="list-style-type: none"> <li>• Present a strong case for Magnet® driven by empirical evidence of nurse recruitment, retention, job satisfaction, and patient outcomes.</li> <li>• Present hospital board and executive leadership with costs associated with replacing one staff nurse compared to journey to Magnet® costs.</li> <li>• Share outcomes achieved by Waverly Health Center from their journey to Magnet®.</li> <li>• Communicate to hospital board and executive leadership that journey to Magnet® is a long-term commitment to advancing the organization, not just nursing.</li> </ul>
2) Strategically plan for small, incremental change.	<ul style="list-style-type: none"> <li>• Use the nursing process (assess, diagnosis, plan, implement, and evaluate) to perform a thorough gap analysis; identify and prioritize goals and measurable outcomes; develop a plan; initiate the plan; and continuously evaluate progress towards goals, making adjustments as needed.</li> <li>• Conduct a thorough gap analysis that includes: assessment of whether the organization's values align with Magnet® standards, individuals' knowledge of Magnet®, and the organization's current performance on meeting the Magnet® standards.</li> <li>• Identify and prioritize goals and measurable outcomes based on gap analysis.</li> <li>• Develop an actionable plan to move you towards your goals, including who is going to do what and by when. Plan should be reasonable, understanding journey to Magnet® make take 5 years or more.</li> <li>• Incorporate the plan into the hospital's 5-year budget. Include both financial and human resource costs (e.g., Magnet® application costs, Magnet® consultant costs, FTEs and flexible scheduling for staff to attend shared governance councils, IRB costs, Magnet® site visit, and time and expenditures for staff training to attend Magnet® workshops or conferences).</li> <li>• Identify and appoint a strong taskmaster who will keep the process organized and hold everyone accountable to completing their assigned tasks on time.</li> <li>• Document your QI projects as you go, do not try to recreate or recall later.</li> </ul>
3) Build shared governance, QI, research, and education.	<ul style="list-style-type: none"> <li>• Investigate various shared governance models used by other hospitals. Customize a model to suit your organization's mission and values.</li> <li>• Explore Waverly's Professional Practice Model (shared decision making, evidence-based practice, and patient-centered care) as an exemplary model tailored for CAHs. Use it as a starting point for developing your own professional nursing practice model.</li> <li>• Build nursing councils to engage staff in shared decision making; increase knowledge, skills, and appreciation for QI, EBP, and research; and promote leadership development. Recommended councils include: nursing practice, quality, professional development, and leadership councils.</li> </ul>

(continued)

Recommendation	Action Step
	<ul style="list-style-type: none"> <li>• Train and involve frontline nursing staff directly in the collection of quality outcomes data (e.g., patient fall rates, HAPU rates), analysis of the data, search for and assessment of the evidence in the literature, and building of planned interventions for QI.</li> <li>• Network with larger academic and non-academic hospitals to provide research support (e.g., develop multi-site studies, IRB review).</li> <li>• Identify and partner with individuals within your hospital (e.g., physicians) who may already be working on research, or have research knowledge and interest in advancing the organization.</li> <li>• Work with external IRB, if necessary, to ensure your research will meet all criteria necessary for the protection of human subjects and future publication.</li> <li>• Support higher levels of education for nursing staff through consistent messaging, including: tuition reimbursement, preferential hiring of BSN-prepared RNs, and requiring BSN education to advance up Career Ladder.</li> </ul>
4) Harness collective power.	<ul style="list-style-type: none"> <li>• Focus on culture first. Culture must support staff and patient care.</li> <li>• Involve everyone in developing your plan, get input from all stakeholders.</li> <li>• Identify past successes and build from what worked well in those experiences.</li> <li>• Educate nursing managers, staff nurses, and all non-nursing staff about Magnet<sup>®</sup> and why it is important to them and the organization.</li> <li>• Utilize your most valuable resource, your staff. Engage <u>all</u> staff in the process (e.g., identifying stories, writing Magnet<sup>®</sup> documentation, preparing for Magnet<sup>®</sup> site visit).</li> <li>• Communicate a strong message that Magnet<sup>®</sup> is not just about nursing, it is about everyone in the organization. Everyone (e.g., nursing staff, ancillary staff, interprofessional care providers) play a role. Lift the organization collectively.</li> <li>• Identify and focus everyone on meaningful intrinsic rewards.</li> <li>• Communicate frequently in an open, transparent manner, explaining the rationale, the benefits, and the downfalls/challenges.</li> <li>• Be consistent in your messaging. Instill a positive, enduring sense of hope.</li> <li>• Consider hiring a Magnet<sup>®</sup> consultant who can bring you expertise, knowledge, and coaching during your journey.</li> </ul>
5) Believe and stay committed.	<ul style="list-style-type: none"> <li>• If after you have completed a thorough gap analysis and have determined your organization can meet the Magnet<sup>®</sup> criteria, go for it!</li> <li>• Be flexible, but stick to the plan. Do not let other priorities creep in.</li> <li>• Do not discount your stories, no matter how small.</li> <li>• Do not let others influence your belief that it is possible.</li> <li>• Remember why you are doing this. Focus on improving staff and patient outcomes, not the ‘plaque on the wall’.</li> </ul>

*Note.* FTEs = full-time equivalents. IRB = internal review board. BSN = Bachelor of Science in Nursing. RNs = registered nurses. QI = quality improvement. CAHs = critical access hospitals. EBP = evidence-based practice. HAPU = hospital acquired pressure ulcer.

## Discussion

Nurses have been called to lead change in transforming hospitals to provide more efficient, safe, high quality care (IOM, 2011). Although CAH designation has provided much needed access to care for rural residents, CAH NEs continue to face significant challenges in ensuring that their organizations provide high quality care. These challenges point to the need for NEs to identify successful strategies for increasing recruitment and retention of highly educated, flexible, confident nurses who possess multi-specialized knowledge to care for diverse and complex patients. These demands require adequate financial and human resources to support new graduate nurse transition, continuing education, evidence-based practice, and professional development. Much may be learned from Waverly Health Center as an example of a successful CAH rural health model.

Waverly Health Center implemented a multi-faceted approach to ensuring their financial viability as well as advancing nursing staff and patient outcomes. Waverly has built a strong foundation of care services that extend beyond their 25 inpatient beds and emergency room. In fact, only 901 individuals received inpatient care as compared to 55,877 who received outpatient care services in 2014. Offering care services such as outpatient surgery and a variety of health clinics (e.g., walk-in, women's health, and orthopedic) generates increased liquidity, revenue, and utilization, key variables for rural hospitals that have been empirically associated with increased likelihood of remaining open (Kaufman et al., 2016). In addition, Waverly has been astute in capitalizing on government financial incentive opportunities, such as providing clinical lab services to Medicare beneficiaries and investment in health information technology (American Hospital Association, 2010). Collectively, these approaches help secure the financial stability of a CAH; however, additional approaches are needed to attract and retain high quality

staff and to ensure patients are receiving the highest quality of care. For Waverly Health Center, the journey to Magnet<sup>®</sup> proved to be a very effective approach to meeting these challenges.

Nurse executives in rural CAHs may consider the journey to Magnet<sup>®</sup> as a blueprint for attracting and retaining quality staff, increasing the educational preparation of their nursing workforce, engaging frontline staff in shared decision making, and improving patient quality outcomes. Particular consideration should be given to: (a) securing administrative leadership support, (b) strategically planning for small, incremental change, (c) building shared governance, quality improvement, research, and education, (d) harnessing collective power, and (e) believing and staying committed to the purpose of improving staff and patient outcomes. Senior leadership and hospital board support are needed to establish and sustain a long-term budget that provides necessary financial and human resources. The NE must be knowledgeable in the empirical evidence of Magnet<sup>®</sup> hospitals and present a strong business case for Magnet<sup>®</sup>. They also must help senior leaders understand that the journey to Magnet<sup>®</sup> will be lengthy and require significant resources, but that the return on investment far outweighs the associated costs.

Once senior leadership has given their full support, the NE can use the nursing process as a model for strategically planning, implementing, and evaluating the journey to Magnet<sup>®</sup>. An essential step will be to engage all stakeholders in the planning process. The NE should seek diverse perspectives, including frontline staff, nurse managers, ancillary staff, interprofessional care providers, and executive leadership (e.g., chief executive officer [CEO], chief financial officer [CFO]). Engaging all members helps build knowledge, enthusiasm, and commitment to the journey.

Critical access hospital NEs should expect to spend a minimum of two years building shared governance structures, QI capacities, research networks, and advanced educational

preparation of nursing staff, if none of these structures exist within the organization. Building nursing councils that engage frontline staff in shared decision making for nursing practice, leadership, professional development, and QI will help increase staff knowledge, skills, and appreciation for all of the essential Magnet<sup>®</sup> criteria. In addition, it promotes mentorship of frontline staff that may be contemplating furthering their education by interacting with role models who have completed an advanced degree. Similar to the approach used by Waverly, other CAH NEs should work on establishing strong external networks with larger hospitals and consultants that can provide staff with CE and support for their research efforts.

The NE is instrumental in establishing a clear and consistent message that the hospital values education (Orsolini-Hain, 2012). The NE should work with the CEO and CFO to develop a stepped plan for tuition reimbursement, flexible scheduling to support staff returning to school, and preferential hiring of BSN-prepared RNs. A BSN degree should be required for advancement up the Career Ladder, rather than advancements based solely on years of experience (Orsolini-Hain, 2012).

While the CAH NE may see significant challenges to achieving Magnet<sup>®</sup> due to limited resources, an open mind will help them recognize and tap into one of their greatest strengths—the strong sense of community that exists within their hospital. Like nurses at Waverly Health Center, nurses who work in other small, rural hospitals report that their work is satisfying because of being part of a close knit community, and describe their work environment as less cumbersome because there are less complex hierarchies that interfere with their ability to bring about change (Lockhart, 2009). Rural NEs should use this strength to harness the collective power necessary for achieving Magnet<sup>®</sup>. Unlike larger hospitals that often pay one or more individuals to work full-time on preparing the hospital for Magnet<sup>®</sup>, CAHs most likely do not

have the financial means to take this approach. Therefore, engaging all stakeholders in the preparation and documentation for Magnet<sup>®</sup> is necessary for success. The benefits of doing so are increased commitment of the entire organization and appreciation for the work that occurs throughout the hospital. It is essential that the NE communicate frequently, openly, and transparently to internal and external stakeholders throughout the process. A strong message should be conveyed through both words and action that Magnet<sup>®</sup> is not just about nursing; it is about achieving a desired future for improved staff and patient outcomes.

The NE should anticipate varied levels of skepticism and doubt, both from external and internal stakeholders alike. Achieving Magnet<sup>®</sup> is a difficult prospect for a hospital of any size, but may be particularly difficult for CAHs to envision. For Waverly Health Center, skepticism and doubt gave way to enthusiasm and commitment through the NE's unwavering belief that their 25-bed hospital could achieve as high of standards in providing safe, quality care as the larger hospitals around them. The Waverly NE encourages other CAH NEs seeking Magnet<sup>®</sup> to never let others negatively influence their belief that they can achieve it, to stay committed the purpose of improving staff and patient outcomes, and to be a cheerleader to help others in the organization stay focused on achieving what truly matters, providing exceptional patient care.

These recommendations are offered for rural NEs to consider within the context of their own organization. We recognize that each CAH is unique, and as such, there are likely components that fit or do not fit any one specific hospital. If the CAH is part of a larger system, we recommend building a symbiotic relationship with other NEs in the system that may be mutually beneficial. The CAH NE knows best what the needs of their community are. As such, they are perfectly positioned to advocate on behalf of their organization to maintain local decision making, including types of care services provided. This will ensure the long-term

viability of the CAH and add to the financial wellbeing of the larger hospital system. By partnering with NEs from larger hospitals in the system, the CAH NE may advance their own knowledge for evidence-based practice, technology, and research as well as their staff's. This will ensure that they are able to meet the increasingly complex health care needs of their community.

We recognize that Waverly Health Center may be ahead in their efforts to lead change due to the additional outpatient services and external support networks that they have established. These factors may be beyond the reach of other CAHs with even greater resource limitations. Regardless of whether the CAH hospital seeks actual Magnet<sup>®</sup> designation, we recommend that CAH NEs carefully consider and work towards leading change to achieve Magnet<sup>®</sup> standards. The evidence supports that this journey will lead to significant improvements for staff, patients, and the organization as a whole.

### **Conclusions**

Rural CAHs are essential to the provision of health care and economic security of rural populations. Nurse executives, whether leading a 25-bed hospital or a 1,500-bed hospital, are called to lead change to improve patient, nurse, and organizational outcomes. This report has offered lessons learned from the first independent CAH's journey to achieve Magnet<sup>®</sup> designation, how the lessons can be applied to other similar hospitals, and what positive outcomes may be realized from seeking Magnet<sup>®</sup>. Magnet<sup>®</sup> standards should be every NE's goal.

### **Acknowledgements**

The authors thank Dr. Kristin Stegenga and Dr. Robert Lee for their time in reviewing and providing recommendations to strengthen the manuscript.

### **Disclaimer**

The primary author obtained written permission from Waverly Health Center to use their hospital name in this published manuscript.

## References

- Aiken, L. H., Clarke, S. P., Cheung, R. B., Sloane, D. M., & Silber, J. H. (2003). Educational levels of hospital nurses and surgical patient mortality. *JAMA, 290*(12), 1617-1623.
- Aiken, L. H., Smith, H. L., & Lake, E. T. (1994). Lower medicare mortality among a set of hospitals known for good nursing care. *Medical Care, 771-787*.
- American Hospital Association. (2010). CAH legislative history. Retrieved from <http://www.aha.org/advocacy-issues/cah/history.shtml>
- American Nurses Credentialing Center. (2013). *The Magnet Model® components and sources of evidence: Magnet Recognition Program®* (Revision 1.0 ed.). Silver Spring, MD: American Nurses Credentialing Center.
- Baernholdt, M., & Mark, B. A. (2009). The nurse work environment, job satisfaction and turnover rates in rural and urban nursing units. *Journal of Nursing Management, 17*(8), 994-1001.
- Bergquist-Beringer, S., Dong, L., He, J., & Dunton, N. (2013). Pressure ulcers and prevention among acute care hospitals in the United States. *Joint Commission Journal on Quality and Patient Safety, 39*(9), 404-414.
- Brewer, C. S., & Watkins, R. (2011). *A regional analysis of the 2008 national sample survey of registered nurses*. Retrieved from <http://www.ahec.buffalo.edu/resources/>
- Buzza, C., Ono, S. S., Turvey, C., Wittrock, S., Noble, M., Reddy, G., . . . Reisinger, H. S. (2011). Distance is relative: Unpacking a principal barrier in rural healthcare. *Journal of General Internal Medicine, 26*(2), 648-654.
- Collins, C. (2016). Challenges of recruitment and retention in rural areas. *North Carolina Medical Journal, 77*(2), 99-101.

- Doeksen, G. A., St. Clair, C. F., & Eilrich, F. C. (2012). *The economic impact of a critical access hospital on a rural community*. Retrieved from <https://www.ruralhealthinfo.org/publications/documents/8905>
- Estabrooks, C. A., Midodzi, W. K., Cummings, G. G., Ricker, K. L., & Giovannetti, P. (2005). The impact of hospital nursing characteristics on 30-day mortality. *Nursing Research*, 54(2), 74-84.
- Everhart, D., Schumacher, J. R., Duncan, R. P., Hall, A. G., Neff, D. F., & Shorr, R. I. (2014). Determinants of hospital fall rate trajectory groups: A longitudinal assessment of nurse staffing and organizational characteristics. *Health Care Management Review*, 39(4), 352.
- Fairchild, R. M., Everly, M., Bozarth, L., Bauer, R., Walters, L., Sample, M., & Anderson, L. (2013). A qualitative study of continuing education needs of rural nursing unit staff: The nurse administrator's perspective. *Nurse Education Today*, 33(4), 364-369.  
doi:<http://dx.doi.org/10.1016/j.nedt.2012.05.023>
- Flex Monitoring Team. (2011). *Critical access hospital year 6 hospital compare participation and quality measure results*. Retrieved from <http://www.flexmonitoring.org/publications/bp28/>
- Friese, C. R., Lake, E. T., Aiken, L. H., Silber, J. H., & Sochalski, J. (2008). Hospital nurse practice environments and outcomes for surgical oncology patients. *Health Services Research*, 43(4), 1145-1163.
- Gardner, J. K., Thomas-Hawkins, C., Fogg, L., & Latham, C. E. (2007). The relationships between nurses' perceptions of the hemodialysis unit work environment and nurse turnover, patient satisfaction, and hospitalizations. *Nephrology Nursing Journal*, 34(3), 271-282.

- Gerardi, T. (2015). *Rural health: Finding creative solutions together*. Retrieved from <http://campaignforaction.org/resource/rural-health-and-academic-progression-meeting-summary>
- Harmon, L. M. (2013). Rural model dedicated education unit: Partnership between college and hospital. *Journal of Continuing Education in Nursing, 44*(2), 89-96.  
doi:10.3928/00220124-20121217-62
- Hartley, D., Ziller, E. C., Loux, S. L., Gale, J. A., Lambert, D., & Yousefian, A. E. (2007). Use of critical access hospital emergency rooms by patients with mental health symptoms. *Journal of Rural Health, 23*(2), 108-115.
- Hauenstein, E. J., Glick, D. F., Kane, C., Kulbok, P., Barbero, E., & Cox, K. (2014). A model to develop nurse leaders for rural practice. *Journal of Professional Nursing, 30*(6), 463-473.  
doi:<http://dx.doi.org/10.1016/j.profnurs.2014.04.001>
- Hess, R., DesRoches, C., Donelan, K., Norman, L., & Buerhaus, P. I. (2011). Perceptions of nurses in Magnet® hospitals, non-Magnet hospitals, and hospitals pursuing Magnet status. *Journal of Nursing Administration, 41*(7/8), 315-323.
- Holmes, G. M., Pink, G. H., & Friedman, S. A. (2013). The financial performance of rural hospitals and implications for elimination of the critical access hospital program. *Journal of Rural Health, 29*(2), 140-149. doi:10.1111/j.1748-0361.2012.00425.x
- Hunsberger, M., Baumann, A., Blythe, J., & Crea, M. (2009). Sustaining the rural workforce: Nursing perspectives on worklife challenges. *The Journal of Rural Health, 25*(1), 17-25.  
doi:10.1111/j.1748-0361.2009.00194.x
- Hurme, E. (2009). Competencies for nursing practice in a rural critical access hospital. *Online Journal of Rural Nursing and Health Care, 9*(2), 67-81.

- Institute of Medicine. (2011). *The future of nursing: Leading change, advancing health*. Washington, D.C.: The National Academies Press.
- Joynt, K. E., Harris, Y., Orav, E. J., & Jha, A. K. (2011). Quality of care and patient outcomes in critical access rural hospitals. *JAMA*, *306*(1), 45-52.
- Jukkala, A., Greenwood, R., Ladner, K., & Hopkins, L. (2010). The clinical nurse leader and rural hospital safety and quality. *Online Journal of Rural Nursing and Health Care*, *10*(2), 38-44 37p.
- Kaufman, B. G., Thomas, S. R., Randolph, R. K., Perry, J. R., Thompson, K. W., Holmes, G. M., & Pink, G. H. (2016). The rising rate of rural hospital closures. *The Journal of Rural Health*, *32*(1), 35-43.
- Keahey, S. (2008). Against the odds: Orienting and retaining rural nurses. *Journal for Nurses in Staff Development*, *24*(2), E15-E20. doi:10.1097/01.NND.0000300875.10684.be
- Kelly, L. A., McHugh, M. D., & Aiken, L. H. (2011). Nurse outcomes in Magnet® and non-Magnet hospitals. *The Journal of Nursing Administration*, *41*(10), 428-433.
- Kovner, C. T., Brewer, C., Katigbae, C., Djukic, M., & Fatehl, F. (2012). Charting the course for nurses' achievement of higher education levels. *Journal of Professional Nursing*, *28*(6), 333-343 311p. doi:10.1016/j.profnurs.2012.04.021
- Kutney-Lee, A., Stimpfel, A. W., Sloane, D. M., Cimiotti, J. P., Quinn, L. W., & Aiken, L. H. (2015). Changes in patient and nurse outcomes associated with Magnet hospital recognition. *Medical Care*, *53*(6), 550-557.
- Lacey, S. R., Cox, K. S., Lorfing, K. C., Teasley, S. L., Carroll, C. A., & Sexton, K. (2007). Nursing support, workload, and intent to stay in Magnet, Magnet-aspiring, and non-Magnet hospitals. *Journal of Nursing Administration*, *37*(4), 199-205.

- Li, P., Schneider, J. E., & Ward, M. M. (2007). Effect of critical access hospital conversion on patient safety. *Health Services Research, 42*(6p1), 2089-2108.
- Lockhart, L. (2009). The gate still swings both ways in rural texas. *Journal of Nursing Management, 17*(1), 35-37. doi:10.1111/j.1365-2834.2008.00965.x
- MacLeod, M., Browne, A. J., & Leipert, B. (1998). International perspective: Issues for nurses in rural and remote canada. *Australian Journal of Rural Health, 6*(2), 72-78.
- McClure, M. L., Poulin, M. A., Sovie, M. D., & Wandelt, M. A. (1983). Magnet hospitals: Attraction and retention of professional nurses. American Academy of Nursing. Task force on nursing practice in hospitals.
- McCoy, C. (2009). Professional development in rural nursing: Challenges and opportunities. *Journal of Continuing Education in Nursing, 40*(3), 128-131. doi:10.3928/00220124-20090301-08
- McHugh, M. D., Kelly, L. A., Smith, H. L., Wu, E. S., Vanak, J. M., & Aiken, L. H. (2013). Lower mortality in Magnet hospitals. *Medical Care, 51*(5), 382-388.
- Moss, K., Holmes, M., & Pink, G. H. (2015). *Do current medicare rural hospital payment systems align with cost determinants?* Retrieved from <https://www.ruralhealthinfo.org/publications/documents/10719>
- Nelson-Brantley, H. V., Ford, D. J., Miller, K. L., Stegenga, K., Lee, R., & Bott, M. J. (2016). *Leading change: A case study of the first independent critical access hospital to achieve Magnet® designation.* Manuscript in preparation.
- Orsolini-Hain, L. (2012). Mixed messages: Hospital practices that serve as disincentives for associate degree-prepared nurses to return to school. *Nursing Outlook, 60*(2), 81-90. doi:http://dx.doi.org/10.1016/j.outlook.2011.05.007

- Planetree. (2014). *Planetree designation criteria*. Retrieved from <https://www.google.com/search?q=planetree+designated+hospitals&ie=utf-8&oe=utf-8>
- Rossi, A., Rossi, D., Rossi, M., & Rossi, P. (2011). Continuity of care in a rural critical access hospital: Surgeons as primary care providers. *The American Journal of Surgery*, 201(3), 359-362. doi:<http://dx.doi.org/10.1016/j.amjsurg.2010.08.026>
- Rural Health Information Hub. (2015). Critical access hospitals (CAHs) publications. Retrieved from <https://www.ruralhealthinfo.org/topics/critical-access-hospitals/publications>
- Rural Health Information Hub. (2016). Critical access hospitals (CAHs). Retrieved from <https://www.ruralhealthinfo.org/topics/critical-access-hospitals>
- Seright, T. J., & Winters, C. A. (2015). Critical care in critical access hospitals. *Critical Care Nurse*, 35(5), 62-67.
- Smith, S. A. (2014). Magnet hospitals: Higher rates of patient satisfaction. *Policy, Politics, & Nursing Practice*, 15(1-2), 30-41.
- Stimpfel, A. W., Rosen, J. E., & McHugh, M. D. (2014). Understanding the role of the professional practice environment on quality of care in Magnet® and non-Magnet hospitals. *Journal of Nursing Administration*, 44(1), 10-16.  
doi:10.1097/NNA.0000000000000015
- Tourangeau, A. E., Doran, D. M., Hall, L. M., O'Brien Pallas, L., Pringle, D., Tu, J. V., & Cranley, L. A. (2007). Impact of hospital nursing care on 30-day mortality for acute medical patients. *Journal of Advanced Nursing*, 57(1), 32-44.
- U.S. Department of Health and Human Services. (2010). *The registered nurse population: Findings from the 2008 national sample survey of registered nurses*. Retrieved from <http://bhpr.hrsa.gov/healthworkforce/rnsurveys/rnsurveyfinal.pdf>

U.S. Department of Health and Human Services. (n.d.-a). How is rural defined? Retrieved from <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/defined.html>

U.S. Department of Health and Human Services. (n.d.-b). What is the flex program? Retrieved from <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/flex.html>

United States Census Bureau. (2014). Urban and rural universe: Housing units 2010 census summary file 1. Retrieved from [http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC\\_10\\_SF1\\_H2&prodType=table](http://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_H2&prodType=table)

Waverly Health Center. (2013). *Magnet documentation 001*.

Waverly Health Center. (2014). *Report to the community: July 2013 - June 2014*. Retrieved from [https://www.waverlyhealthcenter.org/about\\_us/annual\\_reports.aspx](https://www.waverlyhealthcenter.org/about_us/annual_reports.aspx)

Waverly Health Center. (2015). About us. Retrieved from [https://www.waverlyhealthcenter.org/about\\_us/accreditation\\_quality.aspx](https://www.waverlyhealthcenter.org/about_us/accreditation_quality.aspx)

Weinhold, I., & Gurtner, S. (2014). Understanding shortages of sufficient health care in rural areas. *Health Policy, 118*(2), 201-214.

doi:<http://dx.doi.org/10.1016/j.healthpol.2014.07.018>

Winters, C. A., Lee, H. J., Besel, J., Strand, A., Echeverri, R., Jorgensen, K. P., & Dea, J. E. (2007). Access to and use of research by rural nurses. *Rural and Remote Health, 7*(3), 758-758.

World Health Organization. (2010). *Increasing access to health workers in remote and rural areas through improved retention*. Retrieved from <http://www.who.int/hrh/retention/guidelines/en/>

World Health Organization. (2014). *Twelfth general programme of work: Not merely the absence of disease*. Retrieved from [http://www.who.int/about/resources\\_planning/twelfth-gpw/en/](http://www.who.int/about/resources_planning/twelfth-gpw/en/)

## CHAPTER 5

### Summary

This chapter provides an explication of how the three manuscripts generated for this study fit together, as well as a brief summary of their results. Study strengths and limitations are discussed, along with implications for practice and future research, and final conclusions.

### Explication of Manuscript Fit

This study investigated the phenomenon of nurses leading change to advance rural critical access hospital (CAH) patient, nurse, and organizational positive outcomes. The study aims were threefold: (a) to gain clarity around the concept of leading change, (b) to understand holistically how leading change was actualized in one independent CAH that successfully achieved Magnet<sup>®</sup> designation, and (c) to use the findings to develop recommendations to prepare and enable nurses to lead change to advance CAH outcomes. These aims were explored and reported through a series of three manuscripts.

In the first manuscript, an analysis of the concept of leading change was performed using the Walker and Avant (2011) method. The analysis took a broad approach in exploring the meaning and usage of the concept of *leading change* from a variety of disciplines (e.g., nursing, medicine, organizational studies, business, education, psychology, and sociology). A theoretical definition and conceptual model of leading change were developed that could be used for empirically investigating the phenomenon of leading change in nursing.

In the second manuscript, the conceptual model of leading change was used as the guiding framework for a qualitative, index case study that explored one 25-bed hospital's efforts to lead change to become the first independent CAH to achieve Magnet<sup>®</sup> designation. The hospital was selected as a positive deviant, or example of outstanding success, with the intention

of gaining new knowledge that could be shared with other rural hospitals. Data collected and analyzed from this study were used to develop recommendations and action steps for rural nurse executives (NEs) seeking to lead change to achieve Magnet<sup>®</sup> standards within their own settings. These recommendations and action steps were outlined in the third manuscript, after synthesizing a review of the literature about the historical development and performance of CAHs and the challenges faced by rural NEs. Combined, the three manuscripts provide greater understanding of the phenomenon of nurses leading change to advance health care systems.

### **Summary of Results**

#### **Manuscript 1**

The primary research question addressed in Manuscript 1 was: what is the meaning of the concept of leading change as evidenced in the literature using a concept analysis approach? The Walker and Avant (2011) method was used to analyze 35 articles and book chapters. Five defining attributes were identified from the analysis: (a) individual and collective leadership, (b) operational support, (c) fostering relationships, (d) organizational learning, and (e) balance (Nelson-Brantley, Ford, & Frank-Ragan, 2016). Antecedents included external or internal driving forces and organizational readiness. Consequences of leading change included new organizational culture and values and improved performance and outcomes. A theoretical definition of leading change in nursing was proposed as follows, “leading change is a complex process where nurses individually and collectively balance paradoxical priorities to provide operational support, foster relationships, and facilitate organizational learning to achieve improved performance and outcomes and new organizational culture and values” (Nelson-Brantley et al., 2016, pp. 68-69). From this, a conceptual model of leading change was

developed to depict the dynamic relationship among the defining attributes and the fluid, nonlinear process of leading change (see Figure 2.3, p. 69).

## **Manuscript 2**

Using the conceptual model of leading change developed in the first manuscript as a guiding framework, the study reported in the second manuscript sought to understand how nurses individually and collectively lead change to achieve Magnet<sup>®</sup> designation. A case study of one 25-bed hospital's journey to become the first independent CAH to achieve Magnet<sup>®</sup> was conducted. Nine themes emerged from the triangulation of data sources (individual interviews, focus groups, unstructured observation, documents and artifacts) to support a refined conceptual model of leading change: (a) driving forces, (b) organizational readiness, (c) individual and collective leadership, (d) organizational learning, (e) operational support, (f) fostering relationships, (g) balance, (h) improved performance and outcomes, and (i) new organizational culture and values (Nelson-Brantley, Ford, Miller, Stegenga, Lee, & Bott, 2016).

The need to recruit nursing staff served as an external driver that brought about an awareness of the need for change at Waverly Health Center, a rural, 25-bed CAH. The chief nursing officer (CNO) attended a Magnet<sup>®</sup> conference to learn more about Magnet<sup>®</sup> hospitals and how they are able to attract and retain nurses. Her passion and belief that her organization could achieve Magnet<sup>®</sup> standards became an internal driver that brought about an awareness in her hospital of her vision for change. Organizational readiness describes how individuals at Waverly Health Center ensured they were able to engage in the change process by having strong administrative leadership support (e.g., chief executive officer, hospital Board of Directors); taking the time to build shared governance structures, research capacities, and improving their

quality outcomes measures; and drawing on their shared philosophy of patient-centered, team-oriented care and winning mindset.

Although the efforts to lead change to achieve Magnet<sup>®</sup> standards originated with an individual change champion (the director of nursing [DON]), it was the distributed leadership approach taken by the nursing unit and clinic managers to work as a team in collecting the sources of evidence and writing the Magnet<sup>®</sup> documentation that generated enthusiasm, commitment, and collective action of the entire hospital. Learning about Magnet<sup>®</sup> (e.g., what it was and why it was important/what it could do for the hospital) rippled out first from individual (e.g., CNO, DON), to group (e.g., nursing managers), and eventually throughout the organization through the efforts of a Magnet<sup>®</sup> educational team. This institutionalized knowledge now serves as a positive feedback loop where nurses are applying the lessons learned from their first journey to Magnet<sup>®</sup> as they prepare for Magnet<sup>®</sup> re-designation.

Throughout the journey to Magnet<sup>®</sup> operational support was provided to ensure the necessary resources for building shared governance councils, adaptation of workflows, strategic planning, and focusing everyone on the meaningful reward of improving patients and staff. Relationships were fostered through frequent and open communication with stakeholders, providing psychological safety to staff nurses, and telling their Magnet<sup>®</sup> story through a strong, unified voice. Nurse leaders had to balance paradoxical priorities, including: the push for radical change versus taking a more strategic approach of small, incremental change; hearing staff concerns about the costs of Magnet<sup>®</sup> versus being committed to the possibility of future decreased costs as a result of decreased staff turnover and improved patient outcomes; and committing time and energy to Magnet<sup>®</sup> documentation versus commitments to staff and patient needs.

The outcomes associated with Waverly's successful journey to Magnet<sup>®</sup> have been many, including: improved quality patient outcomes (e.g., decreased fall rates, decreased hospital acquired infection rates, increased patient satisfaction scores); improved nurse outcomes (e.g., increased staff nurse participation in shared governance, increased nurse job satisfaction, higher levels of education); and improved organizational performance (e.g., increased physician, nurse, and student recruitment; completion and publication of research; development of a nurse residency program for new graduate nurses and an Emerging Leaders Program to support leadership development and succession planning). The journey to Magnet<sup>®</sup> also shaped a new organizational culture and values embodied in their new professional practice model centered on shared governance, evidence-based practice, and patient-centered care. The findings of this study helped refine the conceptual model of leading change to include the multilayered context that leading change efforts are embedded in, as well as directional arrows and feedback loops that more fully depict the process leading change (see Figure 3.1, p. 92).

### **Manuscript 3**

The primary research question addressed in the third manuscript was: what elements should be considered to better prepare and enable nurses at all levels (e.g., staff nurses, nurse managers, DONs, and CNOs) to lead change in advancing rural CAH outcomes? A review of literature was conducted to understand the historical development and performance of CAHs and the challenges faced by rural NEs. Thirty-four articles were included in the review.

The Medicare Rural Hospital Flexibility program, which grants qualifying small rural hospitals with CAH designation, was developed in 1997 with the aim of improving access to emergency and preventative health care for rural populations (U.S. Department of Health and Human Services, n.d.). CAH hospitals now comprise approximately 61% of all hospitals in rural

areas (Moss, Holmes, & Pink, 2015). The average CAH generates annually an average of 248 jobs and \$10.3 million in wages, salaries, and benefits (Doeksen, St. Clair, & Eilrich, 2012). As such, CAHs play a critical role in providing much needed access to health care for rural residents and in maintaining rural economies. However, the closure of CAHs and other rural hospitals has rapidly increased since 2010 (Kaufman et al., 2016), and evidence is mixed over the quality of care provided by CAHs.

Primary challenges faced by rural NEs were identified through a review of the literature. These challenges included: (a) recruitment, retention, and maintaining appropriate staffing ratios, (b) the need for flexible, confident, nursing staff who possess multi-specialist knowledge, (c) having fewer highly educated nurses, and (d) a lack of financial and human resources to support new graduate nurse transition, continuing education, evidence-based practice, and professional development (Nelson-Brantley, Ford, Miller, & Bott, 2016). The journey to achieve Magnet<sup>®</sup> standards may provide a blueprint for NEs seeking to lead change to address the current challenges they face.

Based on the review of the literature, recommendations were made better to prepare and enable nurses in rural CAHs to lead change to advance patient, nurse, and organizational outcomes. These recommendations were informed by study findings of the first independent CAH to achieve Magnet<sup>®</sup> designation and lessons learned from their successful journey to achieve Magnet<sup>®</sup> standards. Recommendations included: (a) securing administrative leadership support, (b) strategically planning for small, incremental change, (c) building shared governance, quality improvement, research, and education, (d) harnessing collective power, and (e) believing and staying committed to the purpose of improving staff and patient outcomes. Specific action steps for achieving each recommendation were provided (see Table 4.2, pp. 132-133).

### Strengths

“In qualitative research literature, understanding is not merely a prelude to or basis for action but, rather, is itself action . . . Whenever users see something for the first time or see it differently, they change the world” (Sandelowski, 2004, p. 1373). The potential to learn from an exceptional healthcare system through in-depth, rich exploration made possible by qualitative case study was a significant strength of this study. This approach provided a new lens for seeing and understanding how nurses lead change to advance care delivery in CAHs. Additionally, this study was the first to offer a holistic understanding of leading change to achieve Magnet<sup>®</sup> status, from the bedside to the boardroom. Nursing leadership studies to date have focused largely on a singular perspective, that of the executive nurse leader or the bedside leader. By including multilayered perspectives from all levels and roles of a hospital organization, this study contributes to a more complete understanding of how nurses, in collaboration with others, lead organizational change.

Leading change is a socially constructed, dynamic process that cannot be understood fully without exploring the context in which it is embedded. The use of unstructured observation was a significant strength of this study because it enabled the researcher to explore the social interactions of those who provide care and receive care at Waverly Health Center. The researcher was able to see, hear, and feel the contextual nature of human interactions, such as who led discussions during executive meetings and interprofessional care team meetings, and whose voices were left unheard. It enabled the researcher to collect non-verbal communication data, including body language and physical expressions as nurses, other care providers, and hospital volunteers interacted with each other and with patients. It also enabled the researcher to gain a sense of the structural environment, such as the location of wheelchairs, computers,

nurses' station, and the size, layout, and amenities offered in patient rooms—all important context for understanding *how* and *why* this case hospital was successful in leading change.

Furthermore, the researcher collected multiple types of data (individual interviews, focus groups, unstructured observation, documents and artifacts) that were analyzed in a triangulating fashion. This approach enabled the researcher to confirm, dispute, or clarify the evidence collected; thus, adding to the study's credibility and minimizing the inherent weakness of any single data source.

### **Limitations**

When considering the study findings, one must take into account that this study was based on a hospital that had already led change to achieve Magnet<sup>®</sup>. Following a hospital organization as it actually goes through the application process may have provided a different perspective that would change the understanding and conclusions that were reached with this study. However, there is no guarantee that a hospital seeking Magnet<sup>®</sup> designation will be successful in that endeavor. Given this study's aim to understand *effective* principles for leading change, the case was centered on a hospital that had effectively led change and had achieved the desired outcome—Magnet<sup>®</sup> designation.

The single case study method has been criticized for its lack of ability to generalize beyond the case. However, as Yin (2014) points out, the purpose of case study is to expand and generalize theories, not to extrapolate probabilities through statistical generalizations (Yin, 2014). Despite the unique characteristics of this case hospital, we found many similarities between their journey and other hospitals that have successfully led change to achieve Magnet<sup>®</sup> designation, as well as many similarities to studies of nurses leading other types of organizational change (e.g., a hospital merger, public health department changes, and

implementing new care delivery models in an academic medical center). The themes that emerged from this case study support and expand the conceptual model of leading change developed in the first manuscript from a larger body of empirical studies and expert commentaries, thus contributing to a midrange descriptive theory of leading change in nursing.

### **Implications for Practice and Future Research**

The study findings support that leading change is a *process* (rather than the attributes of a single person) that is embedded in multilayered, dynamic contexts. Leading change occurs as a continuous pattern of interactions between informal networks of individuals that collectively move the system towards a desired future state. As such, new leadership theories that focus on process and context rather than individual personality characteristics are a better fit for examining how nurses lead change in today's complex health care systems.

The theoretical assumptions underlying complexity leadership theory (Uhl-Bien, Marion, & McKelvey, 2007) clearly were evident in this case study hospital, despite the fact that it had only 25 inpatient beds. Leadership was enmeshed within a superstructure of planning, organizing, and missions, which may have originated at the highest levels of the organization but were collectively developed and achieved through participatory strategies that engaged the entire organization. These efforts were supported by informal dynamics embedded in a context of mutual respect and caring that permeated all levels of the organization. Complexity leadership theory asserts that leaders should focus on enabling rather than suppressing or aligning these informal dynamics to advance outcomes in complex adaptive systems, such as acute care hospitals (Uhl-Bien et al., 2007). NEs and other administrative leaders at Waverly Health Center enabled and supported a socially constructed process where nurses worked both within and across factions inside and outside the organization to address the challenges of seeking Magnet<sup>®</sup>

designation—challenges that required new learning, innovation, and new patterns of behavior for all members of the system (Uhl-Bien et al., 2007). These patterns generated a collective commitment to the goal of improving staff and patient outcomes through the journey to Magnet<sup>®</sup>. This case study supports complexity leadership theory as a more appropriate theoretical framework than traditional leadership theories (e.g., transformational leadership, authentic leadership) for nurses seeking to lead change to improve nurse, patient, and organizational outcomes in complex acute care hospitals today.

Moreover, our study findings indicate that complexity is not defined by the size of a hospital system. Nurses in CAHs with 25 inpatient beds or less face a multitude of complex challenges as they attempt to navigate uncertainty and lead change to improve their organizations, including: (a) recruitment, retention, and appropriate staffing ratios, (b) the need for nursing staff who are flexible, confident, and possess multi-specialist knowledge to care for individuals who are often chronically ill or are in need of care beyond the hospital's capabilities, and the (c) need for more highly educated nurses, compounded by (d) a lack of financial and human resources to support new graduate nurse transition, continuing education, evidence-based practice, and professional development.

Interestingly, being a practicing registered nurse in a rural area was found to be a positive predictor of completing an advanced degree upon returning to school (Kovner, Brewer, Katigbae, Djukic, & Fatehl, 2012). This has important implications for NEs in rural hospitals. Rural NEs should use this evidence to advocate for the financial and human resources necessary to support their nursing staff seeking advanced education through tuition reimbursement, flexible scheduling, and Career Ladder advancements based on educational degree. The evidence supports that their efforts would be well worth the investment to achieve a higher educated

nursing work force, which has been empirically associated with better patient outcomes (Aiken, Clarke, Cheung, Sloane, & Silber, 2003; Estabrooks, Midodzi, Cummings, Ricker, & Giovannetti, 2005; Friese, Lake, Aiken, Silber, & Sochalski, 2008; Tourangeau et al., 2007).

The conceptual model of leading change was supported by the case study findings, suggesting that there may be underlying effective principles for leading change that prevail regardless of an organization's size. These principles, or variables depicted in the conceptual model of leading change should be studied further through qualitative and quantitative research in other organizations of varying size. From there, evidence-based policies and programs may be developed to prepare and enable nurses at all levels to advance the profession's effectiveness as leaders of change in health care.

At the executive level, nurse leaders are essential for establishing the principle of organizational readiness. NEs must garner strong administrative support for the change and take time to do a thorough gap analysis to determine where the organization currently is and where they want to be—their desired future. Based on the findings of the gap analysis, NEs must garner the resources (financial and human) necessary to build structures and processes to support the leading change process. Clear, transparent, consistent, and frequent communication with stakeholders is fundamental to fostering relationships and organizational learning, which in turn generates enthusiasm, understanding, commitment, and collective action for change.

It is estimated that nearly half of all leading change efforts fail due to executive level leaders' lack of establishing sufficient organizational readiness for change (Kotter, 1996). While this fact was identified decades ago in business, there is a dearth of information in the nursing literature that has investigated organizational readiness. Waverly Health Center spent half (3/6 years) of their journey to Magnet<sup>®</sup> establishing organizational readiness, indicating that this

variable may be a significant predictor of leading change success in nursing. Future studies that explore organizational readiness as a predictor of leading change success are recommended. Researchers could use the Commitment to Change (Herscovitch & Meyer, 2002), a highly reliable and valid instrument tested with nurses, to measure the effectiveness of various NE interventions on staff nurses' affective, continuance, and normative commitment to change.

Nurses at the nurse manager level are the enablers of organizational change. They are critical in creating psychological safety for frontline staff as they let go of established behaviors and test the waters of change. Nurse managers at Waverly Health Center excelled in their ability to lead change by recognizing their staff's uncertainty and reassuring them through positive reminders of the great work they were contributing, gentling nudging them along rather than dominating or controlling. It is important for nurse managers to recognize the distinction between *leading* and *directing* or *managing* to establish a supportive environment for leading change. *Directing* change describes an antiquated approach where change ideas are developed by a few at the very top of the hierarchy who then drive their agenda down through the vertical chains of command in their organization with little to no input from those with less authoritative titles. This has been a common approach used by hospital leaders or quality improvement departments in the past, but more recently has been replaced with *managing* change.

In today's complex world of health care delivery, leadership approaches often take the form of *managing* change. Lean approaches, such as applying tape strips to denote where supplies should be and standardizing supply locations on nursing units are helpful strategies for decreasing unnecessary complexity. However, standardizing all processes in an attempt to manage unpredictable change can be detrimental. Hospitals are comprised of freethinking and acting human beings; as such, the solutions to complex unpredictable challenges reside within

the individuals of the system. While change is rapid and continuous, nurses must be attuned to the word *manage* and recognize its ability to shut down naturally emerging opportunities for growth and development of the organization.

In the busyness of their day-to-day work, nurse managers may be tempted to manage change by dismissing innovative ideas from staff in favor of more standardized approaches. However, nurse managers must recognize these moments as opportunities and encourage their frontline staff to engage in shared decision making to generate effective solutions to sustain change efforts at the point of care delivery. The difference between *leading*, *directing*, and *managing* change may be subtle shifts in language, but these terms hold the potential to generate seismic shifts in thoughts, behaviors, and outcomes. Future research that explores how nurse managers achieve balance between managing continuous change and enabling an environment that facilitates an emergence of ideas for effective problem solving at the frontline are warranted.

At the staff nurse level, nurses must embrace lifelong learning and seek advanced education to foster their knowledge, skills, and abilities for evidence-based practice. They must recognize the essential role they play in leading change by taking a proactive approach in engaging in shared governance. If the structures to support shared governance councils are not in place within their hospital, staff nurses should communicate with their nurse managers and NEs to work towards developing these mechanisms for raising their voice. Like many staff nurses, staff nurses at Waverly Health Center were focused first-and-foremost on providing the best care possible to their patients. Through participation on shared governance councils, such as the nursing practice council and nursing quality council, staff nurses at Waverly began to make important connections to how their practice impacts the quality of care their patients receive and the importance of using evidence to drive practice changes. Research moved from a nebulous

concept that only NEs care about to a meaningful tool for effecting change and improving patient care. Staff nurses have an essential role in advocating for structures and processes that can advance the care they deliver. Their expertise and stories are critical for understanding effective, sustainable solutions that can transform hospitals to provide more efficient, effective, high quality care. They are the drivers of change outcomes.

Five recommendations with numerous action steps were developed from the lessons learned by Waverly Health Center and their efforts to lead change to achieve Magnet<sup>®</sup> standards. These recommendations are intended as a blueprint for leading change rather than a prescriptive protocol. Rural NEs may review the action steps to identify appropriate strategies for leading change to improve patient, nurse, and organizational outcomes in their own contexts. Future research is needed to explore the feasibility and effectiveness of the recommendations and action steps for achieving Magnet<sup>®</sup> standards in other CAHs.

### **Conclusions**

Nurse executives, whether leading a 25-bed hospital or a 1,500-bed hospital, are called to lead change to improve patient, nurse, and organizational outcomes. Although leading change in CAHs may at first appear vastly different from leading change in mid-size or larger hospital settings, the findings of this study support that there are underlying principles that universally govern best practices for leading change, including: organizational readiness, individual and collective leadership, organizational learning, providing operational support, fostering relationships, and balancing paradoxical priorities. Nurses in all settings must be adaptable and responsive to the rapidly changing, complex nature of health care delivery. It is not enough to manage change; they must *lead* change.

Nurse managers must foster interprofessional teamwork and empower bedside nurses to embrace evidence-based practice through shared governance. NEs must lead change to generate more effective and efficient care, while ensuring that their hospitals care for the mind, body, and spirit of patients, families, and communities. Nurse leaders at all levels must be relentless in their pursuit of excellence. By seeking knowledge from hospital systems that differ from their own, rural and urban NEs may engage in a symbiotic relationship that fosters the united goal of providing high quality, team-oriented, patient-centered care. These are Magnet<sup>®</sup> qualities that are the mark of nursing excellence driven by superior outcomes and should be every nurse's goal.

With nearly 27.7 million people living in rural areas in the U.S., it is incumbent upon nurses to work in collaboration with others to lead change to transform CAHs to provide sustainable, high quality health care. These hospitals are critical to the provision of care for rural residents and to sustaining rural economies. The dynamic nature of leading change means that there are likely multiple pathways to success. This case study has advanced nursing leadership knowledge by illuminating multiple patterns, rather than singular solutions, that can inform the development of theory, practice, programs, and policies to prepare and enable nurses at all levels to lead change to advance rural CAH outcomes.

## References

- Aiken, L. H., Clarke, S. P., Cheung, R. B., Sloane, D. M., & Silber, J. H. (2003). Educational levels of hospital nurses and surgical patient mortality. *JAMA, 290*(12), 1617-1623.
- Doeksen, G. A., St. Clair, C. F., & Eilrich, F. C. (2012). *The economic impact of a critical access hospital on a rural community*. Retrieved from <https://www.ruralhealthinfo.org/publications/documents/8905>
- Estabrooks, C. A., Midodzi, W. K., Cummings, G. G., Ricker, K. L., & Giovannetti, P. (2005). The impact of hospital nursing characteristics on 30-day mortality. *Nursing Research, 54*(2), 74-84.
- Friese, C. R., Lake, E. T., Aiken, L. H., Silber, J. H., & Sochalski, J. (2008). Hospital nurse practice environments and outcomes for surgical oncology patients. *Health Services Research, 43*(4), 1145-1163.
- Herscovitch, L., & Meyer, J. P. (2002). Commitment to organizational change: Extension of a three-component model. *Journal of Applied Psychology, 87*(3), 474-487.
- Kaufman, B. G., Thomas, S. R., Randolph, R. K., Perry, J. R., Thompson, K. W., Holmes, G. M., & Pink, G. H. (2016). The rising rate of rural hospital closures. *The Journal of Rural Health, 32*(1), 35-43.
- Kotter, J. P. (1996). *Leading change*. Boston, MA: Harvard Business School Press.
- Kovner, C. T., Brewer, C., Katigbae, C., Djukic, M., & Fatehl, F. (2012). Charting the course for nurses' achievement of higher education levels. *Journal of Professional Nursing, 28*(6), 333-343. doi:10.1016/j.profnurs.2012.04.021

- Moss, K., Holmes, M., & Pink, G. H. (2015). *Do current medicare rural hospital payment systems align with cost determinants?* Retrieved from <https://www.ruralhealthinfo.org/publications/documents/10719>
- Nelson-Brantley, H. V., Ford, D. J., & Frank-Ragan, E. (2016). *Leading change: A concept analysis*. Manuscript submitted for publication.
- Nelson-Brantley, H. V., Ford, D. J., Miller, K. L., & Bott, M. J. (2016). *Nurse executives leading change to improve critical access hospital outcomes: A literature review with research-informed recommendations*. Manuscript in preparation.
- Nelson-Brantley, H. V., Ford, D. J., Miller, K. L., Stegenga, K., Lee, R., & Bott, M. J. (2016). *Leading change: A case study of the first independent critical access hospital to achieve Magnet® designation*. Manuscript in preparation.
- Sandelowski, M. (2004). Using qualitative research. *Qualitative Health Research, 14*(10), 1366-1386. doi:10.1177/1049732304269672
- Tourangeau, A. E., Doran, D. M., Hall, L. M., O'Brien Pallas, L., Pringle, D., Tu, J. V., & Cranley, L. A. (2007). Impact of hospital nursing care on 30-day mortality for acute medical patients. *Journal of Advanced Nursing, 57*(1), 32-44.
- U.S. Department of Health and Human Services. (n.d.). What is the flex program? Retrieved from <http://www.hrsa.gov/healthit/toolbox/RuralHealthITtoolbox/Introduction/flex.html>
- Uhl-Bien, M., Marion, R., & McKelvey, B. (2007). Complexity leadership theory: Shifting leadership from the industrial age to the knowledge era. *The Leadership Quarterly, 18*(4), 298-318. doi:http://dx.doi.org/10.1016/j.leaqua.2007.04.002
- Walker, L. O., & Avant, K. C. (2011). Concept analysis. *Strategies for theory construction in nursing* (5th ed., pp. 157-179). Upper Saddle River, NJ: Pearson Prentice Hall.

## Appendix A

### Letter of Invitation

Dear (CNO name):

As a critical access hospital that has recently achieved Magnet<sup>®</sup> designation, your organization is being invited to participate in an important study to understand how nurses successfully lead organizational change. The study will be conducted by Heather Nelson-Brantley, PhD student at the University of Kansas School of Nursing, under the direction of Dr. Marjorie Bott and Dr. Debra Ford. The researcher hopes that information obtained from this study will provide useful recommendations for nursing administration at other critical access hospitals that are looking to lead change to advance patient, nurse, and organizational outcomes within their own organizations.

The Institute of Medicine recommends that nurses lead change, from the bedside to the boardroom, to improve the nation's health and health systems. This study will be the first to investigate nursing leadership at all levels of a hospital organization in order to gain a holistic understanding of how nurses individually and collectively lead change. As such, this study will include individual and focus group interviews, observation, and collection and analysis of documents relevant to the Magnet<sup>®</sup> application time period. Individual interviews will be conducted with the chief nursing officer and willing nurse managers from each hospital unit type (e.g., emergency department, medical-surgical, surgery complex care, and birthing center). Focus group interviews with willing staff nurses will also be conducted. All interviews will be conducted in person and will last approximately one hour.

All participants will be informed that their participation is completely voluntary. Interviews may be stopped at any time if the participant no longer wishes to proceed. Interviews will be conducted in English and audio recorded. Pseudonyms will be used to protect participant confidentiality. Participants may be contacted after the interview to clarify information.

With hospital permission, observation of staff nurses, nurse managers, and the chief nursing officer as they perform their daily work will take place throughout the data collection period. Documents relevant to the Magnet<sup>®</sup> application time period (e.g., Magnet<sup>®</sup> application files; hospital mission, vision statement, and strategic plan; executive board and nursing practice council meeting minutes; Magnet<sup>®</sup> informational and promotional buttons, banners, pins, and/or hospital newsletters) will also be collected.

Please direct questions about the study or your participation in it to Heather Nelson-Brantley at [hnelson-brantley@kumc.edu](mailto:hnelson-brantley@kumc.edu), or 913-244-9907. You may also contact either Dr. Marge Bott at [mbott@kumc.edu](mailto:mbott@kumc.edu), (913-588-1692); or Dr. Debra Ford at [dford@kumc.edu](mailto:dford@kumc.edu), (913-588-1646).

Thank you for your time and consideration of this study.

Sincerely,

Heather Nelson-Brantley, BSN, RN, CCRN-K  
PhD Student, Jonas Nurse Leader Scholar

## Appendix B

## Letter of Interest in Participation from Identified Hospital

---

**doctoral research project**

[REDACTED] [REDACTED]@WaverlyHealthCenter.org]

**Sent:** Friday, November 13, 2015 3:38 PM**To:** Heather Nelson-Brantley

Heather:

Thank you for inviting the administrative staff, managerial staff and direct-care employees to participate in your doctoral research project. My team and I were very pleased to meet with you today and discuss your topic and plans for data collection. All of us at Waverly Health Center look forward to participating. We are proud of our facility and hope to provide whatever help possible.

**[REDACTED], RN, MSN | Chief Clinical and Nursing Officer**

Administration, Waverly Health Center

t [REDACTED] | f [REDACTED]

WaverlyHealthCenter.org

---

This e-mail, including attachments, is covered by the Electronic Communications Privacy Act, 18 U.S.C. 2510-2521. The information contained in this message may be confidential and legally privileged. The message is intended solely for the addressee(s). If you are not the intended recipient, you are hereby notified that any use, forwarding, dissemination, or reproduction of this message is strictly prohibited and may be unlawful. If you are not the intended recipient, please contact the sender by return e-mail and destroy all copies of the original message.

## Appendix C

## Individual Interview Informed Consent Form

**RESEARCH CONSENT FORM****Leading Change in Critical Access Hospitals: A Case Study of the Journey to Magnet<sup>®</sup>****Protocol # 3532****Researcher Contact Information:**

Heather Nelson-Brantley, BSN, RN, CCRN-K

[hnelson-brantley@kumc.edu](mailto:hnelson-brantley@kumc.edu)

Phone: 913-244-9907

Marjorie Bott, PhD, RN

[mbott@kumc.edu](mailto:mbott@kumc.edu)

Phone: 913-588-1692

Debra Ford, PhD

[dford@kumc.edu](mailto:dford@kumc.edu)

Phone: 913-588-1646

You are being asked to join a research study. You are being asked to take part in this study because you have valuable knowledge related to the efforts made at Waverly Health Center to achieve Magnet<sup>®</sup> designation. You do not have to participate in this research study. The main purpose of research is to create new knowledge for the benefit of future patients and society in general. Research studies may or may not benefit the people who participate.

Research is voluntary, and you may change your mind at any time. There will be no penalty to you if you decide not to participate, or if you start the study and decide to stop early. Your participation will have no bearing on your employment status or ability to receive medical care and services at Waverly Health Center. In addition, you can still get medical care and services at the University of Kansas Medical Center (KUMC).

This consent form explains what you have to do if you are in the study. It also describes the possible risks and benefits. Please read the form carefully and ask as many questions as you need to, before deciding about this research.

**BACKGROUND**

Nurses have been called to transform our current health care system to advance the health of individuals, populations, and systems. Despite a multitude of initiatives, transforming hospitals to provide more efficient, effective, and patient-centered care remains an elusive goal for many. One particular type of hospital, the Magnet<sup>®</sup>-designated hospital, has become a universal symbol for high quality nursing care. While much is known about the superior outcomes of Magnet<sup>®</sup> organizations, little is known about how nurses individually and collectively lead change to achieve the outcomes associated with Magnet<sup>®</sup>.

## **PURPOSE**

The purpose of this study is to understand how nurses at all levels of a hospital system individually and collectively lead change to advance patient, nurse, and organizational outcomes. By doing this study, the researchers hope to learn effective principles to prepare and enable nurses at all levels to lead change to advance patient, nurse, and organization outcomes in critical access hospitals.

## **PROCEDURES**

If you are eligible and decide to participate in this study, your participation will last approximately one hour. Your participation will involve

- **An interview conducted either in person or via phone in which the student researcher will ask you questions regarding your experience of leading change during the Magnet<sup>®</sup> application timeframe, and its impact on you professionally.**
- **You will be asked a short series of demographic questions regarding your gender, age, ethnic background, education, years of practice, and/or years of administrative leadership experience. This information will be combined with the demographic data of all participants and reported only as aggregated data.**
- **The interview will be audio-recorded and transcribed verbatim by a professional transcriptionist. All audio recordings will be de-identified prior to transcription through a coding system known only to the researchers. Confidentiality of your identity will be further supported by use of a pseudonym in all reporting.**
- **A follow-up may be asked of you to qualify and/or clarify statements/information collected during your initial interview; to seek further information; and/or to review the transcribed interview data for its accuracy in representing your perspective.**
- **All audio recordings will be maintained on a KUMC secured server and destroyed after the data analysis is complete.**
- **All interview transcriptions will be maintained in a secured file at the University of Kansas School of Nursing for five years as required by the research review board and then destroyed.**

## **RISKS**

You may feel uncomfortable discussing your experiences. If at any point during the study you are not comfortable, you may skip a question or completely stop participating. You may give only the information you choose. The treatment of information obtained during this study will be confidential; although, there is always some risk that the information might unintentionally be released. In order to minimize this risk, audio-recorded interviews will be destroyed following transcription and your transcribed information will be de-identified using a numbered code known only to the researchers. Although every attempt is made to minimize risks as described, there may be other risks of the study that are not yet known.

## **NEW FINDINGS STATEMENT**

You will be told about anything new that might change your decision to be in this study. You may be asked to sign a new consent form if this occurs.

**BENEFITS**

You will not directly benefit from this study. The researchers hope that the information from this research study may be useful in developing recommendations to prepare and enable nurses to lead change to advance rural or critical access hospital outcomes.

**ALTERNATIVES**

Participation in this study is voluntary. Deciding not to participate will have no effect on the care or services you receive at Waverly Health Center or the University of Kansas Medical Center.

**COSTS**

There is no cost for participating in this study.

**PAYMENT TO SUBJECTS**

There is no payment for this study.

**INSTITUTIONAL DISCLAIMER STATEMENT**

If you think you have been harmed as a result of participating in research at the University of Kansas Medical Center (KUMC), you should contact the Director, Human Research Protection Program, Mail Stop #1032, University of Kansas Medical Center, 3901 Rainbow Blvd., Kansas City, KS 66160. Under certain conditions, Kansas state law or the Kansas Tort Claims Act may allow for payment to persons who are injured in research at KUMC.

**CONFIDENTIALITY**

The researchers will protect your information, as required by law. Absolute confidentiality cannot be guaranteed because persons outside the study team may need to look at your study records. The researchers may publish the results of the study. If they do, they will only discuss group results. Your name will not be used in any publication or presentation about the study. Information will be shared with the dissertation co-chairs via KUMC secure file transfer.

**QUESTIONS**

Before you sign this form, Heather Nelson-Brantley or other members of the study team should answer all your questions. You can talk to the researchers if you have any more questions, suggestions, concerns or complaints after signing this form. If you have any questions about your rights as a research subject, or if you want to talk with someone who is not involved in the study, you may call the Human Subjects Committee at (913) 588-1240. You may also write the Human Subjects Committee at Mail Stop #1032, University of Kansas Medical Center, 3901 Rainbow Blvd., Kansas City, KS 66160.

**SUBJECT RIGHTS AND WITHDRAWAL FROM THE STUDY**

You may stop being in the study at any time. Your decision to stop will not prevent you from getting treatment or services at KUMC. The entire study may be discontinued for any reason without your consent by the investigator conducting the study.

**CONSENT**

Dr. Marge Bott, Dr. Debra Ford, Dr. Karen Miller or a member of the research team has given

you information about this research study. They have explained what will be done and how long it will take. They explained any inconvenience, discomfort or risks that may be experienced during this study.

By signing this form, you say that you freely and voluntarily consent to participate in this research study. You have read the information and had your questions answered.

***You will be given a signed copy of the consent form to keep for your records.***

\_\_\_\_\_  
Print Participant's Name

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Time

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name of Person Obtaining Consent

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name of Principal Investigator

\_\_\_\_\_  
Signature of Principal Investigator

\_\_\_\_\_  
Date

## Appendix D

## Focus Group Informed Consent Form

**RESEARCH CONSENT FORM****Leading Change in Critical Access Hospitals: A Case Study of the Journey to Magnet<sup>®</sup>****Protocol # 3532****Researcher Contact Information:**

Heather Nelson-Brantley, BSN, RN, CCRN-K

[hnelson-brantley@kumc.edu](mailto:hnelson-brantley@kumc.edu)

Phone: 913-244-9907

Marjorie Bott, PhD, RN

[mbott@kumc.edu](mailto:mbott@kumc.edu)

Phone: 913-588-1692

Debra Ford, PhD

[dford@kumc.edu](mailto:dford@kumc.edu)

Phone: 913-588-1646

You are being asked to join a research study. You are being asked to take part in this study because you have valuable knowledge related to the efforts made at Waverly Health Center to achieve Magnet<sup>®</sup> designation. You do not have to participate in this research study. The main purpose of research is to create new knowledge for the benefit of future patients and society in general. Research studies may or may not benefit the people who participate.

Research is voluntary, and you may change your mind at any time. There will be no penalty to you if you decide not to participate, or if you start the study and decide to stop early. Your participation will have no bearing on your employment status or ability to receive medical care and services at Waverly Health Center. In addition, you can still get medical care and services at the University of Kansas Medical Center (KUMC).

This consent form explains what you have to do if you are in the study. It also describes the possible risks and benefits. Please read the form carefully and ask as many questions as you need to, before deciding about this research.

**BACKGROUND**

Nurses have been called to transform our current health care system to advance the health of individuals, populations, and systems. Despite a multitude of initiatives, transforming hospitals to provide more efficient, effective, and patient-centered care remains an elusive goal for many. One particular type of hospital, the Magnet<sup>®</sup>-designated hospital, has become a universal symbol for high quality nursing care. While much is known about the superior outcomes of Magnet<sup>®</sup> organizations, little is known about how nurses individually and collectively lead change to achieve the outcomes associated with Magnet<sup>®</sup>.

## **PURPOSE**

The purpose of this study is to understand how nurses at all levels of a hospital system individually and collectively lead change to advance patient, nurse, and organizational outcomes. By doing this study, the researchers hope to learn effective principles to prepare and enable nurses at all levels to lead change to advance patient, nurse, and organization outcomes in critical access hospitals.

## **PROCEDURES**

If you are eligible and decide to participate in this study, your participation will last approximately one hour. Your participation will involve

- **A focus group interview session in which the student researcher will ask you and other group participants questions regarding your experience of leading change during the Magnet<sup>®</sup> application timeframe, and its impact on you professionally.**
- **You will be asked a short series of demographic questions regarding your gender, age, ethnic background, education, years of practice, and/or years of administrative leadership experience. This information will be combined with the demographic data of all participants and reported only as aggregated data.**
- **The interview will be audio-recorded and transcribed verbatim by a professional transcriptionist. All audio recordings will be de-identified prior to transcription through a coding system known only to the researchers. Confidentiality of your identity will be further supported by use of a pseudonym in all reporting.**
- **A follow-up may be asked of you to qualify and/or clarify statements/information collected during your initial interview; to seek further information; and/or to review the transcribed interview data for its accuracy in representing your perspective.**
- **All audio recordings will be maintained on a KUMC secured server and destroyed after the data analysis is complete.**
- **All interview transcriptions will be maintained in a secured file at the University of Kansas School of Nursing for five years as required by the research review board and then destroyed.**

## **RISKS**

You may feel uncomfortable discussing your experiences. If at any point during the study you are not comfortable, you may skip a question or completely stop participating. You may give only the information you choose. The treatment of information obtained during this study will be confidential; although, due to the ability of other group participants to repeat information shared during the focus group session, there is a risk that the information might unintentionally be released. In order to minimize this risk, the researcher will ask all participants to hold all information discussed during the session in confidence. In addition, audio-recorded interviews will be destroyed following transcription and your transcribed information will be de-identified using a numbered code known only to the researchers. Although every attempt is made to minimize risks as described, there may be other risks of the study that are not yet known.

## **NEW FINDINGS STATEMENT**

You will be told about anything new that might change your decision to be in this study. You may be asked to sign a new consent form if this occurs.

**BENEFITS**

You will not directly benefit from this study. The researchers hope that the information from this research study may be useful in developing recommendations to prepare and enable nurses to lead change to advance rural or critical access hospital outcomes.

**ALTERNATIVES**

Participation in this study is voluntary. Deciding not to participate will have no effect on the care or services you receive at Waverly Health Center or the University of Kansas Medical Center.

**COSTS**

There is no cost for participating in this study.

**PAYMENT TO SUBJECTS**

There is no payment for this study.

**INSTITUTIONAL DISCLAIMER STATEMENT**

If you think you have been harmed as a result of participating in research at the University of Kansas Medical Center (KUMC), you should contact the Director, Human Research Protection Program, Mail Stop #1032, University of Kansas Medical Center, 3901 Rainbow Blvd., Kansas City, KS 66160. Under certain conditions, Kansas state law or the Kansas Tort Claims Act may allow for payment to persons who are injured in research at KUMC.

**CONFIDENTIALITY**

The researchers will protect your information, as required by law. Absolute confidentiality cannot be guaranteed because persons outside the study team may need to look at your study records. The researchers may publish the results of the study. If they do, they will only discuss group results. Your name will not be used in any publication or presentation about the study. Information will be shared with the dissertation co-chairs via KUMC secure file transfer.

**QUESTIONS**

Before you sign this form, Heather Nelson-Brantley or other members of the study team should answer all your questions. You can talk to the researchers if you have any more questions, suggestions, concerns or complaints after signing this form. If you have any questions about your rights as a research subject, or if you want to talk with someone who is not involved in the study, you may call the Human Subjects Committee at (913) 588-1240. You may also write the Human Subjects Committee at Mail Stop #1032, University of Kansas Medical Center, 3901 Rainbow Blvd., Kansas City, KS 66160.

**SUBJECT RIGHTS AND WITHDRAWAL FROM THE STUDY**

You may stop being in the study at any time. Your decision to stop will not prevent you from getting treatment or services at KUMC. The entire study may be discontinued for any reason without your consent by the investigator conducting the study.

**CONSENT**

Dr. Marge Bott, Dr. Debra Ford, Dr. Karen Miller or a member of the research team has given

you information about this research study. They have explained what will be done and how long it will take. They explained any inconvenience, discomfort or risks that may be experienced during this study.

By signing this form, you say that you freely and voluntarily consent to participate in this research study. You have read the information and had your questions answered.

***You will be given a signed copy of the consent form to keep for your records.***

\_\_\_\_\_  
Print Participant's Name

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Time

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name of Person Obtaining Consent

\_\_\_\_\_  
Signature of Person Obtaining Consent

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name of Principal Investigator

\_\_\_\_\_  
Signature of Principal Investigator

\_\_\_\_\_  
Date

## Appendix E

## Individual Interview Guide

1. [To be used with administrative staff only]. Tell me briefly about your hospital structure. (Follow up: Organizational reporting structure, number of nursing units/patient populations served, number of nurses, other health care providers, the role of the hospital in serving its community).
2. As a (insert title [e.g., CNO, DON, board member]) of a critical access hospital, how would you describe critical access hospital care to those who have never worked in this setting? (Probe: How does it compare to larger hospital care? Can you describe any unique factors, challenges, or benefits of critical access hospital care?)
3. Tell me about your experience with your hospital seeking Magnet<sup>®</sup> designation. (Probes: Tell me your Magnet<sup>®</sup> journey story. Who were the key players; were there any change champions; what was the process like; what role, if any, did other departments (e.g., respiratory therapy, lab, radiology) and/or external consultants play?)
4. Describe your role in achieving Magnet<sup>®</sup>. (Probe: What or how did you contribute as a (insert title [e.g., CNO, DON, board member])?)
5. Describe your greatest challenge during the pursuit for Magnet<sup>®</sup> designation. (Follow up: What strategies, if any, did you use to address this challenge? What did you learn from that experience?)
6. Tell me about why you think your hospital was successful in achieving Magnet<sup>®</sup> designation.
7. If you were to develop a list of effective strategies for leading change to share with other critical access hospital (insert title [e.g., CNOs, DONs, board members]) seeking to achieve the outcomes associated with Magnet<sup>®</sup> designation, what would you include and why?
8. What was the most important thing you learned from the experience of applying for Magnet<sup>®</sup>? (Follow up: Why was this important to you?)

9. [To be used with nursing administrators and managers only]. In what way(s), if any, were you changed professionally as a result of the journey to Magnet<sup>®</sup>? (Probe: In what way(s), if any, has it influenced or changed the way you lead?)
10. Tell me about what gains, if any, you experienced while leading your organization during the Magnet<sup>®</sup> application time period. (Probe: What was 'in it' for you? Follow up: What, within the organization, helped you the most and what was least helpful to you during this time?)
11. Tell me about what losses, if any, you experienced while leading your organization during the Magnet<sup>®</sup> application time period. (Probe: What was 'at stake' for you? Follow up: What, within the organization, helped you the most and what was least helpful to you during this time?)
12. Tell me about your relationship with others in your organization (e.g., chief executive officer [CEO], CNO, DONs, NMs, staff RNs, board members, and other care providers as appropriate). (Probe: In what way(s) did they provide, or not provide, support for you during the Magnet<sup>®</sup> application process? What did you find most helpful? What did you find least helpful? Follow up: In what way(s), if any, has the journey to Magnet<sup>®</sup> changed the way you work with others in your organization?)
13. Tell me about how the costs of applying for Magnet<sup>®</sup>, both in terms of application fee and organizational change process, were viewed by others in the organization (e.g., CEO, hospital board, physicians, staff). (Follow up: How were they viewed by you?)
14. Is there anything else you would like to share with me that we have not already discussed?

## Appendix F

### Focus Group Interview Guide

#### **Welcome**

Welcome to this focus group session. I appreciate each of you taking time to join us today. My name is Heather Nelson-Brantley, and I am a PhD student at the University of Kansas School of Nursing. My area of interest is in understanding nursing leadership at all levels of a hospital organization.

#### **Topic**

Our topic for this session is on understanding critical access hospitals and your experiences of the journey to Magnet<sup>®</sup>. Information from this focus group session will be combined with information from other focus group sessions, individual interviews, observations, and document collection to gain a comprehensive understanding of how nurses at your hospital individually and collectively led change to achieve Magnet<sup>®</sup> designation. You have valuable knowledge and insight as an individual who worked for WHC during the Magnet<sup>®</sup> application time period. You were selected to participate in this session to share your perspective of this experience.

#### **Guidelines**

There are no right or wrong answers to the questions I will ask you. My intent is to capture as accurately as possible your experiences. I am interested in both positive and negative perspectives, so please share as honestly and openly as you wish.

This session is being audio recorded and will be transcribed verbatim, so one person speaking at a time is appreciated. All names will be removed during transcription and pseudonyms used in their place to protect your confidentiality. In addition, the nature of this session is confidential, and I would ask that you respect all participants by ensuring that what we discuss today remains within the confines of this room. Please respect the confidential nature of all that is discussed today by not discussing with those outside of this session.

My role as moderator will be to help guide the discussion.

## Questions

1. [Opening question. Intended to get participants talking. Will not be included in data analysis]. Tell me your name, where you primarily work in the hospital, and one thing you enjoy doing when not at work.
2. As individuals who work in a critical access hospital, how would you describe critical access hospital care to those who have never worked in this setting? (Probe: How does it compare to larger hospital care? Can you describe any unique factors, challenges, or benefits of critical access hospital care?)
3. Think back to the time when your hospital was seeking Magnet<sup>®</sup> designation. Tell me about what that experience was like from your perspective. (Probes: Tell me your Magnet<sup>®</sup> journey story. Who were the key players; were there any change champions; what was the process like; what role, if any, did other departments (e.g., respiratory therapy, lab, radiology) and/or external consultants play?)
4. Describe your role in achieving Magnet<sup>®</sup>. (Probe: What did you contribute?)
5. [To be asked during direct-care nurse and nurse manager focus groups only]. Tell me what comes to your mind when I say, “bedside leader.” (Probes: Are there individuals who come to your mind when you think of bedside leaders during the journey to Magnet<sup>®</sup>? If so, please describe: (a) how they led change, and (b) why you consider them leaders. How were bedside nurses responsible for leading change during the journey to Magnet<sup>®</sup>?)
6. [To be asked during direct-care nurse and nurse manager focus groups only]. In what way(s), if any, were you changed professionally as a result of the journey to Magnet<sup>®</sup>? (Probe: In what way(s), if any, has it influenced or changed the way you deliver patient care? In what way(s), if any, has it changed your professional values?)
7. Tell me about what quality means to you as you think about the work that is occurring at your hospital. (Follow up: In what ways, if any, has your view of quality changed as a result of your experience of working through the process to achieve Magnet<sup>®</sup>?)

8. Describe the things that you think were absolutely essential to achieving Magnet<sup>®</sup>. (Probe: What was most helpful for you personally and collectively?)
9. [To be asked during direct-care nurse and nurse manager focus groups only]. Describe how work gets done on your unit. (Probe: Describe relationships with other nurses, staff, or physicians. Follow up: In what way(s), if any, has this changed when you think about how work was accomplished prior to applying for Magnet<sup>®</sup>?)
10. Describe your greatest challenge during the pursuit for Magnet<sup>®</sup> designation. (Follow up: What strategies, if any, did you use to address this challenge? What did you learn from that experience?)
11. Tell me about why you think your hospital was successful in achieving Magnet<sup>®</sup> designation.
12. If you were to develop a list of effective strategies for leading change to share with others working in hospitals seeking to achieve the outcomes associated with Magnet<sup>®</sup>, what would you include in it and why?
13. What was the most important thing you learned from the experience of applying for Magnet<sup>®</sup>? (Follow up: Why was this important to you?)
14. [To be asked during direct-care nurse focus groups only]. Describe what comes to mind when I ask you to think about your nurse manager. (Probe: How would you describe him/her as a leader? Follow up: What contributions, if any, did he/she make to the success of your unit during the pursuit for Magnet<sup>®</sup>?)
15. Describe how you interact with the CNO of your organization. (Probe: What is communication like? Follow up: In what way(s), if any, has the journey to Magnet<sup>®</sup> changed the way your CNO interacts with you?)
16. Tell me about what gains, if any, you experienced while working in an organization seeking Magnet<sup>®</sup> designation. (Probe: What was 'in it' for you? Follow up: What, within the organization, helped you the most and what was least helpful to you during this time?)

17. Tell me about what losses, if any, you experienced while working in an organization seeking Magnet<sup>®</sup> designation. (Probe: What was 'at stake' for you? Follow up: What, within the organization, helped you the most and what was least helpful to you during this time?)
18. [Ask each participant to answer this question individually]. Of all the things we have discussed today, which one is most important to you as you think about your experience with leadership and change in seeking Magnet<sup>®</sup> designation?
19. Is there anything else you would like to share with me that we have not already discussed?

### **Summary**

Give a brief summary of the discussion and ask the group if the summary captures their ideas and experiences accurately, providing time for clarification.

Thank the focus group for their time and participation. Provide opportunity to answer any questions the participants have. Once all questions have been addressed, let the participants know that the session has concluded.

Inform participants that they will receive a summary of key themes from hospital administration. At that time, each study participant will have opportunity to provide additional clarification if desired.

Thank the participants one last time.

## Appendix G

## Permission to Use Waverly Health Center Name

**From:** [REDACTED] [REDACTED]@WaverlyHealthCenter.org]

**Sent:** Thursday, May 12, 2016 1:12 PM

**To:** Heather Nelson Brantley

**Subject:** Use of hospital name

Heather:

You have approval to use the actual name, Waverly Health Center, in your documentation as well as any possible future presentations and publications.

[REDACTED], **RN, MSN** | Chief Clinical and Nursing Officer

Administration, Waverly Health Center

t [REDACTED] | f [REDACTED]  
[\[REDACTED\]@WaverlyHealthCenter.org](mailto:[REDACTED]@WaverlyHealthCenter.org)

---

This e-mail, including attachments, is covered by the Electronic Communications Privacy Act, 18 U.S.C. 2510-2521. The information contained in this message may be confidential and legally privileged. The message is intended solely for the addressee(s). If you are not the intended recipient, you are hereby notified that any use, forwarding, dissemination, or reproduction of this message is strictly prohibited and may be unlawful. If you are not the intended recipient, please contact the sender by return e-mail and destroy all copies of the original message.