

2019

# Healthcare Organization Change Management Strategies to Guide Information Technology With for Information Technology Change Initiatives

Sharita Dianthe Speed-Crittell  
*Walden University*

Follow this and additional works at: <https://scholarworks.waldenu.edu/dissertations>



Part of the [Accounting Commons](#)

---

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact [ScholarWorks@waldenu.edu](mailto:ScholarWorks@waldenu.edu).

# Walden University

College of Management and Technology

This is to certify that the doctoral study by

Sharita Speed-Crittelle

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

Review Committee

Dr. Douglas Keevers, Committee Chairperson, Doctor of Business Administration  
Faculty

Dr. Denise Land, Committee Member, Doctor of Business Administration Faculty

Dr. Scott Burrus, University Reviewer, Doctor of Business Administration Faculty

Chief Academic Officer  
Eric Riedel, Ph.D.

Walden University  
2019

**Abstract**

**Healthcare Organization Change Management Strategies for Information**

**Technology Change Initiatives**

**by**

**Sharita Speed-Crittle**

**MS, Belhaven University, 2014**

**BS, University of Memphis, 2012**

**Doctoral Study Submitted in Partial Fulfillment**

**of the Requirements for the Degree of**

**Doctor of Business Administration**

**Walden University**

**April 2019**

## Abstract

As technology and organizations continue to increase in complexity, a willingness to implement change management strategies for Internet technology (IT) change initiatives is necessary in a healthcare setting. This multiple case study explored change management strategies that 3 hospital administrators at 3 different hospitals in the southeast region of the United States used to guide organizational IT change activities to avoid waste and increase profits. The conceptual framework for this study was Lewin's organizational change model and Kanter's theory of structural empowerment. Data were collected using semistructured interviews and a review of hospital documentation from the 3 hospitals. The data analysis process was completed by transcribing the interview recordings and coding the data using a codebook and data-management software. Themes that emerged from data analysis included strategies to increase digitization in all areas, improve communication with IT personnel, provide ongoing training, and encourage the gradual adoption of technology. The implications of this study for positive social change include the potential to provide hospital managers with successful strategies related to the use of IT in hospitals to facilitate improved patient care and community well-being.

Healthcare Organization Change Management Strategies for Information  
Technology Change Initiatives  
by  
Sharita Speed-Crittler

MS, Belhaven University, 2014

BS, University of Memphis, 2012

Doctoral Study Submitted in Partial Fulfillment  
of the Requirements for the Degree of  
Doctor of Business Administration

Walden University

April 2019

## Dedication

I would like to first honor GOD, who is the head of my life. I also dedicate this study to many loved ones, many of whom I will not be able to name. However, I give thanks to my spouse, Marcus, for being with me throughout my educational journey. To my parents for their continuous support and always being a listening ear—without you two, there would be no me. Thank you to my sister, April, who has always been a great role model for me. Thank you so much for believing in me and showing me an educational path that I never thought was possible. I hope I made you proud as your little sister. To my brothers, Cedric and Marcus, thank you both for being my protectors and only a phone call away when I needed you—I will always love you for that. To my cousin Keisha, whom I grew up with as a sister, thank you for everything. You and I have a bond that is unexplainable and can never be replaced. Last, I give thanks to the love of my life, my son, Josiah De'Marcus Crittle. When God blessed me with you this year, 2018, I never knew I could love another human being so unconditionally. You were my motivation to complete this journey. I want you always to know you can do anything in life, as long as you put GOD first and apply yourself. Always remember, it's not where you come from, but where you are going. Mommy loves you so much, and I dedicate this entire study to you.

## Acknowledgments

I want to acknowledge all my family and friends who supported me when times were tough, and who helped keep me moving forward during this doctoral journey. To my God Brother, Jerrell, Uncle Stanley, and Brother-In-Law, Andre, who are all resting in heaven right now. Thank you for making such a significant impact in my life, our talks and memories will live on forever in my heart. I am grateful to my editor, Libby, for her continuous support. A special thanks to my Chair, Dr. Keevers for all his support, guidance, and for being with me every step of the way. I know when he inherited another Chair's students it was not easy for him; but, he jumped right in, showed us so much compassion, and was very eager to see us all succeed. Thank you so much for caring about us, Dr. K.—you are indeed, one of a kind. Finally, thank you so much to my Second Committee Member, Dr. Land, for all your feedback and guidance throughout this dissertation process, your efforts are much appreciated.

## Table of Contents

List of Tables .....	v
Section 1: Foundation of the Study.....	1
Background of the Problem .....	1
Problem Statement .....	2
Purpose Statement.....	3
Nature of the Study .....	3
Research Question .....	5
Interview Questions .....	5
Conceptual Framework.....	6
Operational Definitions.....	7
Assumptions, Limitations, and Delimitations.....	7
Assumptions.....	7
Limitations .....	8
Delimitations.....	8
Significance of the Study.....	9
Contribution to Business Practice .....	9
Implications for Social Change.....	9
A Review of the Professional and Academic Literature.....	10
Search Strategy .....	10
Organization of the Literature Review .....	11
Lewin's Organizational Change Model .....	12

Kanter's Theory of Structural Empowerment.....	16
Healthcare Business Considerations .....	21
Information Technology in Healthcare Organizations .....	25
The Role of the Doctor and Compliancy Issues .....	31
Core Elements to Consider when Implementing Change.....	34
Factors Affecting Change .....	36
Change Management Models in the Healthcare Industry.....	48
Evidence-Informed Change Management Approach.....	51
Health Infoway Change Management Framework .....	52
National Health Service Change Management Guidelines.....	56
Institute for Healthcare Improvement's Triple Aim Framework.....	58
Summary .....	63
Transition .....	64
Section 2: The Project.....	66
Purpose Statement.....	66
Role of the Researcher .....	67
Participants.....	68
Research Method and Design .....	70
Research Method .....	70
Research Design.....	71
Population and Sampling .....	73
Ethical Research.....	75

Data Collection Instruments .....	77
Data Collection Technique .....	79
Semistructured Interviews .....	80
Organization Document Data .....	81
Data Organization Technique .....	82
Data Analysis .....	83
Reliability and Validity.....	85
Reliability.....	85
Validity .....	86
Transition and Summary.....	88
Section 3: Application to Professional Practice and Implications for Change .....	90
Introduction.....	90
Presentation of Findings .....	91
Main Theme 1: Increase Digitization in All Areas .....	92
Main Theme 2: Improve Communication with IT Personnel .....	96
Main Theme 3: Provide Ongoing Training.....	100
Main Theme 4: Encourage the Gradual Adoption of Technology .....	103
Minor Theme 1: Hold Staff Accountable .....	105
Minor Theme 2: Focus on Security .....	107
Application to Professional Practice .....	109
Digitization Strategies.....	109
Facilitation Strategies.....	110

Implications for Social Change.....	114
Recommendations for Action .....	115
Recommendations for Further Research.....	118
Reflections .....	120
Conclusion .....	121
References.....	123
Appendix: Interview Protocol.....	142

## List of Tables

Table 1. Summary of Main and Minor Themes.....	87
--	----

## Section 1: Foundation of the Study

The need for technological innovation is at a premium in business because of rapid change and globalization (Tolentino, 2017). Because of the shifts in technology healthcare organizations are run differently, requiring doctors, nurses, and other hospital staff to learn new technologies to stay current, be in compliance, and remain competitive (Tolentino, 2017). Healthcare organization leaders must be able to respond effectively to and address change within their organizations by incorporating information technology (IT) into their change management strategies to reduce waste and increase profits (Rosemann & vom Brocke, 2015). To be successful hospital administrators cannot rely solely on immediate patient care, they must also adopt change management strategies that will guide IT-related organizational change activities that will assist in the attainment of their primary goal of quality patient care (Lewis, Passmore, & Cantore, 2016).

### **Background of the Problem**

The healthcare industry is undergoing major changes in both healthcare reform and compliance (Lewis, Tutticci et al., 2016). In some hospitals, managers who address change willingly find they can address change with the confidence needed to incorporate IT and remain competitive (Nilashi, Ahmadi, Ahani, Ravangard, & bin Ibrahim, 2016). Alternatively, in the majority of hospitals, the adoption of change management strategies administrators use to guide organizational change activities for the IT elements of organizational change initiatives seems to take place slowly (Pugh, 2016). Change management in the healthcare industry is complex, in particular for managers who do not

possess a clear change management strategy, to guide organizational change activities for the IT elements of organizational change initiatives (Doppelt, 2017).

The focus of this study was to explore change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives. As technology and organizations continue to increase in complexity, a willingness to adopt change management strategies to guide organizational change activities for the IT elements of organizational change initiatives is essential in a hospital setting (Bridges & Bridges, 2017; Çınar & Eren, 2015). Without effectively addressing change management strategies in the healthcare industry, waste, additional expenses, and reduced profits will occur (Kuster et al., 2015).

### **Problem Statement**

Technological innovation and rapid changes in external variables, such as healthcare reform and compliance, have created the need for IT use as a change management strategy to guide organizational change activities in hospitals (Colicchio et al., 2016). In the healthcare industry, 63% of organizational managers attempt to implement IT changes yet fail because of their lack of an effective change management strategy to incorporate technology successfully (Spaulding, Kash, Johnson, & Gamm, 2017). The general business problem is that healthcare managers struggle to address productively change management strategies in their industry, creating waste, increasing expenses, and reducing profits. The specific business problem is that some hospital administrators lack change management strategies to guide organizational change activities for the IT elements of organizational change initiatives.

## Purpose Statement

The purpose of this qualitative multiple case study was to explore change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives. The targeted population was hospital administrators from three hospitals in the southeast region of the United States who have successfully implemented change management strategies to address the IT elements of organizational change initiatives. The results of this study may provide hospital managers with strategies to address IT as part of their change management strategy. Researchers can use this study to promote social change by providing hospital managers with successful strategies related to the use of IT in hospitals to facilitate improved patient care and to catalyze community well-being.

## Nature of the Study

The use of quantitative, qualitative, and mixed method research methodologies are common in academic research (Lewis, 2015). Researchers use qualitative approaches to ask questions such as *what*, *how*, and *why* a particular phenomenon occurs (Silverman, 2016). Researchers use qualitative methodologies to gain a deeper understanding of the thoughts and opinions of individuals (Yin, 2018). Therefore, the choice of a qualitative research methodology was appropriate for this study to help me explore strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives. In contrast, researchers use quantitative methodologies to test hypotheses and assess statistical data to examine variables' relationships or differences (Silverman, 2016). Researchers use the mixed method to

conduct studies with both qualitative and quantitative approaches when the information sought cannot be fully understood using only one approach (Eickhoff & Neuss, 2017); therefore, a quantitative or mixed methods approach was not appropriate for this study because there was no need to test hypotheses with this business problem. To explore effective change management strategies in hospitals, the use of qualitative methodology should enhance understanding of the change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives.

A qualitative methodology offers several possible research designs (Yin, 2018). Four research designs considered for this study included phenomenology, ethnography, historical, and case study. Researchers use phenomenology to provide a further understanding of how one or more individuals experience a phenomenon, most notably through the lived experiences of participants (Lewis, 2015). Therefore, phenomenology was not appropriate because I did not intend to study the lived experiences of participants. Researchers use ethnography to describe a culture and use historical approaches to focus on events that occurred in the past (Lewis, 2015; Yin, 2018). Culture was not the focus of this study, and the intent was not to analyze trends and events of the past; therefore, neither the ethnographic nor the historical designs were appropriate. Researchers use a case study approach to provide a detailed account of one or more cases for gaining insights into an underlying problem (Yin, 2018). Therefore, the case study design was the most appropriate for use in this study. Use of the case study design permits identification of the change management strategies hospital administrators use to

guide organizational change activities for the IT elements of organizational change initiatives.

### **Research Question**

The primary research question for this study was:

RQ: What change management strategies do hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives?

### **Interview Questions**

1. As a preliminary question, what has been your experience with implementing IT change management strategies in your organization?
2. What IT elements are you using to guide organizational change in your work environment?
3. How do you deal with challenges that arise for IT users when implementing new IT change management strategies to support major organizational change initiatives?
4. What communication methods do you use to facilitate the change management strategies implementation process?
5. How do you determine the success of your strategies for the implementation of IT change management strategies supporting major organizational change initiatives?
6. What barriers or challenges have you experienced related to IT change management strategy implementation?
7. How did you address the key barriers related to IT change management strategy implementation?

8. Based on any experiences related to implementing IT, what, if anything would you have changed to improve your strategies?
9. What else would like to share regarding this topic?

### **Conceptual Framework**

Kanter's (2008) structural theory of organizational empowerment and Lewin's (1947) phases of change model served as the conceptual frameworks for this study. Kanter's elements of empowerment include opportunity, the structure of power, access to resources, information, and support. Kanter's theory provides researchers a framework they can use to assess and understand employee use of new IT systems. Furthermore, Kanter suggested that management approaches determine employees' points of view on how they react and adapt to changes in their environment, making this theory relevant for my study. Kanter's model applied to this study because it helped me explore concepts related to IT change management strategies.

In conjunction with Kanter's theory, some researchers use Lewin's (1947) change model to explore dynamics in business. Lewin's model applies to the importance of IT change management as a common thread that all companies share. As such, this theory could help to reveal how IT managerial strategies in a healthcare setting influence an employee's acceptance of systems' use. Use of both Kanter's theory and Lewin's phases of change helped me explore change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives.

## **Operational Definitions**

*Change management strategies:* Change management strategies are strategies that company leaders use to bring change in an organization to gain efficiency and increase profits and business success (Allen, 2016).

*Globalization:* Globalization is the international exchange of goods and services between many countries in the world in an intertwined manner that can affect other countries negatively or positively (Tolentino, 2017).

*Technological innovation:* Technology innovation is a process through which new or improved technologies are developed and brought into widespread use (Colicchio et al., 2016).

## **Assumptions, Limitations, and Delimitations**

### **Assumptions**

Although assumptions are inherent in most research studies, these assumptions may not be within the researcher's control (Marshall & Rossman, 2015). Nevertheless, in an attempt to regulate assumptions, being conscious of the assumption that healthcare organizational managers may answer interview questions similarly warrants consideration. Although healthcare organization leaders may encounter different elements related to employee use and acceptance of IT, the assumption that all healthcare managers would respond to this concept in the same way would have been premature. Therefore, during this multiple case study, the strategies that all three healthcare managers use to implement and manage IT use deserved an open-minded approach. A

final assumption was that the participants were willing to participate and were honest in their responses.

### **Limitations**

Limitations are those parts of a study that are beyond the control of the researcher (Babbie, 2015). One limitation of this study may be the use of qualitative research only, as it limited the number of respondents I could include, and this may have influenced the results. Nevertheless, reaching data saturation took place. A second potential limitation was that of geographic location. As only data from three organizations may not adequately represent all other similar organizations in the state or nation, analyzing the results warranted caution. Lastly, a participant's ability to identify personal bias regarding effective strategies used to approach IT change management may be another limitation of this study. However, the use of varied interview questions and deep exploration of the participants' thoughts, opinions, and perceptions may have curtailed this possibility.

### **Delimitations**

Delimitations are components within a study that limit the scope and establish the boundaries of the study (Houngbo et al., 2017). The purpose of this qualitative multiple case study was to explore change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives. As such, the study was focused on healthcare managers' strategies to effect change, which may not apply to strategies used by managers in other industries.

## Significance of the Study

### Contribution to Business Practice

The findings of this study may be of value to businesses by providing successful strategies for healthcare managers seeking ways to implement IT use. As the workforce continues to grow (Holten & Brenner, 2015), contemporary organizational managers must prepare for change and understand how to design, develop, implement, and communicate IT change needs effectively (Colicchio et al., 2016). The benefits of successfully implementing IT use strategies in the healthcare industry for employees who struggle to adapt to IT change may include (a) employee performance increases when staff feel supported and can easily understand the change process; (b) morale; (c) productivity; (d) quality of work improvement; and (e) employees who are more likely to cooperate, collaborate, and communicate effectively (Glass & Cook, 2016). As noted by Glass and Cook (2016), creating a strong management team can increase creativity, profitability, and productivity throughout healthcare organizations. Healthcare managers may find that this study can contribute to efficient business practices in healthcare facilities implementing IT by identifying change management strategies used to guide organizational change activities for the IT elements of organizational change initiatives.

### Implications for Social Change

The results of this research study could contribute to positive social change by providing strategies on ways to influence the effective use of IT, which may help to provide better healthcare service in local communities. The findings from this study could help hospital administrators implement improved IT change process strategies that

contribute to positive social change by promoting care that is more efficient, both locally and nationally. When members of a society receive care that is more efficient, they may be more likely to seek medical assistance, and the overall health of the local community may improve (Kuipers et al., 2014).

### **A Review of the Professional and Academic Literature**

The purpose of this qualitative multiple case study was to explore change management strategies hospital administrators use to guide activities for the IT elements of organizational change initiatives. Technology shifted how healthcare organizations function, and the need exists to explore the extant literature regarding how hospital administrators use change management strategies to guide organizational change related to IT implementation in order to support the sustainability of a healthcare organization (Pugh, 2016).

### **Search Strategy**

A review of journal articles, dissertations, and other material from the Walden University Library guided this literature review. Specific databases used included Academic Search Elite, EBSCOhost, Google Scholar, ProQuest, SAGE Publications, and Thoreau. The search criteria included the subsequent words and terms: *change management, change management approach, evidence-informed approach, healthcare industry, Internet technology, Internet technology in healthcare organizations, primary care services, and population health management*. I identified 129 sources, 126 of which (97.7%) were peer-reviewed references and 111 (86%) were published in 2015 or later.

The literature review is made up of 111 sources; 107 (96.4%) were peer-reviewed references, and 103 (92.8%) were published in 2015 or later.

### **Organization of the Literature Review**

The literature review consists of an introduction to Lewin's (1947) organizational change model, which relates to phases of change, and Kanter's (2008) theory of structural empowerment regarding how healthcare systems use it to address change (Boamah & Laschinger, 2015). Given the focus of exploring the use of IT and the need for change in hospitals, an overview of the available and current literature extends knowledge on the subject. Information on the history and development of the two conceptual frameworks explored in this study make up a significant portion of this section. An exploration of organizational culture and change approaches are essential hospital culture is changing and the use of IT is more prevalent than ever.

Following a discussion in relation to Lewin (1947) and Kanter's (2008) models, I address several topics linked to the study's problem statement and related to factors that influence change and employee responses to change in this review. The related factors consist of: (a) healthcare business considerations, (b) Internet technology in healthcare organizations, (c) the role of the doctor and compliance issues, (d) core elements to consider when implementing change, (e) factors affecting change, (f) change management models in the healthcare industry, (g) organizational models for transformational change in healthcare systems, (h) evidence-informed change management approach, (i) health infoway change management framework, (j) national

health service change management guidelines, and (k) institute for healthcare improvement's triple aim framework.

### **Lewin's Organizational Change Model**

Lewin (1947) developed an organizational change model consisting of three steps or phases. This model has been a popular choice among many researchers, including Scheuer (2015) and van den Heuvel, Demerouti, Bakker, and Schaufeli (2013), as a framework to introduce organizational changes. Lewin's organizational change model for creating change is: *unfreeze*, *change*, and *refreeze*. According to Lewin, *unfreeze* refers to the process of altering organizational conditions to be conducive to change. Lewin further explained that successful organizational change is contingent on the ability of managers to prepare employees for the change. Change refers to the implementation of the planned change (Lewin, 1947). During this phase, Lewin stated that the adoption of change is at the first stages of implementation within organizational operations. Refreeze refers to the stage in which stability takes place within the organization (Lewin, 1947). According to Lewin, during refreeze, the change becomes the new status quo, and the organization has fully accepted the change. Researchers use this model to understand how change takes place by creating instability that stabilizes due to the adoption of the proposed change (Scheuer, 2015; van den Heuvel et al., 2013). The model helps researchers explore how to change the behavior of groups. Targeting group behavior allows team values to remain the same. Understanding team behavior supports change even if some individual resistance exists (Oreg & Goldenberg, 2015). The alteration of group standards reduces individual employee resistance (Oreg & Goldenberg, 2015).

Unfreezing is the process of destabilizing or diminishing the forces that strive to maintain the status quo (Lewin, 1947). Dismantling mindsets by presenting a stimulating problem and making an individual realize the need for change typifies the unfreezing process. Proper planning of the unfreezing stage is critical to successful change implementation. Healthcare in particular requires fast and successful change implementation. The inability to properly implement change will lead to inefficiency. This inefficiency presents the threat of diminishing patient outcomes (Allen, 2016). As Lewin (1947) stated, diverse kinds of problems might occur in different cases at the unfreezing stage. Burnes (2017) suggested their interpretation of Lewin's organizational change model related to inducing change through manipulation of employees' feelings. They advocated inducing guilt or survival anxiety to nurture a belief among organization members that change is a necessity (Burnes, 2017). Lewin's model has been used to effect change in different ways.

Change, the second step, involves introducing a change that is to become the new status quo. New behaviors or characteristics develop through an evolving organizational structure (Lewin, 1947). Change influences individuals in a variety of ways. Feelings of guilt and survival anxiety can cause those impacted to question their physiological safety. A remorseful outlook can cause individuals to resist change (Lewin, 1947). In this stage, the initiative of organizational managers should be to identify changes needed and how to implement such changes. Change implementation strategies must meet these goals or change targets (Lewin, 1947). Following Lewin's lead, Burnes (2017) asserted that uncertainty and apprehension related to change affects the group, as well as its members.

Since these forces are convoluted and dynamic in nature, managers should apply a trial and error strategy while utilizing such forces to explore diverse options of bringing change (Burnes, 2017). Healthcare managers must recognize and analyze their employees' reactions to a change. Based on this analysis, change plans would benefit from rapid reevaluation if deemed ineffective.

Refreezing, the third phase of Lewin's (1947) organizational change model, deals with addressing change after implementation. The outcome is to stabilize and solidify the new state. Refreezing involves the acceptance of the changes made to organizational processes or structure as the new norm or status quo. Lewin referred to the refreezing step as a crucial stage as it ensures that people do not revert to their old structures. Refreezing is essential to ensuring the consistent implementation and application of a new change. Lewin described this as a quasi-stationary equilibrium. It is critical for managers to ensure employees are consistent in their adoption and implementation of change behaviors. The change must become part of the organization's daily operations.

For refreezing to occur, a group's lifestyle cannot return to its previous state. Instead, the changes must become permanent (Lewin, 1947). As discovered by Burnes (2017) in their assessment of Lewin's (1947) model, it is important for the newly adopted behaviors to exist in accord with the overall group personality as well as the environment of the organization, or this might lead to another round of disconfirmation and change. Change, as a group exercise, should align with the norms and routines of the newly accommodated individual behaviors (Lewin, 1947). The propensity of group members to return to previous behavior necessitates refreezing (Burnes, 2017).

Although Lewin's (1947) organizational change model does not completely address all of the steps an organizational manager could take to mitigate the challenges of change, the model does provide a plan of action to help managers address and respond to the impact technology has on the change management strategies of healthcare organizations (Allen, 2016). Due to the rapid pace at which technology changes, employees may become frustrated, and managers, while sympathetic, may not be able to control the nature of technological innovation to help alleviate employee angst or frustration (Tolentino, 2017). The ever-changing landscape is very likely to cause issues when implementing change in a healthcare organization (see Karyotakis & Moustakis, 2014). Through proper attention given to factors that affect employee performance, managers can increase the likelihood of successful change implementation. It is critical for healthcare organization managers to successfully plan and implement change management strategies (Allen, 2016). As asserted by Allen (2016), managers who can successfully lead their employees through the change process are able to positively affect patient outcomes.

Recent studies conducted by van den Heuvel et al. (2013) and Scheuer (2015) support Lewin's theory that the organizational change model constitutes an operational framework that can be used to predict human behavior. Both van den Heuvel et al. and Scheuer found the model to be able to predict individual resistance to change while offering a solution for ensuring changes will be successful amid this resistance. Van den Heuvel et al. applied Lewin's organizational change model to study employees undergoing reorganization. Their goal was to predict individual adaptive attitudes and

behavior over time (van den Heuvel et al., 2013). Based on similar principles, Scheuer provided an empirical analysis in which a risk-management system in an orthopedic clinic led to different types of relational inertia, seen as the continued forward motion of a relationship, regardless of success. Relational inertia had to be handled by constructing a performative sociotechnical risk-management system in order for the change to succeed (Scheuer, 2015).

### **Kanter's Theory of Structural Empowerment**

Kanter (2008) contended that the structure of the work environment plays a significant role in shaping employee attitudes and behaviors in organizations. Perceived access to power and opportunity structures is another factor that affects the behaviors and attitudes of employees in organizations. Kanter suggested that individuals might display different behaviors depending on whether certain structural supports (power and opportunity) were in place (Kanter, 2008). Due to the influence employee behavior can have on patient outcomes, it is critical that healthcare managers analyze their employees' perceived power and opportunity.

Kanter (2008) identified formal and informal power as two primary forces that are part of the fabric of an organization. Formal power is associated with visible leadership and allows individuals in power the ability to make overt decisions for the organization (Kanter, 2008). Alternatively, informal power is less obvious and is created within the context of forming relationships with colleagues (Neves & Ribeiro, 2016). Informal power is present in many healthcare settings. Employees frequently have contact with a variety of colleagues. The diversity of job titles that exist in the healthcare setting allows

employees to expand their networks. This leads to informal power through the building of diverse relationships.

Kanter (2008) also identified six conditions required for empowerment to take place. These conditions are (a) an opportunity for advancement, (b) access to information, (c) access to support, (d) access to resources, (e) formal power, and (f) informal power (Kanter, 2008). Managers must be aware of these conditions, and they should strive to ensure they exist in their organizations. Many organizational behaviorists have studied and based their work on these six conditions of empowerment. Neves and Ribeiro (2016) asserted that the basis of structural empowerment and psychological empowerment comes from Kanter's work in the 1970s. Both types of empowerment are distinct sources of organizational power (Neves & Ribeiro, 2016).

Opportunity for advancement refers to growth, mobility, and the chance to increase knowledge and skills. Kanter (2008) posited that the second structural element of power allows practitioners to mobilize the available resources to support an individual's role in an organization to achieve goals. Access to resources denotes the ability to obtain supplies, materials, personnel, capital, and anything else needed to achieve organizational goals. Another aspect, access to information, relates to obtaining data, expertise, and technical knowledge necessary to effectively perform in a certain capacity. Concerning support, it is essential to have feedback and guidance from any number or level of coworkers to heighten efficiency (Kanter, 2008). According to Kanter, the degree of formal and informal power an individual has in an organization directly relates to access to empowerment structures. Formal power derives from work that allows

visibility, creativity, and flexibility. Formal power also stems from work considered central to the organization. Alternately, informal power develops from relationships and networks with peers, subordinates, and superiors within and without the organization.

Giving informal power to employees increases job satisfaction, trust, and commitment, and a notable decrease in job burnout (Neves & Ribeiro, 2016; Rocha & Mill, 2017). Kanter's theory has shown to have a determinate effect on employee empowerment and job satisfaction as well as organizational confidence and success, especially in healthcare settings (Neves & Ribeiro, 2016). When decreased work pressure, support from supervisors, greater peer cohesion, and staff autonomy are in place, the transition to using IT for healthcare professionals improves (Watson, 2016).

Significant change has occurred in the healthcare industry, forcing organizations and managers to rethink their strategies regarding operations and structure (Reynolds & Jones, 2016). Kanter's theory continues to remain one of the most basic frameworks to guide practices to improve organizational efficiency. During times of change, healthcare managers have been able to facilitate the use of empowerment models, which often allow for success (Watson, 2016). The use of Kanter's theory for healthcare organizations during times of change can help employees adjust to the effect of IT change in healthcare settings to experience an improved work environment (Reynolds & Jones, 2016).

Kanter's theory was a framework for many different studies in the literature, notably those of: Orgambídez-Ramos and Borrego-Alés (2014); DiNapoli, O'Flaherty, Musil, Clavelle, and Fitzpatrick (2016); Lewis, Passmore, and Cantore (2016); and Al-Dweik, Al-Daken, Abu-Snieneh, and Ahmad (2016); and Thuss, Babenko-Mould,

Andrusyszyn, and Laschinger (2016). Orgambídez-Ramos and Borrego-Alés examined the role of access to opportunity, resources, support and information, and two types of power, formal and informal, as precursors to job satisfaction. Over 226 Spanish university teachers answered questionnaires, and the researchers used the collected data for hierarchical multiple regression analyses. Their results corroborate Kanter's theory of structural empowerment and indicate the presence of strong relationships between job satisfaction and structural empowerment. Using a descriptive qualitative method, Thuss et al. examined the experiences of empowerment for clinical instructors in Rwanda and observed that their findings supported Kanter's (2008) theory. Thuss et al. claimed that support, recognition, and access to professional development opportunities would empower the clinical instructors in their faculty positions in the clinical setting. DiNapoli et al. asserted that the importance of workplace empowerment leads to positive organizational outcomes in nursing. They studied the impact of empowerment on nurses' work environments and discovered a correlation between empowerment and job satisfaction. They concluded that creating a supportive and satisfying work environment for nurses increases retention rates.

Using structural equation modeling techniques, Thuss et al. (2016) studied patterns of relationships and observed that natural power acts as a mediator between formal power and access to empowerment in the workplace. Access to both formal and informal power is a significant forerunner to involvement in decisions related to nursing practice (Neves & Ribeiro, 2016; Rocha & Mill, 2017). The use of Kanter's theory in structuring the organizational setting in the healthcare industry, including decisional

involvement, provides guidance for theory-based management practices and allows those implementing it to have control over both content and context of nursing (Thuss et al., 2016). The perception of formal or informal power significantly influences the access to work empowerment, as found by Pineau Stam, Spence Laschinger, Regan, and Wong (2015) work empowerment can be significantly influenced by the perception employees have regarding their level of power, including both formal power bestowed upon them and informal power they perceive to have. Pineau Stam et al. also found when observing nurses' involvement in professional and organizational decision making that the level of perceived influence on personal and workplace resources impacted the job satisfaction of nurses new to the healthcare industry. Pineau Stam et al. also reported that the perception of managers as authentic increases when managers emphasize transparency, conduct a balanced process, are self-aware, and maintain high ethical standards. As stated by Pineau Stam et al., the more nurses develop a perception of having access to workplace empowerment structures, the more they are satisfied with their work, reporting higher performance levels (Thuss et al., 2016).

Al-Dweik et al. (2016) conducted a comprehensive review of work-related empowerment in the healthcare industry and established important concepts from the literature. They provided a detailed analysis of the use of Kanter's (2008) structural empowerment theory in the healthcare industry that could be useful to the planners, decision makers, and managers who focus on and display interest in nurse empowerment. Another interesting application of Kanter's theory was in the work of Lewis, Tutticci et al. (2016), wherein they illustrated and investigated the challenges of implementation of a

doctoral program in an international exchange scenario by applying the principles of Kanter's theory of empowerment.

There are many business theories used to explain employee and organization behavior such as systems theory (Miner, 2015), contingency theory (Fiedler, 1964), and leadership theories relating to transactional, transformational, and situational leadership (Thompson, 2017). However, I chose Kanter's (2008) theory of structural empowerment and Lewin's (1947) organizational change model as the two most appropriate to frame the use of IT elements in organizational change initiatives.

### **Healthcare Business Considerations**

While it is easy to consider for-profit hospitals as businesses, not-for-profit hospitals also operate businesses. All hospitals have a bottom line. Hospitals must ensure they are able to sustain operations. Flexibility, as well as adaptation to evolving circumstances, ensures business success (White & Wu, 2014). Weaver, Ball, Kim, and Kiel (2016) investigated healthcare costs by utilizing the Centers for Medicare and Medicaid Services' *Healthcare Cost Report Information System*. Weaver et al. revealed that between the years 1996-2009, revenue decreased significantly. However, hospital administrators did not alter their financial strategies during this time. Hospitals borrowed money at high levels. High levels of borrowing have the potential to negatively affect future growth and potential (Weaver et al., 2016). It is critical healthcare administrators determine their revenue sources. Weaver et al. found Medicare patients to account for the majority of a hospital's revenue. As Medicare reimbursement is politically volatile,

administrators must account for potential changes to the reimbursement system (Weaver et al., 2016).

To understand the impact Medicare reimbursement has on hospital revenue, multiple financial factors require analysis. White and Wu (2014) analyzed hospital revenues, profits, and operating expenses. They found Medicare price lowering to have a significant negative impact on hospital revenue. The type of hospital also played a role in determining the impact of Medicare price cuts. For-profit hospitals were more likely to minimize operating costs. Not-for-profit hospitals, compared to for-profit hospitals, were less likely to minimize operating costs. However, hospitals typically do not use cost shifting to make up for Medicare price cuts (White & Wu, 2014). The expectation may be that for-profit hospitals would experience profit reduction, but not necessarily other healthcare institutions (Medicare Payment Advisory Commission, 2017). The challenge for hospital administrators lies in how to mitigate the impact of lost revenue. Administrators must account for changes in a way that does not affect the quality of care patients receive.

Per-case hospital payment systems influence how hospitals operate. Hospital performance correlates with increased value. Patients receive better care when hospital finances managed well. Researchers have determined from the evidence that the number of states employing per case hospital payment systems has been increasing recently (Snipes, 2016). Nevertheless, the debate about the results for equity of access to services continues. Hospital cost concerns related to the failure of classifications for diagnosing to take into consideration patients' care requirements accurately. Such failures create a likely

loss of profit from the inefficient handling of the hospital discharge process (Garrity & Fiedler, 2016).

Joynt, Orav, and Jha (2014) observed hospitals shifting to for-profit status. A shift toward earning a profit often leads to profit-seeking hospitals lowering their overall quality of care, which often creates the need for patient readmission and reduced hospital profitability (Joynt et al., 2014). When cutting costs leads to reduced patient cares, hospitals often lose profitability. This practice is counterproductive. Joynt et al. also found that the need to make a profit drives hospital administrators to reduce the number of staff, resulting in poor service delivery. Reduced staffing makes discharge a less efficient and costly process (Joynt et al., 2014). In contrast, Garrity and Fiedler (2016) noted that profits provide much greater incentives for hospitals to provide affordable services that are efficient. Therefore, if hospitals retain quality outcome of care, and eliminate delays in discharge, a profit-seeking motive may help hospitals to be more stable financially and more conscious of costs (Garrity & Fiedler, 2016).

Boyd (2017) identified another issue, medical spending, as the leading component associated with rapidly increasing healthcare expenditures. Competition among hospitals and other health institutions leaves hospitals at risk for shutdown or debt accumulation because they are limited in funds. As a result, this motivates for-profit hospital administrators to make profits through the shifting of their care to avoid losses (Boyd, 2017). While this practice can seem harmless, it is not ideal for patients. Snipes (2016) explored state benchmarks for hospital performance. The results revealed that the scorecard for Illinois health systems had insufficient performance. Illinois placed 44 out

of 50, with an increase in patient readmissions to the hospital within 30 days. Robust interest in decreasing readmissions has led to a unique, statewide collaboration among BlueCross BlueShield of Illinois, the Illinois Hospital Association (IHA), and the Society of Hospital Medicine to join efforts in decreasing the state's readmission rate (Snipes, 2016).

Hospital readmissions are costly for the hospital, and they are often detrimental to the patient. The goal of this initiative was to increase the state's performance on readmissions so that the state's healthcare performance could move from the bottom to the top of the Commonwealth Fund's measure by 2014. Eighty-nine percent of IHA supporters have used this strategy with many experiencing surges in follow-up care appointments. Utilizing this strategy contributed to significant reductions in readmission rates and costs (Snipes, 2016). The joint initiative introduced in the collaboration between the BlueCross BlueShield of Illinois, the Illinois Hospital Association, and the Society of Hospital Medicine has the potential to counteract detrimental Medicare price cuts. These price cuts result in significant revenue reduction for hospitals (White & Wu, 2014). Joynt et al. (2014) found a shift in hospitals to for-profit ventures. Hospitals are increasingly moving to for-profit status (Joynt et al., 2014). In addition, an increase in medical spending is apparent in recent years (Boyd, 2017). These make apparent the need for more initiatives to decrease the loss of revenue at hospitals. Decreasing loss of revenue ultimately improves patient outcomes.

Stoller (2013) noted the relationship between management and healthcare costs, access, and care quality, and given a changing landscape, IT training is critical to

healthcare organizational efficiency and success. Hospital staff interactions are more complex than in the past due to numerous changes in technology (Alvesson & Sveningsson, 2015). Greater accessibility to information, newer technologies, variability and variety in the talent available, as well as shifting politics, influence the way leadership functions within a hospital setting (Stoller, 2013). It can be easy to assume that management only affects the employees of an organization, but managers in healthcare settings impact patient outcomes. It is critical to build leadership skills. Enhancing employees' IT skills is an ongoing necessity to ensure a quality organization (Stoller, 2013). Proper management is important in all industries. However, healthcare managers and administrators who affect patient outcomes and the successful implementation of IT skills is a necessity for staff in healthcare organizations.

### **Information Technology in Healthcare Organizations**

In beginning a discussion related to IT implementation in the healthcare industry, Watson (2016) pointed-out that technology has transformed, and continues to transform, society. The change in technology use is evident in healthcare, particularly with the development of electronic health record (EHR) technology. Healthcare has been transformed by technology through EHRs, telemedicine, analytics, data, security, and cloud computing. This rapidly changing environment presents a great opportunity to improve healthcare. However, the realization of these opportunities only occurs if healthcare administrators properly utilize new technology. Healthcare will not survive without digitization. It is crucial for healthcare to embrace technology properly. This can be supported through proper planning and implementation (Watson, 2016).

One major opportunity to increase healthcare efficiency lies in health information technologies. Yen, McAlearney, Sieck, Hefner, and Huerta (2017) indicated that the implementation of health information technology (HIT) interventions is at the forefront of most policy agendas internationally. Reynolds and Jones (2016) validated this, as they discussed the importance of using health information in ways that improve outcomes through decreased cost and increased quality. Immense data is available, but its power lies in its proper utilization. Healthcare has evolved in a way that necessitates the move away from traditional models. To provide the best care possible, the industry must change more rapidly. The proper use of health data can ensure that these changes take place quickly. Implementing change requires using health data in a way that increases progress. Management plays a vital role in ensuring this change occurs quickly and correctly. Administrators cannot afford to stick to old ways of thinking. Healthcare is rapidly evolving, and administrators that do not adapt to this evolution will not ensure change (Reynolds & Jones, 2016).

Such undertakings are often far from straightforward, as they require complex strategic planning accompanying the organizational changes associated with such programs. Proper planning is crucial to the successful implementation of HIT (Yen et al., 2017). Furthermore, as health outcomes have the potential for improvement through the adoption of technology, its implementation is crucial to successful patient care. Sittig, Longhurst, Russo, and Singh (2016) described a detailed example of this by pointing out that proper EHR utilization is a critical component of proper patient care.

Through the correct utilization of EHR information, clinicians have the opportunity to deliver the best care possible. EHR implementation is critical to ensuring clinicians deliver this care (Sittig et al., 2016). Prior to the widespread use of EHR technology, clinicians had little information to reference when making treatment decisions (Sittig et al., 2016). EHR technology allows clinicians the ability to perform a task effectively the first time, which improves patient safety by reducing the likelihood that contraindicated treatments are prescribed. Supported by McCallie (2016), the use of EHR technology saves time and clinicians are able to reduce experimental trials. EHR technology increases the likelihood of faster treatment. It also increases the likelihood patients will adhere to treatment plans (Rush, Postelnick, & Schulz, 2015). Long, drawn-out treatment runs the risk of causing the patient to stop treatment. EHR technology reduces the likelihood patient outcomes diminish through lengthy treatment, ineffective treatment, improper treatment, or dangerous treatment (Sittig et al., 2016).

McCallie (2016), who pointed-out the relationship between clinical decision support (CDS) and EHRs, also described the connection between EHRs and patient outcomes. The implementation and maintenance of EHRs provides significant CDS. The CDS provided by EHRs have long supported the move to EHRs (McCallie, 2016). EHRs enhance CDS because EHRs help clinicians review relevant data relating to the patient. The use of EHRs to offer CDS was described in further detail by Rush et al. (2015), who provided details about the improved patient outcomes related to the CDS provided by EHRs. For example, drug prescribing is often contingent on the clinician's review of patient EHRs. Patients more likely receive the correct medication from the outset. This is

due to the doctor being able to access the patient's past health information. Prior to widespread use of EHRs, clinicians had to guess based on information supplied by the patient. The implementation of EHRs to CDS have led to improved patient outcomes and efficiency, and reduced drug costs (Rush et al., 2015).

While many issues currently challenge the healthcare system, it is critical that HIT implementation is not rushed. Proper planning remains a critical component of its successful implementation. The complex relationship between organizational efficiency and patient outcomes necessities great care takes place when planning HIT implementation. Koppel (2016) described this relationship, as barriers to HIT improving patient outcomes. The opportunities for improving care, presented by HIT, are recognizable. However, HIT may not improve outcomes as much as was initially thought. HIT appears to have the potential to reduce medical errors, allow for the easy and instant sharing of information between medical providers, increase efficiency, improve satisfaction, keep physicians up to date on medical research and findings, and facilitate teamwork. However, most clinicians have not found this potential realized in actual practice. Clinicians often report frustration with HIT systems. The opportunity to allow HIT to reach its full potential lies in successful implementation (Koppel, 2016).

Yen et al. (2017) examined and evaluated the design of large-scale HIT interventions in the United States and in the United Kingdom. This information assists healthcare stakeholders in successful HIT implementation (Yen et al., 2017). In addition to the insights provided by Yen et al. pointed-out that competing interests between public and private sectors have a deleterious impact on the HIT's potential to improve

healthcare. Competing priorities have stalled the development of HIT infrastructure development through policy implementation. Federal laws and regulations address varying priorities and potentially complicate infrastructure development. This complication leads to reduced efficiency. To improve HIT efficiency, any competing priorities warrant further examination. The development of federal policy must take place in a way that does not impede progress (Edmunds, Peddicord, & Frisse, 2016).

Certain strategies can ensure the proper implementation of HIT interventions. Yen et al. (2017) identified ten considerations thought to impact successful HIT implementation. These considerations are: clarification of the specific problems the HIT will solve, establishment of consensus among stakeholders, consideration of varying options, the consideration of cost vs. benefits, appropriate planning, development of infrastructure, appropriate staff training, the continuous evaluation of progress, system maintenance, and the long-term maintenance of the venture (Yen et al., 2017). Considering Yen's ten points can assist administrators during the planning and implementation of HIT interventions.

The first point, clarification of the problems the technology may solve is critical to an efficient intervention. Yen et al. pointed-out the deleterious impact that an assumption of benefits can have on successful interventions. It is crucial that goals are clearly stated, as this increases the likelihood that all those involved with the change share the same goals. Additionally, this step reduces waste. Occasionally, it can seem as though HIT is the best way to solve a problem. Specific analyzation of the problem sometimes introduces other solutions (Edmunds et al., 2016).

The second point, the establishment of consensus, is critical. These interventions are often complex, and successful implementation can be contingent on all parties being on the same page. Yen et al. (2017) pointed-out that consensus must be reached, regardless of the scale of the project. Successful consensus building occurs through developing a team to strategize. The team should be representative of all those influenced by the change and should consider all aspects during planning (Yen et al., 2017). The third and fourth points, the consideration of varying options and the consideration of costs vs. benefits, are critical to planning the scope of the intervention. Yen et al. found that the consideration of options takes time. Efficiency is contingent on the implementation of proper technologies. Due to the complexity, that often accompanies HIT implementation, increased care assists in avoiding unnecessary technological changes. To maintain efficiency, consideration of the costs vs. benefits is warranted. The most affordable way to meet the organization's needs is the ideal selection (Yen et al., 2017).

Yen et al. (2017) pointed-out that five and six included the importance of appropriate planning and infrastructure development. Careful consideration can ensure that projects do not deviate too far from their original scope during implementation. Proper planning should be flexible, but it should also consider the conditions of the specific organization. Proper infrastructure development increases the likelihood the technology will function properly. Improper functioning can lead to reduced organizational efficiency (Yen et al., 2017). Regarding points seven and eight, they address the proper staff training and continuous evaluation of progress. Yen et al.

pointed-out that insufficient staff training decreases staff satisfaction. This satisfaction can lead to reduced efficiency, as well as poor patient outcomes. Training must consider individual roles budgeting activities is a priority. Spending a large portion of the budget on training allows training to take place. Progress evaluation serves to solve any problems encountered. Progress evaluation also helps determine when new technologies should be adopted (Sittig et al., 2016). Related to points nine and ten, they deal with system maintenance and long-term maintenance. System maintenance is the review of potential upgrades and changes that could enhance the technology. Long-term maintenance refers to the need for organizations to realize that many benefits of HIT can take years to become apparent and warrant additional time if results are not immediate (Yen et al., 2017).

Yen et al. (2017) identified opportunities for increasing the potential of HIT through the analyzation of its implementation. This analyzation revealed points of consideration that those designing HIT interventions must utilize. HIT implementation is often complex. Proper planning, as well as proper implementation, is critical to the success of a technology. HIT has the potential to increase patient outcomes. However, to do this, it must be successfully implemented and maintained.

### **The Role of the Doctor and Compliancy Issues**

The role of the doctor and compliancy issues in relation to adopting IT changes in a healthcare setting, Sultan (2015) pointed-out the need to consider the impact technology has on doctors. To properly utilize new technology, doctors must understand the technology. Doctors now have greater access to health information than ever before.

However, it is crucial that information is properly utilized (Sultan, 2015). Blocker, Hayden, and Bullock (2015) explored the impact of readily available health information. Doctors have the opportunity to share information and findings with colleagues in a way that was not possible in the past. Technology bolsters the connections between doctors. They are now able to share knowledge in ways that can improve patient outcomes. However, potential problems do exist. For example, the information shared is not always high-quality information. Due to the speed at which information is available, quality may suffer. Additionally, it is difficult to control the context in which medical information is now used. Many factors contribute to workplace learning. To ensure the best use of shared knowledge, proper workplace learning techniques must be explored (Blocker et al., 2015). Making health information available in a way that considers the needs of all users is paramount. Without collaboration between stakeholders, the sharing of health information may be ineffective (Sultan, 2015).

According to Kiel, Ciamacco, and Steines (2016), one major issue associated with HIT relates to the security of patient privacy within the system and a question of whether patient privacy requires consideration when it is to the detriment of patient outcomes. Kiel et al. explored the impact of recent changes to HIPAA on HIT. According to Rosemann & vom Brocke (2015), patient privacy is essential in all cases. Without proper adherence, organizations face steep penalties. It is critical for health managers to be aware of changes to HIPAA and the Health Information Technology for Economic and Clinical Health Act (HITECH). These regulations do have the potential to impede the sharing of information that might be beneficial to the patient (Kiel et al., 2016). While

HITECH provides managers with many challenges, Edmunds et al. (2016) found that technical, financial, organizational, legal, and cultural factors also lead to reduced interoperability. These factors, in whichever manner they manifest, can influence information sharing. Attention to these factors can help guide the development of infrastructure. HITECH does provide policy challenges, but this cannot impede progress (Edmunds et al., 2016).

It is the responsibility of managers to find the best way to use health information while maintaining patients' privacy. Using HIPAA and HITECH as excuses to underutilizing the opportunities presented by HIT is inappropriate, according to Kiel et al. (2016). Meyers (2016) further explored the relationship between policy and health outcomes. Through analyzing the *Report of the Commission on Systemic Interoperability: Ending the Document Game*, the need for interoperability was clarified (Meyers, 2016). The report defined interoperability as immediate access to medical information, without barriers. The access had the potential to transform America's healthcare for the better.

However, American health information techniques are archaic (Kiel et al., 2016). Documentation decreases with the use of paper, as well as the ability to access information across platforms (Meyers, 2016). Without a central bank of patient information, doctors have a difficult time providing high-quality care (Kiel et al., 2016). Additionally, a lack of information access and sharing causes healthcare costs to increase (Saarnio, Suhonen, & Isola, 2016; Skochelak, et al., 2016). To ensure proper patient care, the following information warrants exchange: clinical, financial, regulatory, demographic, quality and safety related, public health and epidemiologic (Meyers, 2016).

Sharing this information among all those with the power to improve patient outcomes in practice. While thought to protect patients, certain regulations will continue to harm patients unless altered. Sharing health information improves the quality of care (Meyers, 2016).

### **Core Elements to Consider when Implementing Change**

Given the diverse models developed to manage change in the healthcare industry, there are various core components, which can ensure that organizations use the multiple benefits of each of the models. This element ensures effective implementation of change management to gain the various benefits from the implemented. According to Korbi (2015), the first element considered to ensure benefit is the environmental circumstance of the healthcare institution. This element represents the varied external business environmental factors, which may force the healthcare organization to implement change; these factors are outside the control of the healthcare institution. These factors include technological advancement, which potentially makes the current technology in the healthcare system obsolete; competition, which can relate to healthcare systems losing their competitive advantage; legal and regulatory factors, which may require extra legal and regulatory requirements for a healthcare organization; and various other social and economic factors (Korbi, 2015).

Ganta and Manukonda (2017) stated that another crucial element is organizational harmony, which means that processes, people, and various units within the organization should be working together in harmony towards the achievement of the goals and objectives of the organization. The people should have a clear understanding of the

mission and the vision of the business organization, which they must work towards achieving. Also, the organization must gear the various processes and plans implemented towards the achievement of the set goals and objectives of the organization.

The other element of change management to consider is the power dynamics within the organization that is implementing the change. O'Connor and Jackson (2017) posited that power dynamics refers to the flow of authority and its hierarchy within an organization. Change managers must consider which units, and which people within an organization, have the necessary power to influence decisions and outcomes within the organization so that they can use them to lead the change process (Hwang, Al-Arabi, & Shin, 2015). By identifying the greatest influencers within the organization, it becomes easy for the change managers to determine the people and the units they have to buy in from to assure that the change process will be successful (Ganta & Manukonda, 2017).

The capacity of the organization is another element of change management, which an organization should consider when implementing change. As the organization implements the change process, it is necessary for the organization to ensure that they have the necessary financial, human, and other resources necessary to implement the change process (Heckmann, Steger, & Dowling, 2016). This area also involves ensuring that the employees that will participate in the change process have the necessary skills and knowledge to apply the change process. It also includes ensuring that the organization has the resources that may be required to implement the change process (Kuster et al., 2015).

Carnall (2018) stated that another element that needs to consider is the process used to carry out the change process. Successful implementation of the change process is ensured when all the stakeholders within the organization are informed and agree with the proposed change process before implementation. This attention to detail goes a long way in ensuring the success of the change process. The nature of the change process also needs consideration because this refers to the rationale behind the change process (Kuipers et al., 2014). By considering all the above elements, healthcare institutions can implement the change process effectively and ensure the results of the change process are an improvement in the quality of services offered to the patients and the level of care for the patients.

### **Factors Affecting Change**

Multiple factors affect the implementation of change initiatives. These dynamic forces might act as facilitators of change, positively supporting the initiative, or may serve as barriers to change, against the initiatives. Some of these key factors are reviewed in the following text and primarily include workstyle communication styles, cultural environment, employee resistance to change, employee flexibility and readiness to change, and their trust in the organizational management (By, Armenakis, & Burnes, 2015; Seamons & Canary, 2017).

**Communication and culture.** Effective communication with employees and the work culture is one of the key ingredients that affect the implementation of change initiatives in any organization, be it public or private. During a change process, it is the people who change and not the organization (Kuster et al., 2015). This change is

successful when it achieves what the managers wanted in first place. Seamons and Canary (2017) pointed-out the essential or critical success factors responsible for the useful management of change. These include concepts of awareness, desire, knowledge, ability, and reinforcement. Seamons and Canary performed a literature review along with a pilot study to create a survey to explore the effectiveness of a particular communication factor on any organizational change. Seamons and Canary surveyed many employees and characterized them into three categories: employees who experienced changes, employees who recently finished a change process and employees who had yet to experience changes. He discovered that forces like frequent contact with the employees, central management, easy availability of information to the employees, and influence of an administrator's personality determine the communication factors that are in play, and therefore affect the success of change initiatives.

Awareness among employees is an important instrument in bringing about change as the more the employee has a keen understanding of requirements and implications of the planned changes, the easier it is for the management to accomplish the change (Kuster et al., 2015). The major goal of an organizational administrator is to enable acceptance among employees and generate positive attitudes towards change (Georgalis, Samaratunge, Kimberley, & Lu, 2015). It is of the utmost importance to have a mutual understanding between employees and administrators. According to Georgalis et al. (2015), a manager should delve deeper into an organization's issues by making sure that both the organization and the employees do not have unmet needs. Effective managers

not only recognize the importance of these requirements but also deduce findings that diagnose the change scenarios before carrying out any change process.

Attainment of recognition is possible by educating employees about the benefits of the change in the system and thus building user acceptance (Kuster et al., 2015; Shin & Konrad, 2017). This recognition process is a crucial step for all organizational changes to effectively occur (Hwang et al., 2015). Only having knowledge about an impending change is not sufficient; employees need the awareness that a specific process will cause the change to happen (van den Heuvel et al., 2013). Van den Heuvel et al. (2013) noted that when employees are provided information about a change they begin to adapt because they can actively engage and connect meaning to the changes. It is quite evident from the literature that changing a business strategy brings about a change in structure. Organizational changes and innovations involve changes at all levels of organizational dimensions, including the employees, their work culture, organizational structure, work strategy, performance measurement, processes involved, and state of the art technology in use, which must all be adequately communicated (Kuster et al., 2015). Change occurs in ways that are not compatible with the learning styles of all employees. Stress and confusion can lead to a reduction in the quality of work an employee produces (Smollan, 2015a). These challenges undermine an organization's ability to implement new technology in a timely and efficient manner. The consideration of how to best guide employees through change is critical to the success of the organization.

By et al. (2015) asserted that it is imperative that cultural preferences and differences are taken into consideration as they play a major role in the shaping of

business processes and interactions and are necessary when strategically examining change management. Organizational structure guides the processes of management, communication, and business functions. Other dimensions include strategies and processes that determine goal setting, planning, mission, and direction of the organization (By et al., 2015). As the principal purpose of managers lies in improving the overall performance of the organization, the management must consider these critical dimensions (By et al., 2015). As Hornstein (2015) posited, by considering key aspects in change management, risks of resistance to change from staff reduces.

Smollan (2015b) asserted that the weak linkage of a change process with these vital dimensions leads to negative impressions and stress from the people in the organization. Smollan defined a conceptualizing phase that is required for linking needs and expectations to the dimensions to eliminate obstacles against the change. In this phase, a change management strategy contains all the necessary resources and well-explained performance targets. Smollan (2015a) pointed-out several organizational stress indicators present during a significant change process. It is very common for organizations and staff members to develop anxiety when extensive changes are made, for example, when announcing new assignments, reorganization occurs, new bosses appear, or any changes in procedures occur. Smollan reiterated that change often causes employees significant stress.

The very nature of technological innovation can lead employees to experience uncertainty about the security of their employment. Employees are frequently insecure about the probability that their position will become obsolete. Change can be so rapid;

employees sometimes adjust to a change only to have it no longer be of value to the organization (Smollan, 2015b). Employee stress is a barrier to the implementation of change. Managers must reduce stress on employees by being sensitive to their concerns about their job security. They must also be empathetic to the frustration employees feel when they spend significant time implementing a change that quickly becomes obsolete.

It is prudent for experienced managers to involve themselves in change management so that the process of implementing change includes managerial input (Holten & Brenner, 2015; Smollan, 2015b). Though such managers are not required to offer a full-time service, they can guide new managers through an effective change management process. Holten and Brenner (2015) pointed-out the importance of delegating duties as certain strategies ensure the involvement of the entire workforce in the process and improve the dynamics of the organization. Their recommendations also coincide with the teleological model for planned change in which participants agree and move together towards shared organizational goals (Tabibi, Nasiripour, Kazemzadeh, & Ebrahimi, 2015).

Another key point for successful change implementation is the inclusion of employees in the change process, as suggested by both Holten and Brenner (2015) and Tabibi et al. (2015). An effective change management plan should attend to the people involved (Tabibi et al., 2015). Individual and group biases that might occur from errors in critical thinking, recognition, poor decision making, and group thinking should also be resolved. Furthermore, a lack of employee recognition in the change process creates a situation for resistance to change (Kuster et al., 2015). Therefore, for any change process

to be effective, it is essential that the needs of the staff be deliberate and direct by the administrator. Moreover, the change process must include key people for the process to receive minimum resistance (Holten & Brenner, 2015; Kuster et al., 2015). Key people include higher-ranking managers, peer managers, and subordinate staff within the department (Kuster et al., 2015).

Employers wield great power when it comes to the level of acceptance employees have for new policies and procedures. Employees will frequently follow the example of their managers; therefore, the level of acceptance of recent changes by top management might affect acceptance by subordinates (Hwang et al., 2015). Communication of the change process should be clear and concise. Communication between change managers and employees is an effective motivation or reinforcement tool during the change process (Kuster et al., 2015). During the implementation of changes, it is important to communicate timely and clear messages to employees to create dialogue and decrease resistance to and anxiety about the changes (Heckmann et al., 2016). When management communicates their resistance to change this is communicated to employees and results in additional struggles with implementation.

**Resistance to change.** Resistance to change is a significant barrier to change. At the same time, resistance to change points toward an employee's propensity to care about something within the organization or the organization itself (Kloniek, Lehmann-Willenbrock, & Kauffeld, 2014). Kloniek et al. (2014) asserted that resistance to change becomes a problem only when not addressed properly. An organization's perception of the resistance by employees shapes whether the opposition to the change hurts the

process or improves it (Burnes, 2015). However, Klonk et al. claim resistance to be a natural response of humans as a defense mechanism and assert that it should not be a barrier, but rather respected. According to Klonke et al., organizational members do not prefer the unknown, and therefore, they resist. Burnes (2015) also explained resistance as a typical human reaction to any form of change, and thus something addressed strategically. Accepting that a resistance to change is inevitable and proactively preparing to address it will allow managers the opportunity to prepare employees and increase their readiness to accept the change.

**Readiness to change.** Readiness to change can also act as a facilitator or a barrier to change processes. According to Holten and Brenner (2015), readiness helps shape employees' initial support for specific change initiatives. The readiness of employees collectively shows their cognitive and emotional propensity towards a plan to alter the status quo (Holten & Brenner, 2015). According to Holten and Brenner, four significant factors affect the readiness of employees to accept change: the content of the change, the process involved in the procedure, the context on an employee, and the individual's personality. Hornstein (2015) determined that change-related communications, opportunities to participate in change, as well as the level of employees' commitment to change, are useful measurements for employee readiness and resistance attitudes. According to them, the relationship between the two needs further investigation.

Using data gathered from survey responses of 102 employees in organizations implementing change across New Zealand and Australia, Hornstein (2015) discovered a relationship between readiness and factors like change-related communications,

empowerment to participate, as well as the commitment of the employees. Hornstein also pointed-out the effectiveness of participative, employee-centered implementation of change initiatives in service industries. Kirrane, Lennon, O'Connor, and Fu (2017) revealed that an individual's readiness affects organizational change. Being ready symbolizes the concept of unfreezing in Lewin's (1947) three-phase change model and is crucial for change initiatives to be successful. Kirrane et al. reviewed the literature and revealed how readiness only increases if normative-reductive change strategies are in effect and if the people's perception is more oriented towards learning.

**Trust.** The level of trust between organizational members and their managers seriously affects change initiatives and their implementation. Hornstein (2015) pointed-out the role trust plays in an organization by studying the relationship between interpersonal and organizational factors that affect consultant-client relationships and the effectiveness of an organizational change initiative. Hornstein concluded from both qualitative as well as quantitative studies that elevated levels of commitment to change could positively shape the implementation of change initiatives. According to Hornstein, a commitment to change is the consequence of the prominent level of dyadic trust. This level of trust will play a prominent role in the successful implementation of changes in all types of organizations.

**Implementing changes in healthcare.** Even though hospitals experience significant pressure to improve the quality of the services they offer, various challenges affect their operations. These roadblocks include a shortage of nurses and a lack of the necessary resources to ensure that they can provide high-quality services. There are also

various situations, which necessitate for change implementation in these hospitals so that they can align the available resources and the expectations of the different stakeholders (Bengat, Odenyo, & Rotich, 2015).

Hospital leaders experience numerous challenges and increased pressure while improving their quality of work even though they must face various problems, such as shortages in nurses or lack of resources. Similar factors that hinder changes in the healthcare industry might affect change in other sectors. For example, Williams, Perillo, and Brown (2015) pointed-out the case where nursing educators' attitudes toward evidence-based practices might act as a barrier to effective change initiatives, such as shifting to the latest information technologies. Acceptance of change also depends on the nursing educators' attitudes towards the latest technology. If nursing educators had a positive attitude towards change, they had an increased propensity towards using such techniques. However, a negative perception of the effects of IT on patient care might affect nurses and make them fall prey to their fears regarding the use of these modern technologies (Pineau Stam et al., 2015).

Bengat et al. (2015) studied the effects of expectations of nurses to commit to change and examined the relationship between change-related communication, the exchanges of managers and their followers, and the consequences of such expectations on change outcomes. Using a theoretical model based on predictive and non-experimental design, they performed structural equation modeling on 395 randomly chosen nurses and discovered that a positive expectation could significantly influence commitment to change. The authors further indicated that the possibility of administrators member

exchange and communication shapes nurses' decisions to adapt to change or shapes their expectations regarding any possible change. They concluded that nurses' expectations regarding modifications do carry importance when considering their commitment to change.

Larson (2015) asserted that change management in the healthcare industry faces the same challenges that other sectors face when implementing organizational change. In the current environment, there are many changes taking place in the healthcare industry both from an operational point of view to a governmental policy level (Edmunds et al., 2016; Houngbo et al., 2017). The nature of the current business environment dictates that change is everywhere, in all organizations, and individuals need to adapt accordingly so that the change management process can be smooth and efficient. Successful implementation of the change management process involves following specific steps by which there are challenges to overcome to achieve the desired state (Lewin, 1947).

Even though hospital leaders have experienced significant pressure in the recent past to improve the quality of the services they offer, various challenges affect their operations (Larson, 2015). These challenges include a shortage of nurses and the lack of necessary resources to ensure that they can provide high-quality services. Different situations are created, which necessitate changes in hospitals so that they can align the available resources with the expectations of the stakeholders (Bengat et al., 2015). According to Kogan, Conforti, Yamazaki, Iobst, and Holmboe (2017), the change management process in the healthcare industry ensures that various stakeholders in the

industry adopt new ways of doing things and change the organizational culture so that they realize multiple benefits, ensuring sustainability.

There is a need for a large number of healthcare institutions to make sure that they deal with the biggest challenge in the implementation of change management, which is the confusion people feel during times of change. The presence of uncertainty compels people not to respond to change, as they have no understanding of the new ways of doing things and they do not know why they need to adopt these new methods. One of the approaches that healthcare institutions can use to ensure that the change process is efficient is through the application of the 4Rs, reason, result, route, and role (Diab, Safan, & Bakeer, 2018). The first R involves executive's explaining to employees the reason why the organization is making the change. According to Ratnapalan and Uleryk (2014), this helps employees to gain answers to the question of why the change is necessary to the organization and ensures that these employees and other stakeholders are going to support the change process. By understanding why the change occurs, the employees along with the other stakeholders who may affect the change process can tolerate the various shifts in procedures and the changing culture of the organization.

According to Diab et al. (2018), for hospital management to attain a successful change process, they should focus on the results. Results are what the operations and processes of the healthcare institutions will look like after the implementation of the change process. Management must explain the new procedures created because of the change process, explain the new systems adopted because of the change process, and explain the future expectations of all the stakeholders because of the change process.

Results also include explaining the expected advantages gained from the implementation of the changes. According to Saarnio et al. (2016), some of the expectations of implementing the change process include saving costs, saving the time taken to serve patients, improving the quality of services offered to the patients, and improving the efficiency of all the processes in the hospital. These benefits need an adequate explanation for all the stakeholders who may have an impact on the change process.

Regarding implementing change, Kuipers et al. (2014) posited that the road to change is the process or path followed when implementing the change. When a healthcare institution implements a change, the route specifies how to perform the change process and how the healthcare system will move from the current way of doing things to the future, desired way of doing business. The steps followed require definition, along with an explanation of the actions and the tasks carried out at each stage of the change implementation process. Timelines are required for each of the tasks so that the overall schedule of implementing the whole change process can be determined and discussed with the stakeholders. Other implications for the tasks need definition, including the costs incurred in the implementation of the change process.

Finally, the last thing to establish for stakeholders is the role of the change process. The role consists of what the change process will mean for the employees regarding expectations, benefits, or shortfalls they will experience due to the implementation of the modification (Yen et al., 2017). The role delineates new rules and situations that the employees must work in because of the implementation of the change process. In case the change process involves changing the roles and the responsibilities of

the employees, the executive must ensure that clear communication takes place with employees, so they can understand what their new roles will be after the implemented change and what expectations they will have because of the change process (Seamons & Canary, 2017). In cases where it is not clear what the new role of the various employees and other stakeholders will be after the implementation of the modification process, the executive must prepare them mentally to be flexible and positive and to support the change process even if it means changing roles for them (Diab et al., 2018).

### **Change Management Models in the Healthcare Industry**

In addition to using Lewin's (1947) organizational change model and Kanter's (2008) theory of structural empowerment, there are various models, specifically developed for the healthcare industry, to guide the organizations as they implement various organizational changes to improve the quality of care in these organizations. These models developed in consideration of the complexity of the operations and the environment in which healthcare institutions operate.

**Organizational model for transformational change.** The development of the organizational model for transformational change in healthcare systems was to help healthcare institutions implement change at all levels of their operations with the aim of providing a safer and higher quality environment and level of care for patients. According to Kogan et al. (2017), the model aimed at ensuring that healthcare institutions can guarantee an improved patient care environment by redefining the key components of their operations. Some of the primary components implemented are the mission of the organization, the vision of the organization, and the strategies, by the organization to

achieve the set goals and objectives. These components are useful for healthcare institutions as they help in the provision of the direction that the organization takes and their priorities. Another key segment of the model is the organizational culture, which defines the values held by the health institution and the behavioral norms of the employees and other stakeholders in the healthcare organization.

Further relevant components of the model are the processes and operational functions carried out within the healthcare institution. These processes and functions help define the work that caregivers do in healthcare facilities to offer the necessary services to the patients. To support operations and service delivery to the patients, healthcare institutions need to have various infrastructure forms in place to act as the foundation of the various operations that take place. These foundations include IT systems which support various business operations within the institutions, human resources who are assigned various tasks to ensure service delivery to the patients, financial services, and facilities management which guarantee that patient care services are effectively offered to the patients (Naus, Faint, & Dwyer, 2018).

Given that these four components define the primary operations of healthcare institutions, including support processes, directions, and resources, what this means is that changing any of the components constitutes a change in the healthcare system. Successful change in healthcare entities requires the presence of specific elements of transformational change (Thompson, 2017). These items include the impetus to transform, which means that there must be an external pressure, which compels the healthcare organization to undergo change to specific components identified or to all the

components to better improve service delivery. Even though the impetus for the organization to transform refers to external pressure for change, various internal factors may also force the organization to change (Fokkema, 2016).

According to Fokkema (2016), the other element essential for healthcare organizational change is the quality commitment of management. Managers of healthcare institutions need to accept that the quality levels are below par and hence the healthcare institution needs to undergo a change process so that the quality of services can improve. This change shift involves identifying the desired quality level that the healthcare institution wishes to achieve. Fokkema argued that there is also a need to ensure that employees are involved in various improvement initiatives aimed at making operations better within the healthcare institution. The implementation of various growth initiatives and the involvement of employees aims to ensure that the overall performance and the efficiency of the organization are significantly improved. The main advantage of engaging employees in the implementation of these initiatives is that insight from employees can be very useful in ensuring that the change process is successful.

Another element that is essential to change implementation in healthcare institutions is the alignment aimed at achieving organization-wide goals through the allocation of resources and implementation of various actions at all levels of operations within the organization. Fokkema (2016) stated that by engaging employees and other key stakeholders in the implementation of the various change initiatives, which are designed to accomplish improvement of operations, then this alignment of allocation occurs. Finally, it is necessary for the organization to ensure that distinct boundaries

between different individual components within the organization receive consideration so that the quality of service can be improved (Naus et al., 2018).

### **Evidence-Informed Change Management Approach**

The evidence-informed change management model specifically targets healthcare institutions in Canada by focusing on the development of the necessary leadership requirements to support a change in these organizations. According to Brown et al. (2016), the four distinct change phases of this approach include the planning stage, wherein the context of the change process to be implemented receives definition and understanding by all the stakeholders in the change process. The various dynamics of the change process warrant clear definition, understanding, and adherence during the change process and documentation.

For the change process to be successful, it is also necessary to determine whether the organization can handle the change process and whether it is ready to implement the change. According to Brown et al. (2016), the capacity of the organization to manage the change, by focusing both on the financial capability of the organization and the resources available to implement the required change, takes precedent. Brown et al. asserted these activities take place in the planning stage of the change process and argued that the next stage after the planning stage is implementation, whereby the change initiators carry out the activities defined during the planning stage. One of the main objectives of implementing the change process is to ensure that there is an improvement in the quality of service delivery in the healthcare institution. One achieves this goal by making sure that all the actions and activities defined in the planning phase ensure that the state of

various components of the organization change to ensure better and higher quality service delivery. According to Brown et al., the next step is distributing the change so that all areas of the organization receive the positive impact of the change.

One achieves this distribution step by spreading change beyond the scope covered during the change process. For example, in cases in which the healthcare institution has more than one branch, this may involve disbursing the change to all branches beyond the branch in which the pilot took place. The result of spreading the change ensures that at an organizational level, the proper influence of the organization's culture takes place so that the healthcare institution experiences new ways of doing things, new beliefs, and new operations. To ensure that the change lasts, a sustaining step can occur by adjusting the change process from time to time based on the lessons learned and the practical experience gained during the change process. Anticipating how the final products and processes should look and then comparing this with reality to see whether it is achievable or not helps move this step along (Brown et al., 2016).

### **Health Infoway Change Management Framework**

The creation of the Health Infoway Change Management model took place in Canada to help healthcare institutions as they implemented change within the context of health technology projects aimed at the establishment of e-health within healthcare institutions (Canada Health Infoway, 2017). The change management principles apply in various contexts within the healthcare environment to help implement change aimed at improving service delivery and patient care.

According to Canada Health Infoway (2017), the model contains six core elements. The first element is governance and management, which defines the mechanisms, which healthcare institutions use to guide, regulate, and lead the change process within the organization. This element also represents the various ways in which different stakeholders in the healthcare institution can affect the change management process within the organization. By applying effective management and governance, an organization can gain buy in from the various stakeholders as it implements the change process and is able to ensure that change process priorities are well aligned with the different components within the organization. The healthcare institution must provide leadership and governance structures that are well aligned with the organization's culture and the various goals and objectives that the organization is trying to achieve to increase the likelihood of success.

Stakeholders have an impact on the success of any project in an organization as noted by Manca (2015). Davis (2016) posited that for the change process to be successful, stakeholder engagement is essential from the onset of the change process. Stakeholders are involved in the varied operations of the organization, and the change process involves change for the stakeholders as well, so it is important to ensure that they are focused on the change process as it happens. Stakeholders need to define their behaviors, understanding why they behave a certain way and then discover the various considerations that focus on them during the change implementation. At each stage of the implementation of the change process, each stakeholder must stay informed of the progress and the various decisions made or the actions taken (Manca, 2015).

For the organization, stakeholder engagement means that an organization has to understand the perceptions, issues, and expectations that stakeholders have and come up with various ways of managing these points. Brown et al. (2016) argued that the stakeholders must have a chance to influence the various decisions made by consulting them at the different levels of the implementation. So that they can feel that they are part of the decisions and the actions taken, the stakeholders also need to be involved in the implementation of the change process. There is a need to collaborate with the stakeholders and to empower them so that they can participate in the change process (Brown et al., 2016). Greater involvement gives stakeholders an opportunity to raise their concerns and allows them to have a better understanding of why various decisions happen.

According to Canada Health Infoway (2017), the other element of the change management process is communication. Communication involves ensuring that all the stakeholders within the organization have the right information unique to the right people using the right communication channels at the right time. By having a good communication plan in place for the change process, the management of the organization is also able to get feedback from the stakeholders; this ensures the placement of trust and progress of the change process is well communicated to all the stakeholders. All communications made to the stakeholders are with the intention of prompting them to respond with the right response.

To accurately implement the change process, it is crucial that management ensures the implementation of workflow analysis and integration. According to Canada

Health Infoway (2017), this involves understanding the current work processes that take place in the healthcare institutions and understanding the various challenges of the current processes and the opportunities for improvement, which exist. Implementation of new methods then occurs. For example, current processes take place to determine that healthcare IT systems apply to improve the efficiency of operations within specific functions within the healthcare institution. The end goal of workflow analysis and integration is to ensure that the people, processes, and technology integrate to improve the effectiveness of operations within healthcare institutions.

Training and education are the next imperative elements, as they help the transfer of necessary knowledge and skills to the different stakeholders so that they can effectively adopt new ways of doing things as defined by the change process (Canada Health Infoway, 2017). To ensure the success of the education processes, training and education need to be part of the change process from the early stages so that stakeholders gain more understanding and can buy into the change process. Before the employees can start operating in a new way, training sessions help employees gain the skills necessary to carry out different operations in a new way.

Monitoring and evaluation occur at the different stages of the implementation of the change process to ensure that the change management processes and activities take place as planned. Monitoring and evaluation are also useful in determining whether the change process works in comparison to the previous ways of doing things. Monitoring and evaluation can be carried out throughout the change process where at any point of the process a determination can be made as to whether the short-term goals and objectives of

the change process are in place. Furthermore, at the end of the change process, it can be determined whether the stakeholders experience the long-term benefits of the change process (Manca, 2015).

### **National Health Service Change Management Guidelines**

The development of the National Health Service Change Management Guidelines by the UK's National Health Service (NHS) is used to assist healthcare institutions in successfully implementing change management models for various processes to improve the workforce within healthcare institutions. The development of these guidelines mainly focused on mental healthcare institutions, primary care, and acute care institutions to help in the implementation of staff banking and e-rostering solutions. The principles and concepts developed in the guidelines apply in any healthcare setting to help bring the change necessary to improve the efficiency and quality of services (Drummond, Sculpher, Claxton, Stoddart, & Torrance, 2015).

According to Drummond et al. (2015), the guidelines offer a six-step approach, which assures a successful change implementation in healthcare institutions. The first step is having knowledge surround where you are going and why you are going there. Through developing a business case, which defines the various benefits and disadvantages of the implemented change, contributes to deciding whether it is necessary to make the change. The development of the business case defines the timelines for the change process, the achievement of specific milestones, roles and responsibilities, and identifying the various risks inherent in the process. The necessary mitigation strategies for these risks can then be a focus. This stage also involves identifying the team involved

in the change process and acquiring information from the various organizational functions, which will help in guiding the change process. To ensure successful implementation of the change process, the healthcare institution also needs to ensure that they have the necessary skills and knowledge to implement the change along with the right management, which ensures and supports the change process.

The next stage according to the guidelines is the analysis and design step. The main aim of this step is to come up with a strategy for change delivery. Analysis of the various design options that are available and then a decision on the design process achieve this step. This step also involves analyzing how the change is going to affect the *stakeholders* of the organization and consulting with the stakeholders so that they can support the change process. The information collected in this phase guides the implementation of the change process and provides the necessary controls for the change process implementation (Garvare & Nyström, 2017).

Piper and Schneider (2015) argued that the next stage as defined by the guidelines is gaining commitment from the various stakeholders involved in the change process. Obtaining this commitment encompasses the assessment of the readiness of the organization to adopt the change and preparing the implementation of the change process. A pilot change process then establishes that readiness and the necessary preparations are in place to ensure successful implementation of the change process.

After the appropriate plans are in place and the organization is ready for change, Lornudd, Bergman, Sandahl, and von Thiele Schwarz (2016) argued that the next step is delivering the change. Change delivery involves executing the many activities that were

defined in the analysis and design phase using the plans developed in the first step of the change implementation process. Another deliverable achieved in this phase is ensuring that all the stakeholders, specifically employees, have the necessary training, skills, and knowledge to carry out activities using the new processes and resources after change implementation. As the change process begins, Piper and Schneider (2015) asserted that employers keep stakeholders informed of the progress made from time to time, and they should be involved in the decision-making process so that they can feel that they are a part of the whole process.

After successful implementation of the defined change processes, the organization should then reinforce the change through regular review of current methods and create new processes if needed based on the feedback collected from the various stakeholders (Allen, 2016). According to Allen (2016), to ensure that the change is sustainable in the long run, the organization should regularly measure the results of the change process vs. the goals, as well as the objectives of the organization so as to see what impact the change process has on the goals and objectives. In instances where this is not the case, one must develop necessary strategies and incorporate them into the current processes to ensure that there is a continuous improvement towards the achievement of the set goals and objectives.

### **Institute for Healthcare Improvement's Triple Aim Framework**

The development of the triple aim framework model for the Institute for Healthcare in the United States helps healthcare organizations improve various aspects of their operations by carrying out the changes necessary to optimize the performance of the

different healthcare systems within these institutions (Institute for Healthcare Improvement, 2017). Whittington, Nolan, Lewis, and Torres (2015) argued that the reason why the name of the model is Triple Aim is that it intends to simultaneously achieve three primary objectives expected because of implementing the change process. The first projected goal to be completed is the improvement of the experience of care that the patients go through. This improvement occurs by ensuring that the quality of care and the quality of services offered to the patients improve significantly with the new way of doing things. Thus, all the patients who visit a healthcare institution are satisfied with the level of services and the quality offered by the healthcare institution.

The other aim achieved by the model is improving the health of the population served by the healthcare institution. By enhancing the quality of services, there is a high success rate of the services offered by the healthcare institution, which ensures that the health of the population served by the healthcare institution significantly improves (Whittington et al., 2015). Finally, the model aims to reduce the per capita cost of healthcare by first ensuring that the population is more healthy which then lessens the amount of money that the population spends on healthcare. Secondly, success encompasses ensuring that the services offered by healthcare institutions are affordable for the population, and so the population does not have to spend more than they are expected to for them to access healthcare services (Billings & Halstead, 2015).

The reason for the development of the model was due to the many challenges faced by the American healthcare system as compared to other healthcare systems in the world. One of the observations was the expense of the American healthcare system when

compared to other healthcare systems around the world. The per capita cost of healthcare is very high. The research found that this accounted for 17% of the gross domestic product and it was continually growing. With the increased demand to gain greater value from the current healthcare system, there was an expectation of the cost of healthcare. This continuous increase in cost, especially with issues such as chronic illnesses, an aging population, and increased longevity is an emerging health challenge that healthcare institutions are expected to address (Skochelak, et al., 2016).

Skochelak et al. (2016) argued that the implementation of this model ensures accountability from healthcare institutions on the triple goals expected through the change process. The model aims to improve the overall health of the population served by healthcare institutions and ensure that the population can afford the services offered.

The framework developed a necessary change process when carrying out the process from the current mode of operation and systems to a new, desirable, future style of performance and updated systems. The first step of the change process is the identification of the target population. This identification helps determine the current state of the healthcare services offered regarding the quality and the cost of healthcare incurred by the population.

The next step is the definition of the system aims and strategies. Here, the objectives that the change process should achieve are clear, and the ways of determining the success of the change process are in place (Whittington et al., 2015). The next step is the development of the various project functions to improve the results of the different operations in the healthcare institution. This development involves creating and

implementing ways of improving the quality of services offered to the patients while at the same time reducing the cost of healthcare incurred by the patients in the healthcare institutions. The development of new processes ensures the quality of services and finds new systems to improve the effectiveness and efficiency of the services offered. Rapid testing ensures that the developed process is working efficiently and is meeting the set goals and objectives. After the rapid tests conduction, the framework is then available for the entire institution, or the different institutions, and is customizable to meet the needs of the local population served by the healthcare institution (Skochelak, et al., 2016). Five components developed to ensure the achievement of the above aims of the framework.

These components include:

**Focus on individuals and families.** For healthcare institutions to implement the necessary change to achieve the triple aim of the framework, they must ensure a healthy relationship between the healthcare institution staff (physicians) and their patients (individuals and families). The healthcare institutions must work towards the customization of the care services offered to the patients, and these individuals and families must be involved in every step of planning and customization of these care services that they will receive from the healthcare institutions. The effective implementation of the change process is ensured through interrogation of the experience of the patients in healthcare institutions to inform the change process (Institute for Healthcare Improvement, 2017). According to Skochelak et al. (2016), the change process aims to ensure that the individuals and families have control over their health by having the power to manage it. This power transfer ensures that there is an active

interaction between patients and healthcare institutions and the patients can receive much-needed care from these healthcare institutions.

**Redesign of primary care services and structures.** To ensure patients are receiving the best care from healthcare institutions it is important to evaluate and if necessary redesign primary care services. According to the Institute for Healthcare Improvement (2017), healthcare institutions should ensure that they have the necessary capacity to make sure that they are meeting at least 70% of the medical and health-related needs of the population. These services should be accessible and flexible enough to meet the individual needs of all the patients served by the healthcare institution (Institute for Healthcare Improvement). When services are both accessible and flexible enough to meet the needs of the population things within the healthcare institution should improve.

**Population health management.** Healthcare institutions should discover various strategies to ensure that the health of the whole population improves. These actions include advising the population on healthy eating, exercise, and reduction of drug abuse among the population. Health improvement achievement is possible through partnerships with other institutions to help those who are willing to adopt various healthy living strategies. All these strategies aim to ensure the development of a healthier community, hence reducing the need for healthcare services (Institute for Healthcare Improvement, 2017).

**Cost control platform.** It is necessary for healthcare institutions to find various strategies, which ensure a reduction in resource waste in their operations, and to maximize the long-term reduction in the cost of healthcare. There is also a need to ensure

the use of available resources is efficient, so cost-effective healthcare services exist (Institute for Healthcare Improvement, 2017). Healthcare institutions should aim at ensuring that the rate of healthcare cost inflation is less than 3% annually (Institute for Healthcare Improvement, 2017).

**System integration and execution.** System integration provides the capacity of the healthcare institutions matched by the suppliers. Healthcare institutions need to have suppliers who can match their demand. System integration and execution facilitate that healthcare institutions meet the needs of the patients that they serve (Institute for Healthcare Improvement, 2017).

### **Summary**

Given the interpretive nature of qualitative studies, analysis of the literature related to the topic is an essential and continuous process. The conceptual frameworks and other literature explored, helped ground the study and answer the primary research question addressed. Concerning managerial strategies in a healthcare setting to assess and understand employee use of new IT systems, Kanter's (2008) theory of structural empowerment and Lewin's (1947) organizational change model provided me with a framework for understanding how management approaches determine employees' points of view on changes in their environment. Kanter's model applied to this study because it helped me explore concepts related to IT change management strategies, and Lewin's model highlighted the importance of IT change management as a common thread that all companies share. Use of both Kanter's theory and Lewin's phases of change helped me

explore change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives.

While establishing the conceptual framework was critical to understanding the process of organizational change explored in this study, the other models discussed have importance for IT change implications in the healthcare industry. The topics covered in this review such as models of transformational change, the evidence-informed change management approach, the Health Infoway change management framework, the National Health Service change management guidelines, and the Institute for Healthcare Improvement's triple aim framework, and its associated five components, helped explain complexity of the environment in which healthcare institutions operate. Understanding the diversity in approaches in various healthcare settings helped inform this study.

### **Transition**

Section 1 of this study included an explanation of the nature of the study, research question, conceptual framework, and operational definitions. In Section 1, I addressed the assumptions, limitations, delimitations, significance of the study, provided an explanation of the contribution to business practices, the implications for social change, and reviewed the professional academic literature. The purpose of a review of the literature was to set the foundation for the study, along with an elaboration on how the content of the study fits the research and was used to understand the impact technology has on the change management strategies of healthcare organizations and the roles that managers' play in addressing the need for change. Various factors can motivate organizational change, but in most cases, the primary motivation for change is the multiple external business

environmental factors, which an organization has no control over. These factors include technological change, competition, and legal and regulatory factors, all of which may affect the success of a business organization. Given the focus of exploring the use of IT and the need for change in hospitals, an overview of the available and current literature extends knowledge on the subject.

In the following section, Section 2, there is a description of the qualitative method research approach used in this study. Section 2 included the population and sampling, data collection, data analysis, and reliability and validity. Additionally, Section 2 included a discussion on the role of the researcher and the ethics of the study. In Section 3, I addressed the findings, the application of professional practice, the implication of social change, recommendation for action, recommendation for further study, my reflections, and a conclusion.

## Section 2: The Project

Technological innovation and rapid changes in external variables such as healthcare reform and compliance have created the need for a change management strategy to guide organizational change activities for IT in hospitals (Colicchio et al., 2016). In the healthcare industry, 63% of organizational leaders attempt to implement IT changes yet fail because of their lack of an effective change management strategy to incorporate technology successfully (Spaulding et al., 2017). In this study, I explored hospital administration management strategies to guide organizational change activities for the IT elements of organizational change initiatives. In the following section, I provide details of the study and discuss the research methods, research design, and the role of the researcher. I also discuss participant population and sampling; data collection instruments, techniques, and organization; data analysis; and reliability and validity.

### **Purpose Statement**

The purpose of this qualitative multiple case study was to explore change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives. The targeted population was hospital administrators from three hospitals in the southeast region of the United States who have successfully implemented change management strategies to address the IT elements of organizational change initiatives. The results of this study may provide hospital managers with strategies to address IT as part of their change management strategy. Administrators can use this study to promote social change by providing

hospital managers with successful strategies related to the use of IT in hospitals to facilitate improved patient care and community well-being.

### **Role of the Researcher**

Stake (2013) asserted that researchers assume a range of roles in qualitative research. A researcher can conduct qualitative studies in several ways (Yin, 2018). For this qualitative multiple case study, I collected data from three hospitals in the southeast region of the United States to understand the different strategies hospital administrators used to successfully implement change management strategies to address the IT elements of organizational change initiatives. I used semistructured interviews with open-ended questions and the documentation collected from the three hospitals, with permission, regarding their use of IT. During the interviews, I reassured the participants that what they shared would remain confidential. I informed the participants that they could choose not to participate in the study at any time, and made every effort to be objective in reviewing the information presented by the participants, and an attempt was made to minimize researcher bias when analyzing the data.

As an individual with interest in hospital governance, IT use, and change management strategies, I mitigated bias and avoided viewing data from a personal perspective. Additionally, member checking helped me to ensure that the results were impartial and that the study was valid, as recommended by Stake (2013). According to Birt, Scott, Cavers, Campbell, and Walter (2016), member checking is a method of ensuring the credibility of results through researchers returning data and results to the participants to allow them the opportunity to check for accuracy. Additionally, in

recording and analyzing the transcript data, I used of triangulation to verify the accuracy of my results, a method suggested by Denzin and Giardina (2016).

Researchers must also adhere to the necessary procedures and must uphold ethical principles while engaged in research (Yin, 2018). I followed the guidelines stipulated in the Belmont Report (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979) by being upfront, honest, and reassuring about issues related to confidentiality with the participants. With the use of an interview protocol (see Appendix) participant reassurance took place that what they shared would remain confidential. The interview protocol also served to make participants aware they could have opted out of the study and discontinued the interview at any time without repercussions, a method recommended by Stake (2013). I also gained Institutional Review Board (IRB) approval from Walden University prior to contacting any participants. Any information shared by individuals participating in the study is confidential and will remain confined to research purposes only.

## **Participants**

For this study, I recruited and gathered data from hospital administrators from three hospitals in the southeast region of the United States who have successfully implemented change management strategies to address the IT elements of organizational change initiatives. The selection criterion for participants required them to (a) have successfully implemented change management strategies to address the IT elements of organizational change initiatives, (b) be full-time hospital administrative employees, and (c) be hospital employees who have been in leadership positions for a minimum of 5

years. To ensure obtaining the necessary data, it was essential to use participants who fulfill the selection criteria requirements.

Once the IRB approval had been granted through Walden University and recommendations by the three hospitals' administrations for choosing appropriate participants occurred, I contacted participants via e-mail with an invitation to participate. To ensure the use of purposive sampling, I asked if the potential participants met the eligibility criteria to participate in the study. To acquire participants, I sought out contact with three well-known hospitals in the region by calling the hospitals and speaking with administrators by phone to see if the hospital was willing to have employee participate in the study. Upon receiving a positive response, I asked if the administrators themselves would be willing to participate. If the administrators were unwilling or unable to participate, they were asked to recommend others who were willing and who fit the criteria. Nevertheless, all administrators from the three hospitals agreed to allow their employees to participate in the study. In this case, three participants were appropriate as this number is minimally recommended by Yin (2018) for data saturation.

After obtaining interest from potential participants, and after verifying their eligibility criteria, I clarified the purpose of the study. I then asked the participants if they were willing to meet with me to have a face-to-face interview. At that point, an interview meeting time was set up that was convenient for both the participant and me. In conducting the interviews, bringing the consent form, and asking participants to sign the form, I explained any expectations related to the study. I made a concerted effort to develop a respectful rapport and sense of trust with the hospital administrators

interviewed by sharing some of my own experiences with adopting the use of IT in the medical industry and by assuring them that they could leave the study at any time, as recommended by Klenke (2016). All measures were taken to assure the participants that their personal information and any information about their organizations would remain confidential at all times.

### **Research Method and Design**

#### **Research Method**

I used a qualitative methodology to explore successful strategies hospital administrators have used to implement the IT elements of organizational change initiatives in their hospitals. I used a qualitative methodology to both establish the foundation of a study and to ascertain the best method for framing a study (Yin, 2018). I used semistructured interviews with participants as a method to gather explanations of successful strategies for managing IT initiatives, as well as data collected on IT use from the three hospitals. The questions asked throughout the interview process were open-ended, iterative in style, and flexible enough to allow the participants to respond in a comfortable manner. Qualitative studies are exploratory and appropriate for use when the researcher seeks insight into the underlying reasons, opinions, and motivations related to behavior (Fusch & Ness, 2015). Qualitative studies are subjective, and the researcher makes interpretations from the information participants provide collaboratively between the researcher and the participant (Fusch & Ness, 2015).

A quantitative methodology was inappropriate for this study. Quantitative studies explore the relationship between independent and dependent variables in a particular

population (Stake, 2013). Quantitative and qualitative researchers use very different processes, research strategies, and procedures (Fusch & Ness, 2015). According to Stake (2013), quantitative studies require that researchers use randomization of participants to ensure internal validity. The nature of this study did not warrant the use of randomization as it focused only on hospital administrators who have had success implementing strategies to address organizational change initiatives that affect their IT systems; randomization was not required. As a quantitative methodology was not appropriate for this study, a mixed-method approach, which combines qualitative and quantitative methods, would not have been beneficial as this methodology uses both qualitative and quantitative methods within one study.

Using a qualitative methodology versus a quantitative methodology allowed for a deeper understanding of the phenomenon under study. Using a qualitative method that excludes randomization and is based on obtaining several qualified participants was better suited to this study. Furthermore, this study benefited from the use of the data-rich qualitative methodology to provide an in-depth understanding of the topic.

### **Research Design**

According to Yin(2018), a multiple case study includes research questions that researchers use to explore how and why a phenomenon exists. Considering multiple interview questions and amassing perceptual data is consistent with interviewing hospital administrators as participants (Stake, 2013). For this study, I preferred a multiple case approach to phenomenology, ethnography, and historical research designs because the

multiple case design met the purpose of this study as well as the type of data needed to conduct the study accurately.

Researchers use phenomenology to provide a further understanding of how one or more individuals experience a phenomenon, most notably through the lived experiences of participants (Lewis, 2015). Phenomenology is also suitable to explore participants' lived experiences (Keutel, Michalik, & Richter, 2014). However, the objective of this study was not to explore the participants' experiences. Therefore, phenomenology was not appropriate because I did not intend to study the lived experiences of participants. Researchers use ethnography to describe a culture and use historical approaches to focus on events that occurred in the past (Lewis, 2015; Yin, 2018). Ethnographers observe the behaviors, beliefs, customs, or other social traditions of a populace (Keutel et al., 2014). Culture was not the focus of this study, and the intent was not to analyze trends and events of the past; therefore, neither the ethnographic nor the historical design was appropriate for use in this study.

Researchers use a case study approach to provide a detailed account of one or more cases for gaining insights underlying problem (Yin, 2018). Use of the case study design permitted identification of the change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives. Therefore, the case study design was the most appropriate for use in this study. A type of case study, multiple case study design, allowed for understanding the phenomenon from a broader perspective while still being constrained by time, activities, events, and individuals. Case study designs allow for the

use of multiple sources to construct a comprehensive picture of the topic and permit participants to respond to face-to-face interviews (Yin, 2018). The multiple case study design was appropriate for exploring strategies hospital administrators use to successfully implement change management strategies to address the IT elements of organizational change initiatives in their hospitals.

Data saturation takes place when nothing new develops from interviewing the participants of a study, and theme identification is complete (Morse, 2015; Sim, Saunders, Waterfield, & Kingstone, 2018). During the interviews, I requested that the participants provide answers to questions until there was nothing more they thought they could add. After reviewing the data and as a function of member checking, I asked the participants to read the information to see if what they shared was correct and if anything was absent. As confirmed by Morse (2015), at the point when the interviews are no longer adding new information to the research questions, and when I was unable to uncover additional themes based on a review of the documentation and literature, I verified data saturation had occurred. The use of the multiple case study design was not only consistent with the purpose and research questions used in the study, but it also allowed for saturation and triangulation of data. Data from both interviews, hospital documents, and literature were compared and contrasted. Lastly, precise coding of the data took place to reveal significant themes as recommended by Yin (2018).

### **Population and Sampling**

To conduct this multiple case study, I planned to use both purposive and snowball sampling. When using purposive sampling a researcher selects a demonstrative

population based on characteristics that align with the research questions (Ritchie, Lewis, Nicholls, & Ormston, 2013). Holloway and Galvin (2016) stressed the importance of using more than one sampling method. Snowball sampling, as asserted by Holloway and Galvin, relies on word of mouth from participants who have completed the interview as a means of acquiring new referrals. For this method to be effective, I asked participants to speak with, in this case, hospital administrators, to ensure data saturation (Holloway & Galvin, 2016). For studies in which data generalization is a concern, random sampling is the more prudent choice (Ritchie et al., 2013). As the results of this research were not reliant on generalization, purposive sampling was an ideal sampling method for this study.

In this study, I recruited and gathered data from 3 hospital administrators who have successfully implemented change management strategies to address the IT elements of organizational change initiatives. According to Yin (2018), a study is considered valid based on the depth of information provided by the participants, also supported by Birt et al. (2016). The selection criterion for hospital administrators required them to (a) have successfully implemented change management strategies to address the IT elements of organizational change initiatives, (b) be full-time hospital administrative employees, and (c) be hospital employees who have been in leadership positions for a minimum of 5 years.

As a method of acquiring participants, I contacted hospital administrators by phone and asked questions to determine if the potential participants met the eligibility criteria necessary for participation in the study. After obtaining interest

from potential participants, and after verifying their eligibility criteria, sharing the purpose of the study took place. I then asked the participants if they were willing to meet with me to have a face-to-face interview. At this point, the interview meeting time was set up that was convenient for both the participant and myself. The meeting occurred in a location that was comfortable for them, yet private enough to keep what they shared confidential. When I conducted the interviews, I brought a consent form, which explained any expectations related to the study, and asked participants to sign the form. During the interviews, the participants provided answers to the questions until there was nothing more they thought they could add. At the point in which the interviews were no longer contributing new information, and I was unable to uncover other themes based on a review of the documentation and the literature, data saturation had occurred, a method suggested by Morse (2015). In a case where data saturation does not occur, and also according to Morse, participants could have been added by asking for coworker recommendations of those already contributing to the study who were willing to participate, indicating the use of a combination of purposeful and snowball sampling techniques. However, obtaining additional participants was not needed.

### **Ethical Research**

I gained approval from the Walden University IRB, approval number 10-25-18-0550376, before contacting participants and gathering any data. I endeavored to ensure that participants have protection by (a) following the recruitment plan, (b) ensuring the privacy of the research participants, (c) respecting the rights of the participants, and (d) following the informed consent process. For those who consented to the interview and

became participants, they were asked to sign the consent form when we met for the interview.

To ensure the privacy and confidentiality of the participants, their identities, and those of their organizations will be kept confidential. Assurances affirmed that I am the only individual who knows identifying information about the participants and their hospitals. To retain the participants' confidentiality, I assigned codes to each participant, such as Participant One (P1), Participant Two (P2), and so on, for use when presenting the data. Additionally, participants were made aware they could withdraw from the study at any given time and that they had the choice not to respond to every interview question. Participants were able to withdraw from the study without penalty, and as recommended by Yin (2018), I ensured at the start of each interview that they were aware that they had the right not to participate. A hard copy of the data collected for this study will stay in a locked cabinet, accessible only by me, and all electronic data will be password protected on my personal computer. The data will be stored in a password-protected computer, belonging to the researcher for 5 years. After the 5 years, I will dispose of the data by deletion and shredding.

To dispel potential anxiety related to participation in the study I refrained from sharing information about other research participants and ensured that each participant understood that any findings are for research purposes only. Additionally, no potential physical, legal, or economic risk is or was present for participants, and there were no direct monetary incentives for participation in the study. According to Karaaslan (2015), participants may have had an internal motivation for participating in a study, such as

gaining new strategies for implementing the IT elements of organizational change initiatives in their hospitals.

### **Data Collection Instruments**

I was the primary data collection instrument for the study. Yin (2018) identified several types of data used in qualitative research. These consisted of: (a) interviews, (b) documentation, (c) physical artifacts, (d) direct observation, (e) archival records, and (f) participant observation. Yin (2018) stated that not all sources are required in any one study, although at least two are sources are required. The use of semistructured interviews with open-ended questions was the primary means of obtaining data during one-on-one interviews with participants. Furthermore, I used a collection of hospital documentation from the three hospitals, with permission, to assess their change management strategies relating to guiding employees in the use of reviewing and understanding policies and procedures through interfacing with the intranet. Use of intranet monitoring systems have been in use for over twenty-five years and are extensively used in a number of organizations, including within a healthcare setting (Giardina, Baldwin, Nystrom, Sittig, & Singh, 2017; Underwood, 2017). In this study, the intranet was useful in reviewing and understanding policies and procedures concerning the adoption and use of IT (Kang et al., 2018)

At the beginning of the interview process, I shared with the participants both the nature and purpose of the study, and the hospital administrators had the assurance that what they chose to share with me will remain confidential and that they were free to terminate the interview at any time. The interview questions were open ended, and I

had follow-up questions prepared in case participants were struggling to answer the questions in a comprehensive and detailed manner. Both the interview protocol and interview questions obtained IRB approval before the interviews take place. Double checking the data collection instruments for the appropriate number of questions, clarity of language, and to ensure there was sufficient time to conduct the interviews without inconveniencing the hospital administrators, took place. Furthermore, as the interviewing occurred, I attempted to create a comfortable atmosphere, so the participants felt at ease in sharing their experiences.

According to Gehman et al. (2017), it is imperative that researchers pay attention to both the initial interview protocol and the revision of the protocol (see Appendix) as their research progresses as a means to most effectively guide the initial interview. To ensure validity and reliability, I created a highly detailed audit trail, which is a systematically maintained collection of material involved in a given study. I also interpreted the participant's statements, and in turn, shared my interpretation of the responses with the participant to guarantee validity. According to Yin (2018) and Harvey (2015), validity can occur through member checking, which involves researchers verifying the accuracy of their interpretation of responses provided by the participant. Member checking, by engaging the participants with further conversation, took place during and following the interviews by reviewing what the participants shared, a technique recommended by researchers Stake (2013) and Yin (2018). The member checking process provided an opportunity to review and interpret the interview responses and summarize replies to the interview questions. Member checking also ensured that

what had been shared was intended and that no new information needed to be provided by the participants. Last, the participants received a printed copy of the combined responses to the interview questions.

### **Data Collection Technique**

Denzin and Giardina (2016) posited all methods of data collection have positives and negatives attributes, and different data collection techniques have merit, for example using large data sets as with statistical analysis; nevertheless, interviewing participants in an iterative style suited the flexibility needed in this study to achieve the appropriate depth of information gathering. Manning and Kunkel (2014) stated that conducting open-ended, non-rehearsed or yes/no answers will help participants interviews allows for a sense of sentiment, feelings, and understanding of participants' experiences. Other methods of data collection may not have had the same effect. Therefore, asking open-ended questions during the semistructured interviews to obtain rich data and achieve a greater understanding of the participants' experiences was useful. The other source of data used in the study, document collection, allows for broad coverage of the study topic through a collection of information about the topic and repeated reviews (Eickhoff & Neuss, 2017). According to Yin (2018), using more than one collection technique helps investigators validate their findings through triangulation. I used methodological triangulation in the data analysis process, with the interview and hospital documentation data, as well as previously conducted research related to relevant methods and theories, as a means of providing supporting evidence for this study.

To ensure the validity of the data I made a concerted effort to respect the perspectives, beliefs, and experiences each of the hospital administrators brought to the study in gathering, analyzing, and interpreting their responses. Additionally, I used several procedures to maximize objectivity and reduce researcher bias, including member checking and a detailed audit trail, which according to Schwandt (2015), are both appropriate procedures for ensuring the credibility of data.

### **Semistructured Interviews**

According to Klenke (2016), there are several benefits to holding face-to-face interviews including (a) politeness, (b) gaining trust, (c) learning from nonverbal communication, and (d) the capacity for participants to express themselves more fully. I used face-to-face semistructured interviews to interview the hospital administrators. Manning and Kunkel (2014) posited that holding interviews provides a deeper understanding of the participants' feelings, sentiments, and experiences; whereas, other types of data collection might not create the same outcome. Klenke (2016) recommended the use of prompting during interviews as a method for increasing the detail and depth of interview responses. Therefore, I used open-ended questions during all three semistructured interviews to garner comprehensive data and to achieve a deeper awareness of the participants' thoughts, feelings, and experiences.

The interviews were conducted in a location that ensured privacy and lasted approximately 60-90 minutes. Interview locations were chosen by the hospital administrators and myself and provided the privacy necessary to ensure confidentiality. The instruments utilized during the interview process were a manual tool for organizing

notes and an audio recorder to be used for transcription purposes. After the interview has been completed and the audio recording has been transcribed, the participants had an opportunity to review their responses as outlined in the member checking process, to ensure the accuracy of their responses. I used follow-up questions built upon the answers initially provided by the participants to establish iterative analysis and to ensure saturation of the data. The process used to collect data focused on emergent analysis and required the use of flexible and adaptive processes in all interview situations, as recommended by Schwandt (2015). Finally, I used member checking to garner descriptive and thorough data from the participants to warrant reliability and validity until saturation occurred. Member checking can take place during and after the interviews by asking participants to review what they have shared and to ensure they shared what they intended to share (Yin, 2018). By using member checking and a complete exploration of the documentation and the literature, data saturation could take place. This process clarified that there were no new patterns emerging through the data collection and analysis process (Stake, 2013).

### **Organization Document Data**

To analyze documentation, I received permission from the hospital administration to have access to information pertaining to reviewing policies and procedures through interfacing with the intranet for use in this study. Document analysis allows for the complete understanding of the study topic through collecting facts about the topic and through repeated reviews (Colicchio et al., 2016). According to Tang (2017), careful validation and exploration of the documents, or information from the intranet, was critical

in organizing the relevant data. The inclusion of data from the hospital's database regarding employee review of policies and procedures through interfacing with the intranet was useful in appropriately organizing and categorizing the data. Participants also had the opportunity to member check the information collected from the documents to ensure accuracy. Although document analysis is less personal than the interviewing process, it allowed for extensive data comparison (primarily acquired from the interviews), which may have increased the credibility of data interpretation, according to (Eickhoff & Neuss, 2017).

### **Data Organization Technique**

I separated the data into groupings (e.g., recordings, notes, participants' responses) for clear documentation of the information. Along with the use of a tape recorder, audio recording the interviews, and transcribing the interviews, using a reflective journal to capture any thoughts I may have had during or after the interviews were useful. Birt et al. (2016) noted to achieve accuracy, and avoid the omission of pertinent information, narratives call for immediate transcription. For additional clarity of data and assurance that the participants had thoroughly expressed their thoughts and feelings, member checking occurred with the hospital administrators in an informal follow-up meeting a short time after the initial interview took place.

Throughout the process, I aimed to develop a respectful rapport with the hospital administrators being interviewed to ensure they were comfortable sharing their experiences, insights, and strategies for implementing change management strategies to address the IT elements of organizational change initiatives. By sharing the

transcribed material with the participants to ensure the completeness of their responses, ensuring data saturation could take place and the collected and analyzed data could be utilized by future researchers as recommended by Yin (2018). After transcribing, I saved the transcripts in a Word document on my personal computer as well as on a backup drive. The backup drive, consent forms, and transcripts are stored in a locked facility for 5 years. After the 5 years elapses, deleting the electronic data and shredding any paper data will occur. Both Stake (2013) and Yin (2018) recommend the use of this method.

### **Data Analysis**

After each interview, I transcribed the recordings, reviewed the final transcripts for accuracy, and then conducted, by hand; open coding of the information using a codebook and NVivo 10 software. Treating the interview data in this manner helped ensure the accurate identification and categorization the material shared by the participants. Robinson (2014) recommended coding data in this manner as it is an effective method for identifying themes. As an additional method for ensuring the reliability of data and validating findings, I asked two experienced coders to code the transcripts as well. Once the information had been coded, comparison of the coding results with those of the experienced coders I validated the findings. Methodological triangulation also took place using the interview and document data.

Given the interpretive nature of qualitative studies, data analysis is an essential and continuous process. As a means of ensuring my interpretation of the data adhered to the literature and conceptual framework, I made a comparison of key themes identified in

previously conducted research. The use of constant coding, as described by Robinson (2014), aids in recognizing emerging themes and allows for identifying the point at which data saturation occurs. The first phase in data analysis, open coding, as outlined by Yin (2018), consists of reviewing the transcribed interview material and notes, categorizing the information, and then organizing the data. The methods chosen to open code included coding the data by hand and through NVivo 10 software. I used NVivo 10 software to analyze, organize, and identify emerging themes from the data and, when necessary, organized any unstructured data. The NVivo 10 software helped with coding themes and identifying trends in the participants' responses. To ensure the credibility and reliability of data I also retained all of the materials acquired in paper form.

**Triangulation.** When conducting qualitative studies, researchers may use either methodological triangulation or data triangulation, and occasionally I used both. Methodological triangulation involves using several methods of primary research to gather data and guarantee the integrity of the findings; these methods include interviews, observations, surveys, questionnaires, and documents (Fusch, Fusch, & Ness, 2018). To ensure methodological triangulation, I compared the two forms of data collected in this study: interview and hospital documentation data relating to IT use. Conversely, to ensure the integrity of their results, researchers may use data triangulation to compare their findings across different periods of time and in different settings (Denzin & Giardina, 2016). In this study, I carried out method triangulation by both conducting interviews and reviewing the documentation associated with hospital administrators who have successfully implemented change management strategies to address the IT elements of

organizational change initiatives. The purpose of using methodological triangulation is to affirm that the data gathered during a study is complete (Denzin & Giardina, 2016). The information garnered through both the interview data, hospital documentation, and a thorough review of the literature helped to establish an all-inclusive data to understand the experiences of hospital administrators from three hospitals in the southeast region of the United States.

### **Reliability and Validity**

According to Burnes (2017), validity refers to the accurate interpretation of the results of the research and the reliability of the information gathered, both of which ensure future researchers can duplicate the study and obtain similar results. Reliability and validity are critical to affirming the authentic value of a study's results. According to Sousa (2014), a clear and thorough understanding of the data can lead to valid and reliable results. I confirmed the consistency of the data by interviewing and assessing documentation on three hospital administrators from three hospitals in the southeast region of the United States who have successfully implemented change management strategies to address the IT elements of organizational change initiatives.

### **Reliability**

According to Leung (2015), determining the reliability of a study lies within the consistency of data that, while different between studies, should remain similar ontologically. To ensure the reliability of a study it is imperative to involve participants in the analysis process, through both allowing member checking of the material and through providing a detailed description of the research method (Yin, 2018). To assess

the reliability of this study, Fusch and Ness (2015) recommended using an audit trail, which examines the processes that made the study attainable. I generated an audit trail by delineating the process I used to make methodological decisions. Researchers can produce audit trails by (a) clarifying the reasoning involved when choosing the participants used in a study, (b) clarifying the purpose of the study, (c) clarifying the process of data collection, (d) clarifying conversion of the data during the analysis process, (e) clarifying the techniques used to define data credibility, and (f) clarifying the research findings (Yin, 2018). Determining reliability is frequently contingent upon the dependability of a study (Stake, 2013). Strategies to ensure dependability include participant involvement in the analysis by conducting member checking and providing detailed descriptions of the research methods (Stake, 2013).

### **Validity**

To achieve validity, qualitative research should be reflective and honest; these parameters are preferable as it increases the credibility of a qualitative study (Sousa, 2014). Validity in a study commonly consists of confirmability and credibility (Sousa, 2014). Qualitative research must be reflective, keeping a sense of awareness and honesty to the study that contains valid, telling results (Stake, 2013). I used the interview protocol (see Appendix) to guide the initial interview, interpret the participant's statements, and in turn share my interpretation of the responses with the participant to guarantee validity.

**Credibility.** To ensure the credibility and the accuracy of the data, I used methodological triangulation. Researchers employ the use of triangulation by using the participants' responses to the semistructured interview questions as sources of

data for verifying their findings (Eickhoff & Neuss, 2017). Eickhoff and Neuss (2017) posited that all methods of review have positive and negative attributes and that investigators can validate their findings through triangulation. I used methodological triangulation in the data analysis process, as a means of providing supporting evidence for this study, by using interview and hospital documentation data, as well as previously conducted research related to relevant methods and theories.

**Transferability.** According to Yin (2018), transferability occurs when researchers provide consistent, reproducible results, with various data, to create a reliable study (Portney & Watkins, 2015). I based transferability on whether my study was applicable, and found meaningful, to other studies, individuals, and communities. Obtaining a full understanding of the research context, readers and scholars can now assess the use of this study in the context of other studies (Portney & Watkins, 2015).

**Confirmability.** To ensure the confirmability of this study utilizing a thorough and detailed description of the participants' responses occurred. I used member checking to attain confirmability, which as stated, also increases the accuracy, credibility, validity, and transferability of a study. Member checking consisted of asking the participants to look over the material gathered after the interviews to ensure accuracy. The participants were able to change anything that needed to be changed at this time. I confirmed that the information participants were sharing was intentional by conducting member checking both during and after the interview process.

**Data saturation.** Data saturation takes place when nothing new develops from interviewing the participants of a study and theme identification is complete (Morse,

2015; Sim et al., 2018). To guarantee data saturation, I collected data materials by continuing to interview hospital administrators until nothing new could be added by the participants. During the interviews, I requested that the participants provide answers to questions until there was nothing more they think they could add. At the point at which the interviews were no longer adding new information, and nothing more remained to be uncovered based on a review of the documentation and literature, I assumed data saturation has occurred, a practice recommended by Morse (2015).

### **Transition and Summary**

The purpose of this qualitative multiple case study was to explore successful strategies hospital administrators have implemented to address the IT elements of organizational change initiatives within their organizations. Conducting face-to-face, semistructured interviews with hospital administrators, who have successfully used IT to foster organizational change initiatives, granted a deeper awareness of the phenomenon. A criteria-based sample of hospital administrators in the southeast region of the United States included three participants, who had successfully implemented organizational change activities for the IT elements of organizational change initiatives. Using additional participants was not needed to facilitate data saturation. After attaining approval for this study from the Walden University IRB, I called participants and summarized the purpose of the study, provided the interview questions that intended for use in the process of collecting data, and ensured the confidentiality of the participants.

Once participants both met the criteria and agreed to take part in the study, I scheduled an interview. During the interviews, I created an audio recording and transcribed the recordings in a timely manner and asked the participants to check their answers to verify the accuracy and thoroughness of their responses. Use of the member checking technique was appropriate for warranting accuracy, ensuring correct interpretation of the data, and serving as a strategy for future researchers. I used a purposive participant selection method as it increased the likelihood that the data collected met the objectives of this study. Using semistructured interviews, analysis, coding, and the support of NVivo10 software, I interpreted the data to answer the research question explored in this study. In Section 3, I present the findings, share the applicability of the study to professional practice, indicate implications for change, make recommendations for action, and provide suggestions for further research.

### Section 3: Application to Professional Practice and Implications for Change

#### **Introduction**

The purpose of this qualitative multiple case study was to explore change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives. The targeted population was hospital administrators from three hospitals in the southeast region of the United States who have successfully implemented change management strategies to address the IT elements of organizational change initiatives. The hospital administrators interviewed in this study revealed the strategies they use to address IT as part of their change management strategy. Additional findings from the data retrieved from the three hospitals' intranets revealed strategies already in use and the need for deeper exploration of the potential uses of the intranet to understand employee use of the IT elements of organizational change initiatives. The themes revealed were the need for strategies to (a) increase digitization in all areas, (b) improve communication with IT personnel, (c) provide ongoing training, and (d) encourage the gradual adoption of technology. The minor themes were strategies needed to (a) hold staff accountable, and (b) focus on security. The findings may provide hospital managers with strategies to address IT as part of their change management strategy. Researchers can use this study to promote social change by providing hospital managers with successful strategies related to the use of IT in hospitals to facilitate improved patient care and to catalyze community well-being.

## Presentation of Findings

The following research question guided the study: What change management strategies do hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives? The three administrators who participated in this study shared their thoughts and responses related to the research question by answering the interview questions used in the study. To remain compliant with ethical and legal standards, the interviewees were coded Participant 1, Participant 2, and Participant 3 to maintain confidentiality. With the aid of NVivo software, a presentation of the findings is below. The findings are based on the found themes from the interviews and the intranet data review and consisted of the need for strategies to (a) increase digitization in all areas, (b) improve communication with IT personnel, (c) provide ongoing training, and (d) encourage the gradual adoption of technology. The minor themes were strategies needed to (a) hold staff accountable and (b) focus on security, all of which are laid out in Table 1 below. I compared the findings with what has been found in the literature related to this field to confirm and extend knowledge in the discipline. The conceptual framework was tied to the findings as well to confirm the findings of the existing literature on effective business practice. This chapter includes applications to professional practice, implications for social change, recommendations for action, recommendations for further research, additional reflections, and the conclusion.

Table 1

*Summary of Main and Minor Themes*

	Description of themes	Occurrence
Main themes	Increase digitization in all areas	P1, P2, P3
	Improve communication with IT personnel	P1, P2, P3
	Provide ongoing training	P1, P2, P3
	Encourage gradual adoption of technology	P1, P2, P3
Minor themes	Hold staff accountable	P3
	Focus on security	P3

**Main Theme 1: Increase Digitization in All Areas**

To integrate technology into the hospital workplace in the best way possible, technology must be incorporated into many different aspects of the workplace. The many different IT technologies on the market allow for digitization and optimization of hospital documents; digital communication with staff, patients, and families; and simpler interdepartmental interactions. As Watson (2016) pointed out, EHRs in particular have completely changed the nature of healthcare administration, and rapid technological advancement will only make EHRs more prominent and vital. As Sittig et al. (2016) discussed, EHR technology allows doctors to have a faster, more modern concept of their patients' medical histories, increasing patient safety. Integrating different types of software that interact well with each other can create comprehensive, streamlined IT systems that can tremendously increase productivity. P1, P2, and P3 all recognized that properly incorporating multiple technologies into a hospital's workflow can be challenging, but they all realized that a cross-platform IT strategy is an important part of updating a hospital's communication systems.

Lewin (1947) discussed incorporating a three-step transitional model of *unfreeze*, change, and refreeze when attempting to go about any organizational change (Lewin, 1947). Lewin believed the best method for any leader to create organizational change was to prepare their employees for the change (*unfreeze*), make the changes necessary to help the organization function better (change), and then reestablish the changes as the new status quo (*refreeze*). Digitization is becoming an increasingly important part of organizational leaders' jobs in the post-2000 economy (Colicchio et al., 2016). In the long term, the implementation of digital organizational strategies is going to become necessary for all hospital organizational managers. However, to incorporate various technologies into a workplace is a complicated process because the technologies in question may interact with each other in ways that are not necessarily intuitive for people already reluctant or resistant to change. This reluctance may be even more apparent with older employees who are less likely to be familiar with technology and less likely to welcome the changes needed. Consequently, there is a possibility that leaders in this position may need to be juggling different overlapping periods of *unfreeze*, change, and *refreeze* to properly integrate these technologies into their workplaces. While this can be a stressful thing for some employees to deal with, the speed with which new technology becomes standardized makes quicker adoption necessary (Tolentino, 2017).

P1, P2, and P3 all identified increasing digitization in all areas of work as an essential factor in effecting change as a hospital administrator. P1 discussed how increasing cross-platform scanning was being utilized in her organization to optimize workflow. P1 discussed holding training and creating new standard operating procedures

to show existing employees how to properly use new technologies. Creating standard operating procedures helps to highlight the connections between different platforms and helps employees better understand how these various programs can be used together, optimizing workflow. P1 also discussed using “computer software, databases, and phone systems” as a comprehensive set of IT tools. This helps make the point that not all cross-platform integrations have to be purely digital; even though P1 explicitly mentioned Skype as a new program she had started incorporating at her workplace, phone systems are still critical to the functioning of a hospital.

P2 went into detail regarding the interdepartment functionality of her hospital’s new IT system. P2 discussed how her hospital was

using software to consolidate charting, data aggregation, and population health management; also, Human Resources has been transformed using electronic systems to clock in/out, request time off, store employee policies, and manage benefits. These elements changed the workflow for patient care and payroll functions, which have streamline[d] processes, decreased errors, and improved auditing.

Here, P2 noted the different practical purposes that digital platforms have been utilized for and how increasing digitization has cross-departmental practical benefits. By incorporating digital resources into payroll, employees are forced to work with computers, which will ultimately make them more comfortable when new computer technologies are adopted in the workplace. P2 also pointed out the immediate reduction in error such practices have brought, saving the hospital time and money. P3 spoke more

generally regarding her hospital's cross-departmental digitization, discussing how her hospital will "continue to improve and adopt [the] best practices" while continuing to optimize the systems. P3's statements touched on the importance of improving workflow and improving cross-platform methods of digitization. The data collected from both P2 and P3 described what is available through interfacing with their hospital's intranet system. The information obtained from the participants, linked with what I found relating to guiding employees in the use of reviewing and understanding policies and procedures through the hospital's intranet system, revealed the need for increased digitization in all areas.

Although the use of IT was present in all three hospitals, greater strategies for accepting digitization was still needed. As digitization is becoming an increasingly important part of a hospital administrator's job, there is a greater need to fully adopt the use of IT in all areas (Colicchio et al., 2016; Coliccohoio et al., 2017). Although this can be stressful for some employees, the rapidity with which new technology becomes standardized makes faster implementation necessary (Tolentino, 2017). Some use of IT and increased digitization is already taking place in the three hospitals used in this study; however, more digitization, and greater acceptance of IT, is warranted. Using Lewin's (1947) three-step transitional model of unfreeze, change, and refreeze in attempting to create organizational change would be an effective way leaders can create structural changes by preparing their employees for the change (unfreeze), make the changes necessary to help the organization function better (change), and then reestablish the changes as the new status quo (refreeze).

The greater shift to digitization is also needed in all three hospitals' intranet services. While the participants shared that the intranet has been in operation for "a long time" and that it "works pretty well," according to P3, integrating different types of software that are compatible can create comprehensive, efficient IT systems that can increase productivity and make the use of the intranet more hospital staff friendly. Although I did find evidence of staff pages related to training on how to use the intranet and other hospital IT systems, the evidence was not robust and more strategies would be beneficial. According to Kang et al. (2018), expansion of intranet services can enhance the connection between devices, assist in monitoring patients remotely, and serve to monitor equipment and events taking place within the healthcare setting. An expansion of the intranet services appears to be needed because although the service "works pretty well," both P1 and P2 noted that the "intranet could use some updating." Nevertheless, I was able to locate a number of documents and training manuals on the intranet, which provided employees with tools for incorporating greater use of technology into their jobs. However, further strategies to develop the intranet and other IT systems within the hospital would improve the competencies of all hospital staff (see Tang, 2017; Underwood, 2017). Greater expansion of the intranet and an increased acceptance of technological changes in the hospitals through Lewin's three-step model could provide greater hospital efficiency.

### **Main Theme 2: Improve Communication with IT Personnel**

Communication is a vital part of effecting change in any business. P1, P2, and P3 all stressed the importance of improving communication with IT and non-IT employees.

Kanter's (2008) discussion of power and opportunity structures were very relevant to the interpersonal issues that can arise when new IT strategies are adopted and there is a greater need to be in communication with IT personnel. Kanter discussed how gaps in formal and informal power could shape the relationships between different employees. When a group of IT employees is brought in to change existing IT systems, they are given control over employees who are already established. The IT employees are brought into a work environment where non-IT employees have well-established routines, have an existing rapport with each other, and may not be accommodating to change. Because the IT employees are both emblematic of the changes that will be brought to the non-IT employees' workplace, and because, ostensibly, IT employees have a stronger understanding of the new systems they intend to implement than the non-IT employees, a power imbalance is created. Non-IT employees may have to defer to the IT employees; in the interest of making the incorporation of new technologies smoother, supervisors may entrust IT employees with more power during these periods of change, possibly causing non-IT employees to feel disempowered. This is a challenging situation, especially given that employees who understand themselves as having informal power tend to have a more significant commitment to their positions, and they trust in their supervisors more (Neves & Ribeiro, 2016). As DiNapoli et al. (2016) determined, trust is particularly important in medical professions because positive patient outcomes are impacted by the focus and care of health professionals.

Kanter (2008) also discussed how access to information and access to support are both necessary conditions to empower an employee. The IT employees act as a source of

information and as a source of support, but the possibility of impending power struggles means that this means of empowerment can be tenuous. Having to act as an intermediary between a new group of IT experts and a group of longtime employees can be challenging, so communicating clearly with IT employees and non-IT employees about the progress of the transition is a vital part of orchestrating a change of IT strategies. Ultimately, implementation of IT use strategies can lead to increases in morale, work quality, and can strengthen communication between parties (Glass & Cook, 2016).

Further, in hospital settings, confident and well-trained staff members can help positively impact patient outcomes (Allen, 2016). P3 explicitly discussed her organization's need for a strong IT department by saying:

My experience with implementing IT management strategies within my organization has been relative[ly] challenging[,] especially with the magnitude of software and systems our organization must support. One challenge we continue to have is obtaining a knowledgeable IT group with the skill set to support our infrastructure and software maintenance needs.

Attempting to encourage employees who have become comfortable in old habits to try to learn how to properly use a new IT system is a daunting task. Without ample support from an IT team that recognizes the needs of the particular organization, knows the budget of the organization, has a thorough understanding of the technology involved, and is integrated into their workplace, the adoption of new IT systems will be immensely challenging. Consequently, engaging directly with a knowledgeable IT team about organizational goals and IT solutions is vital.

P1 emphasized the importance of being explicit with the company's goals regarding IT change management strategy to better demonstrate to employees why organizational changes are being made; she said, "Communication is key" and said to constantly ask, "Why are we doing [this]? How will we do it?" While she also discussed holding meetings about new IT implementations to ensure that staff was fully committed to and ready for the changes, P1 regretted "waiting until [her organization had] complete buy in" to implement new IT strategies, citing how holding on to outdated organizational methods could have impeded growth in her hospital.

P2 recognized that the healthcare industry as a whole is moving toward mass digitization, and discussed how in her organization, many people were concerned that the adoption of new IT technologies "would minimize provider productivity and patient satisfaction." P2 stressed that communication of the purpose and goals of any IT strategy and in-person training were both key parts of incorporating an IT strategy; someone working in IT, who understands the systems and their uses, would best aid both of these incorporative methods, notably the latter.

Concerning the need for improved strategies for communicating with IT personnel, all three hospitals could benefit from greater IT support. Through using Kanter's (2008) framework relating to power and opportunity structures is relevant here because some hospital administrators and other staff may feel an unequal balance of power exists in having less knowledge than the IT professionals. As Kanter discussed, there are gaps in formal and informal power between different employees in a hospital setting and when a group of IT employees is brought in to modify existing IT systems,

they are given control over employees already established and comfortable with the existing IT systems. In analyzing the data retrieved from all three hospitals' intranet systems, Kanter's theory seemed to be an accurate assessment of what was taking place in the hospitals.

In using a collection of hospital documentation from the three hospitals related to change management strategies to guide employees in reviewing and understanding policies and procedures through the intranet, very little information was available on working with IT personnel. In hospital settings, confident and well-trained staff members positively influence patient outcomes and allow the organization to operate smoothly (Allen, 2016; DiNapoli et al., 2016). Therefore, when updating hospital services such as the intranet, strategies encouraging the support of IT personnel would be beneficial. Learning to communicate effectively would allow administrators to facilitate greater communication with IT personnel for the betterment of the organization, regardless of the hospital system being used. Communication may be the only way in which to break through any staff resistance to being taught new IT systems and functions (Rocha & Mill, 2017).

### **Main Theme 3: Provide Ongoing Training**

As Reynolds and Jones (2016) asserted, healthcare technology is changing at a tremendous rate and is redefining how patients interact with doctors and hospitals. As technology progresses and new IT technology is developed, released, and standardized, hospital employees must keep abreast of the changes within their workplace; consequently, ongoing training is a necessary part of maintaining a hospital's IT strategy

up to date. Beyond the practical reasons for employees to stay aware of workplace changes, ongoing training helps create a positive workplace environment. Researchers use Kanter's (2008) theory of structural empowerment to assert that access to information and access to support help empower employees, making them feel important to their organizations. Ongoing training provides both information and support to employees; they gain information regarding the purposes of IT resources in their workplace and gain support regarding how to properly utilize IT practices. When employees feel valued in their organizations, they often become more productive and cooperative when embracing new directives (Glass & Cook, 2016).

P1 discussed how "the largest barrier or challenge (related to IT change management strategy implementation) is related to user experience. With new technologies, there will be challenges around use." The participant discussed holding a series of training to help mitigate these challenges. Having an ongoing series of trainings allows her to respond to the common problems employees may be having with the new IT strategy, facilitate conversations between different employees who may be having issues with each other due to the IT strategy, and plan future training for new employees and new technologies.

To become aware of staff needs regarding training and implementation, some of the participants enacted more training opportunities for employees. For example, P2 discussed how her initial lack of training resources led her to, "schedule periodic trainings post implementation, continue to address staff concerns and support them through the process, and identify workarounds which are often costly and time

consuming.” P2 understands that learning new skills with this technology is a process and that it is important to ensure that staff members are expanding their knowledge of the tools they use. P2 also recognizes that as employees grow more comfortable with the technology, they will come to understand new and productive ways to utilize it, making staff discussions generative. P3 explicitly mentioned training and “re-training” employees to ensure that the new concepts are solidified in employees’ minds.

By investing time, money, and energy in ongoing training, the hospital administration can demonstrate that they value their employees and can ensure that employees have a strong understanding of the tools they are using. Using Kanter’s (2008) theory of structural empowerment, granting employees access to information and support will help empower employees, making them feel important to their organizations.

Ongoing training provides both information and support to employees; they gain information regarding the purposes of IT resources and acquire support regarding how to properly use IT.

In this study, all three participants mentioned the need to train their employees on the use of the hospitals’ systems, including the intranet. While there was evidence that employees frequently use the intranet to communicate with each other, place orders, and monitor patients’ needs, greater strategies are needed to facilitate full employee use of the intranet. According to Mieronkoski et al. (2017), a need exists for regular and inclusive clinical assessment related to monitoring daily activities and the ongoing care of patients for efficient use of the intranet. Through analyzing the information available on the intranet, it appeared that not all services were being used effectively. In this case, and

with hospital IT systems in general, ongoing training is critical to allow the organizations to function at their greatest capacities. As framed by Kanter's (2008) theory of structural empowerment and Lewin's (1947) approach to using strategies to lessen employee anxiety, employees can feel valued in their organizations, less fearful of using all the services available to them, and often become more productive and cooperative when embracing new directives when ongoing training is available (Glass & Cook, 2016).

#### **Main Theme 4: Encourage the Gradual Adoption of Technology**

Gradual adoption of technology allows for a smoother transition into new IT systems. Lewin's (1947) organizational change model discusses the *change* period as a source of potential anxiety and fear for employees and managers alike. In this era, where greater accessibility to information and constant technological innovation characterize the medical profession's development, and the profitability of any given hospital, anxieties regarding technology must be addressed (Stoller, 2013). Change implementation can be extremely stressful, particularly when suddenly enacted; Burnes (2017) argued that anxiety in organizations in the process of change can be detrimental to the group as a whole and that a trial and error strategy is ideal when attempting to adopt a new practice. By gradually adopting new IT practices, hospital staff can ease into their new procedures, and these anxieties can be lessened. When concerns of this nature are adequately addressed, a more harmonious, productive, and collaborative work environment is created (Glass & Cook, 2016).

P1, P2, and P3 all said that were they to do something different during their IT implementations, they would have tried to speed up the IT adoption process by

introducing some elements earlier, or in a more methodical manner. P3 cited taking a “more systematic approach” to implementing IT practices than she had as something she would change to improve her IT strategies. This means that she would want to introduce elements of her IT plan one at a time, which would allow her employees to become well acquainted with each of these elements at a steady pace, and would allow her to ease her employees into her broader IT strategy. P2 said, “engage(ing) the entire staff before the (IT) strategy is developed and adopted” was something she would change about her IT implementation strategy, “[because] this helps with easier buy in.” P1 discussed how she was to implement IT practices again; she would “not wait until [her organization] had complete buy in” to start changing her hospital’s practices, and pointed-out how holding on to outmoded technologies and ideas “can impede growth.” Both P1 and P2 discussed how bureaucracy slows hospitals’ development; by trying to make small, incremental changes, P1 and P2 could sidestep some of the bureaucracy, have a way to demonstrate the successes of new IT practices, and begin implementing their broader strategies.

Using Lewin’s (1947) organizational change model to create strategies to facilitate the gradual adoption of technology will allow for smoother employee transition into using new IT systems, especially when employee anxieties and fears about change are an issue. Change can be very stressful, particularly when suddenly sanctioned. According to Burnes (2017), the process of change can be detrimental to the group when attempting to adopt a new practice. As noted by all three participants, the need for gradually adopting new IT practices will allow hospital staff to ease into their new procedures and employee anxiety can be lessened.

Intranet systems, as much as any hospital IT system must also be used with efficiency, including strategies to teach employees to incorporate new IT programs without anxiety (Kang et al., 2018). Through accessing the information available on the three hospitals' intranet systems, it was clear that a number of services available to employees are not being used fully. While basic program use was in full evidence, P2 shared, "I believe our employees could do more with the intranet, but we have to train them a little bit at a time." The intranet has been a source of organizational functioning for many years (Giardina et al., 2017). Although adoption of greater use of intranet systems has been incremental, intranets are being used to foster knowledge management and employee understanding of hospital operations more fully (Underwood, 2017). Creating strategies for the efficient use of hospital IT systems, including the use of the intranet, must be conducted with care to encourage employees in making greater use of the available systems (Tang, 2017). Employee anxiety can be lessened by consciously using the information available in Lewin's (1947) organizational change model to create strategies for the gradual adoption of IT in a hospital setting. When anxieties surrounding new IT use are adequately addressed, a productive, harmonious, and collaborative work environment is created (Glass & Cook, 2016).

### **Minor Theme 1: Hold Staff Accountable**

Holding staff accountable for their knowledge and development is an important component identified in this study. P3 identified, "lack of training retention" and inconsistent implementation of IT change management strategies as two of the major problems with her organization's adoption of new IT products; P3 then said she

addressed these barriers by, “[holding] employees accountable for what was being implemented by documenting with a signature of policies and procedures [what was] being read and understood.” By giving employees both a clear, written definition of what they need to know to properly use the new IT tools and a definite time when they need to be able to utilize those tools, P3 creates an effective timeline. This gives employees a reasonable, definite period to learn the processes they need, and holds employees accountable to a timeline. This helps to create and enforce apparent, gradual periods of unfreeze, change, and refreeze in line with Lewin’s (1947) transitional model; theoretically, this should help streamline the periods of transition between change and refreeze. P1 and P2 did not mention holding staff formally accountable for their knowledge and development as a strategy they had utilized.

More so, a lack of holding staff accountable was noted in the document review from the hospitals’ intranets. Full employee use of the intranet was not in evidence, and concerning P1 and P2’s lack of holding staff accountable, it appears that greater adoption of the intranet, and other hospital IT system use, would help facilitate a more robust use of IT systems. Using Lewin’s (1947) framework to create strategies to hold staff accountable through a moderate approach, and Kanter’s (2008) framework to foster strategies that would empower hospital administrators to create an environment in which administrators may be more willing to hold their staff accountable for full use of IT systems, would be beneficial.

## Minor Theme 2: Focus on Security

There are specific concerns that need to be accounted for when developing and organizing new hospital IT systems. Given the private nature of medical records, security is uniquely valuable in a hospital workplace. As Rosemann and vom Brocke (2015) discussed, patient privacy is of the utmost importance to any hospital; medical professionals tend to susceptible and personal issues daily, and a hospital's reputation and profitability all rely on the staff's ability to keep information of this nature private. Further, laws regarding patients' rights to privacy, notably HIPAA, put hospitals at risk for legal retribution if they do not adequately protect their patients. As Watson (2016) pointed-out, profitability in the healthcare sector is decreasing, and can only survive by adopting digital solutions, which reduce cost, save time, and simplify workflow. When budgeting, planning, directing IT staff and educating non-IT staff, security needs to be prioritized.

P3 discussed IT security in detail, saying, “all the security elements around HIPAA [...] [just add] a layer of complexity [to] our ever-changing IT needs. Our organization has been strategizing to weight options as it relates to [our] IT structure contract or in-house IT department.” Here, P3 explicitly points out how the extra security considerations she makes are a strain on her strategy regarding IT and are demanding for her IT department. P3 goes on to mention the “stringent reporting requirements regulated by the government and insurance plans,” bringing up the point that the regulations surrounding hospitals require in-depth information to be communicated safely and securely between different parties; when updating IT systems, secure lines of

communication must be maintained with insurance companies and government entities alike.

There are many ways in which a security breach could occur, and IT departments need to be vigilant about updating their existing means of communication to ensure patient privacy is not invaded. Neither P1 nor P2 discussed security concerns specifically, but it could be inferred that they understood security as a part of updating IT systems, about which they broadly spoke. Through an analysis of the intranet systems, it seemed that only some security strategies were in place, indicating the need for greater security applications and methods, despite any potential drain on hospital resources. P3 also indicated that some security strategies and procedures were followed via the intranet, which I found to be true; however, updating of these systems would be beneficial to the hospitals. Strategies comprised of Lewin's (1947) model could help facilitate a change to more stringent security practices with the ease of gradually adopting and teaching employees how to use new IT security systems, largely available through the intranet. Last, Kanter's (2008) conceptual framework could facilitate the use of strategies to encourage greater adoption of IT security protocols in an environment in which employees will feel supported in learning and using the new technology.

To ensure triangulation, the findings of the need for strategies to (a) increase digitization in all areas, (b) improve communication with IT personnel, (c) provide ongoing training, and (d) encourage the gradual adoption of technology. The minor themes of strategies needed to (a) hold staff accountable and (b) focus on security, were compared to the key themes identified in previously conducted research also took place

using the interview and document data. Further discussed below, applications to professional practice, implications for social change, recommendations for action, further research, reflections, and the conclusion are presented.

### **Application to Professional Practice**

Study findings contribute to business practices by having identified strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives, which result in creating strong management teams that can increase creativity, profitability, and productivity of healthcare organizations, findings. While employee adoption of technology has been shown to be a problem, strategies such as increasing digitization, facilitating greater communication with IT personnel, providing ongoing training, and initiating the gradual adoption of technology are valuable in assessing what needs to be corrected to contribute to a more effective IT integration and acceptance process in hospitals.

### **Digitization Strategies**

The need for greater IT incorporation is needed in a hospital setting (Colicchio et al., 2016; Coliccohoio et al., 2017), and the findings in this study are consistent with the findings in the literature concerning the digitization of strategies. As noted by Yen et al. (2017), several strategies can ensure the proper implementation of IT in a hospital environment. Yen et al. asserted these strategies consisted of the establishment of consensus among stakeholders, consideration of varying options, the consideration of cost versus benefits, appropriate planning, development of infrastructure, appropriate staff training, the continuous evaluation of progress, system maintenance, and the long-

term maintenance of the venture. In the instances in which the participants in this study established some of the strategies noted by Yen et al., the results were positive.

Considering Yen's ten points can assist administrators during the planning and implementation of IT strategies and increased digitization and tie in well to the recommendations by Lewin (1947) and Kanter (2008) in facilitating change in a more comfortable atmosphere for employees.

### **Facilitation Strategies**

The findings are corroborated by the participants' thoughts regarding the need for strategies to facilitate the acceptance and greater use of IT. While there is some evidence of successful strategies, being used at the hospitals to facilitate the use of IT, incorporation of more efficiency in the use of IT will serve to improve business practices at hospitals. As previously noted, digitization is becoming an increasingly significant part of being a hospital administrator, and there is a greater requirement to implement the use of IT in all areas (Colicchio et al., 2016; Coliccohoio et al., 2017).

Although this can be a stressful for some employees, the rapidity with which new technology becomes standardized makes faster implementation necessary (Tolentino, 2017). Employee stress and confusion can lead to a decrease in the quality of work an employee produces, and these challenges destabilize an organization's ability to implement new technology in a timely and efficient manner (Smollan, 2015a). Further strategies geared toward ensuring employees feel confident, supported, and empowered in their roles (Kanter, 2008; Lewin, 1947) will aid in the development of systems such as

the intranet and other forms of digitization within the hospital (Tang, 2017; Underwood, 2017).

For enhancing professional practice, greater communication with IT personnel is warranted. Hornstein (2015) determined that change-related communications, opportunities to participate in change, as well as the level of employees' commitment to change, are useful and meaningful for employee acceptance of the new. According to them, the relationship between the two needs further investigation. Rocha and Mill (2017) noted that increasing communication on all levels would result in positive outcomes. Nevertheless, discomfort with the potential unequal balance of power does seem to exist within the three hospitals. By using the conceptual framework for this study, both Kanter's (2008) and Lewin's (1947) theories serve to recognize the need for better strategies in helping employees feel comfortable taking instruction from IT personnel in other departments. Aiding employees in learning to communicate effectively would allow administrators to facilitate greater communication with IT personnel for the advancement of the hospital organization as noted from the findings in this study.

Concerning ongoing training, it is evident from the literature that training is always an essential part of hospital organization, so surrounding IT as this field is consistently changing, and new technologies are being used, as frequently noted in the literature (By et al., 2015). Incorporating strategies that allow employees to receive the training they need, while at the same time ensuring they feel supported and valued, will make a significant difference in employee acceptance of training in IT. Change occurs in ways that are not always compatible with the learning styles of all employees and

sometimes new strategies are needed in the training process. By et al. (2015) asserted that it is critical that cultural preferences and differences are taken into consideration as they play a key role in the shaping of business processes and interactions.

Enhancing employees' IT skills is an ongoing necessity to ensure a quality organization (Stoller, 2013). In this study, all three participants stated the need to train their employees on the use of the hospitals' systems, including the intranet. As noted in the conceptual framework used in this study, Kanter's (2008) theory of structural empowerment and Lewin's (1947) approach to using strategies to lessen employee anxiety and to increase their sense of feeling valued in their organizations will increase if ongoing training is available (Glass & Cook, 2016).

The initiation of gradual adoption of technology has proven to be a successful strategy as seen within the literature reviewed for this study (Tabibi et al., 2015). A key point for successful change implementation is the inclusion of employees in a moderate change process, as recommended by Holten and Brenner (2015) and Tabibi et al. (2015). According to Lewin (1947) and Kanter (2008), change can be difficult. Therefore, the need to encourage strategies that allow IT systems to be incorporated slowly can alleviate unnecessary stress on employees. These findings were also corroborated by Kang et al. (2018), who noted that any hospital IT system, especially the intranet system according to the authors, must be approached carefully, including strategies to teach employees to incorporate new IT programs without anxiety. Through accessing the information available on the three hospitals' intranet systems, and in discussing change strategies with the participants, it was clear that a number of services available to employees are not

being fully used. Clearly, using Lewin's (1947) organizational change model to create strategies to assist with the gradual adoption of technology will allow for smoother employee acceptance of using new IT systems.

In discussing the minor themes of holding, staff accountable and focusing on security, the professional practice can benefit from the results of the study. Without question, what has been learned through the participants and through an analysis of the hospitals' systems is that staff would benefit more from being held accountable and that increasing staff and patient security is an issue that holds significant merit for incorporating IT strategies into hospital systems (Watson, 2016). Empowering hospital administrators to create an environment in which they may be more willing to hold their staff accountable would be advantageous, as would be the professional practice adoption of strategies to encourage greater IT security protocols

The findings from this study can serve hospital administrators and business practices to create effective strategies by identifying the need to prepare for change and understand how to design, develop, implement, and communicate IT changes needs effectively, as recommended by Colicchio et al. (2016). Findings related to communicating effectively with employees can offer hospital administrators leadership strategies that the participants in this study have found effective in promoting employee morale, productivity, and quality of work improvement. Bolstering employ morale and productivity in a supportive environment can enhance business practices in a healthcare setting. The findings, conclusions, and recommendations from this study can contribute to creating efficient business practices in healthcare facilities implementing IT by

identifying change management strategies used to guide organizational change activities for the IT elements of organizational change initiatives, thereby adding value to hospital business practices.

### **Implications for Social Change**

The findings from this study could help hospital administrators implement improved IT change process strategies that can contribute to positive social change within communities by promoting care that is more efficient, both locally and nationally. Increasing digitization in all areas can positively affect hospital and also fosters a sense of security and productivity that come with the gradual adoption of technology (Reynolds & Jones, 2016; Watson, 2016). The results of this research contribute to positive social change by demonstrating how effective organizational strategies such as ongoing training, gradual adoption of technology, and holding staff accountable can contribute to making the transition to IT use easier. These findings can help hospital administrators implement increasing digitization in all areas, which contributes to positive social change. Although there are various problems in many hospitals' systems, this study also shows that it is possible to adopt more efficient procedures for successfully implementing change management strategies to address the IT elements of organizational change initiatives. The positive social implications for this research are that through adopting leadership strategies, which subscribe to the use of Kanter's theory of structural empowerment (2008) and Lewin's (1947) organizational change model, social hardships associated with employee reservation and anxiety can be mitigated. The social impact for the community in which the hospitals serve can be impacted positively by supporting

employee acceptance of IT use in the hospitals. Adoption of the strategies both present and lacking in the results of this study will allow for privacy and patients may be more likely to seek medical assistance, and the overall health of the local community can increase (Kuipers et al., 2014). Supported by the work of Garrity and Fiedler (2016) and Mieronskoski et al. (2017), findings from this study can effect change within communities, both local and national, by promoting more efficient care.

### **Recommendations for Action**

In deciding what actions need to be taken, it is important to explore which strategies are best, who can benefit from the recommended actions, and how to best implement the strategies. In reviewing the literature by Reynolds and Jones (2016), their findings paralleled the results of this study that the need for communication with IT personnel, ongoing training, gradual adoption of technology, holding staff accountable, and a focus on security are all worthy to address. More so, addressing change through the lens of Kanter's theory helps explain that during times of change helping employees adjust results in an improved work environment. As seen from the findings, this would make a noticeable difference in acceptance surrounding the need to increase digitization in all areas and successfully implemented change management strategies for IT implementation.

Another recommended action would be to ensure that the need for communication with IT personnel, ongoing training, gradual adoption of technology, holding staff accountable, and a focus on security are all worthy to address. Another method to improve communication with IT personnel would be to hold joint training sessions that

could foster a smoother transition and allow for more significant interaction between the hospital staff and the personnel installing and maintaining the software. Holding joint training sessions could be very beneficial given that P1 asserted, “the largest barrier or challenge is related to user experience.” Encouraging greater communication between IT personnel and hospital employees could serve to make the transition to increased IT integration smoother.

Furthermore, Alvesson and Sveningsson (2015) found that ongoing training is beneficial to educating employees and making staff members feel more comfortable with changes taking place, also noted by the participants in the study. In speaking with the participants, P2 explained how as employees grow more comfortable with the technology, they will understand productive ways in which to use the new IT comfortably. P1 also stated that using “periodic trainings post implementation [and continuing] to address staff concerns and support them through the process” is required. It would also be beneficial to ensure that gradual adoption of technology and holding staff accountable is occurring positively. Although not all of these strategies are entirely in place and functioning optimally at the hospitals, they do present a useful strategy for ensuring that the IT acquisition and the use process is more efficient. The need to operationalize increased digitization in all areas and ongoing staff training would also serve to benefit how hospital processes run on all levels (Stoller, 2013). Furthermore, increased attention to the topic of security, and how to adequately understand and incorporate governmental regulation would help employees integrate greater knowledge regarding IT processes and the need for IT use. Information regarding new approaches

can give administrators and policymakers the needed tools to create change to address the IT elements of organizational change initiatives.

Expanding on what is working well, such as using “computer software, databases, and phone systems,” noted by P1, these services create a more efficient and cost-effective work environment, and can be further framed by Kanter’s theory of structural empowerment (2008) and Lewin’s (1947) organizational change model to increase the use of additional IT services. To further address what change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives, Tang (2017) noted that the application of new strategies focused on increasing information and communication technologies could take place with internal tutorials conducted on the intranet for greater training.

Furthermore, a number of strategies such as the Triple Aim Framework, which focuses on improved patient care (Whittington et al., 2015), the strategies used by the Canada Health Infoway (2017), and the National Health Service Change Management Guidelines, which offer a six-step approach to successful change implementation in healthcare institutions can be used by hospital organizations. Ultimately, continuing to positively encourage and support employees, while at the same time holding them accountable for their ability to learn and implement new IT systems will facilitate greater ease of successfully addressing the IT elements of organizational change initiatives within hospitals. Communication and training strategies will ensure that employees have the necessary skills and knowledge to implement the changes along with the efficient management, which ensures and supports the change process (Glass & Cook, 2016;

Kuster et al., 2015). After successful implementation of the defined change processes, the organization should then reinforce the change through regular review of the strategies and create new processes if needed, based on feedback, to facilitate ongoing training (Allen, 2016).

To further disseminate the findings of this study, the results will be shared through the publication of the study, sharing the findings in conferences, and using some of the strategies noted in training and continuing education for the successful adoption of IT in hospital settings. My intention in sharing this information is to improve the adoption and acceptance of IT practices in hospitals settings, and I plan to involve myself in the ongoing training of personnel. Furthermore, I plan to continue working within the healthcare field as a general promoter of adopting new strategies and approaches to create change and address the IT elements of organizational change initiatives. Only in this manner can the healthcare industry thrive in this greater age of technological innovation.

### **Recommendations for Further Research**

Generally, many of the findings in the study are relevant and can significantly influence the organizational change strategies used to facilitate change management strategies concerning IT elements. Most studies create some questions that can be pursued more fully in the future. Below are three recommendations for further research, which may provide greater clarity to this issue.

1. A study should be conducted to gain perspective of the phenomenon from different methods of analysis. For example, as this was a qualitative study, the depth of information taken from the interviews surrounding implementing

change management strategies to address the IT elements of organizational change initiatives could be explored on a broader scale to pursue this topic further. Therefore, a quantitative analysis, including larger data sets, could be used to further explain strategies to address the IT elements of organizational change initiatives in hospitals.

2. A study should be conducted to explore further the perceptions of other types of employees' needs and beliefs regarding installing, learning, and using IT. Different employees may have different perspectives on the process, not to mention a different perspective on the role management plays in facilitating training, as a lack of training retention and employee accountability makes transitions more difficult for everyone. Finally, a greater focus on issues of security and how to approach governmental regulation both warrant further exploration.
3. Further research should be undertaken in different geographic locations and especially in hospitals of different sizes and focuses. Generally, as institutions become larger, or reduce their workload, IT will change. In addition, different geographic areas come with varying perspectives on technology, which may influence employee adoption of IT systems. Understanding how leadership changes in both of these situations would be beneficial to understanding change management strategies to address the IT elements of organizational change initiatives.

## Reflections

As an individual with interest in hospital governance, IT use, and change management strategies, I was knowledgeable regarding change management strategies to address the IT elements of organizational change initiatives to some degree, and this could have affected the way in which I approached this topic. Although I made every effort to treat the study, and any information learned, objectively; and minimized researcher bias by remaining objective and neutral when interviewing the participants and analyzing the data, it was a challenge. Using techniques such as triangulation and member checking have been beneficial tools and have allowed me to engage more fully with the study. I found that during this DBA, I have learned a great deal regarding the topic of change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives.

The adoption and use of IT processes in hospitals can make a significant difference in hospitals and communities. Further study and the implementation of Kanter's (2008) theory of structural empowerment Lewin's (1947) organizational change model could benefit the change management strategies to address the IT elements of organizational change initiatives. I have learned more about what takes place in a hospital setting and how there are so many variables that need to be accounted for. Undertaking this process has allowed me to gain knowledge surrounding what can be done to facilitate a more efficient IT use, save hospitals money, and contribute to the community.

## Conclusion

As has been noted throughout this doc study, the focus of this study has been to explore change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives. The healthcare industry is undergoing significant changes in both healthcare reform and compliance, and the need for technological innovation is at a premium in business because of rapid change and globalization (Colicchio et al., 2016; Colicchio et al., 2016; Lewis, Tutticci et al., 2016). In the majority of hospitals, the adoption of IT change management strategies administrators use to guide organizational change activities appears to take place slowly (Pugh, 2016). The struggle to productively address change management strategies in the hospital industry creates waste, increases expenses, and reduces profits. Because of the failure to adopt IT use and practices more swiftly, a greater need exists to create effective change management strategies to incorporate technology successfully (Spaulding et al., 2017; Tolentino, 2017). A primary objective for hospital administrators should be to identify and implement effective change management strategies to guide organizational change activities for the IT elements of organizational change initiatives. However, in some hospitals, managers who address change willingly find they can address change with the confidence needed to incorporate IT and remain competitive (Nilashi et al., 2016).

In conducting a qualitative multiple case study to explore strategies hospital administrators use to implement change management strategies to address the IT elements of organizational change initiatives, three hospital administrators, from different

hospitals in the southeast region of the United States were interviewed. The main themes that emerged were the need for strategies to (a) increase digitization in all areas, (b) improve communication with IT personnel, (c) provide ongoing training, and (d) encourage the gradual adoption of technology. The minor themes were strategies needed to (a) hold staff accountable and (b) focus on security. Although not all of the administrators had efficient strategies to address implementing IT as part of their change management initiatives, steps were being taken to address and lack of efficiency in this area. The findings of the study can be used to identify what is ineffective within change management strategies hospital administrators use to guide organizational change activities for the IT elements of organizational change initiatives the as well as use what is working, primarily related to training strategies discussed by P1. Results from the study can also contribute to improved patient care and promote social change by providing hospital managers with successful strategies related to the use of IT in hospitals to facilitate improved patient care and to catalyze community well-being.

## References

- Al-Dweik, G., Al-Daken, L. I., Abu-Snieneh, H., & Ahmad, M. M. (2016). Work-related empowerment among nurses: Literature review. *International Journal of Productivity and Quality Management*, 19(2), 168-186.  
doi:10.1504/IJPQM.2016.078885
- Allen, B. (2016). Effective design, implementation, and management of change in healthcare. *Nursing Standard*, 31(3), 58-71. doi:10.7748/ns.2016.e10375
- Alvesson, M., & Svenningsson, S. (2015). Changing organizational culture: Cultural change work in progress. London, England: Routledge.
- Babbie, E. (2015). *The practice of social research*. Boston, MA: Cengage Learning.
- Bengat, J., Odenyo, M., & Rotich, J. (2015). Organizational change and resistance dilemmas, resolution approaches and mechanisms. *International Journal of Economics, Commerce, and Management*, III(2), 1-17. Retrieved from <http://ijecm.co.uk/wp-content/uploads/2015/02/3250.pdf>
- Billings, D. M., & Halstead, J. A. (2015). *Teaching in nursing: A guide for faculty*. Amsterdam, Netherlands: Elsevier Health Sciences.
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: A tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26, 1802-1811. doi:10.1177/1049732316654870.
- Blocker, O., Hayden, L., & Bullock, A. (2015). Doctors and the etiquette of mobile device use in trauma and orthopedics. *JMIR mHealth and uHealth*, 3(2), e71-e71.  
doi:10.2196/mhealth.4122

- Boamah, S., & Laschinger, H. (2015). Engaging new nurses: The role of psychological capital and workplace empowerment. *Journal of Research in Nursing*, 20, 265-277. doi:10.1177/1744987114527302
- Boyd, S. S. (2017). *Hospital administrators' strategies for reducing delayed hospital discharges and improving profitability* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 10640911)
- Bridges, W., & Bridges, S. (2017). *Managing transitions: Making the most of change*. Boston, MA: Da Capo Press.
- Brown, B. B., Patel, C., McInnes, E., Mays, N., Young, J., & Haines, M. (2016). The effectiveness of clinical networks in improving quality of care and patient outcomes: A systematic review of quantitative and qualitative studies. *BMC Health Services Research*, 16, 360-376. doi:10.1186/s12913-016-1615-z
- Burnes, B. (2015). Understanding resistance to change–building on Coch and French. *Journal of Change Management*, 15(2), 92-116. doi:10.1080/14697017.2014.969755
- Burnes, B. (2017). Kurt Lewin: 1890–1947. In D. Szabla, W. Pasmore, M. Barnes, & A. Gipson (Eds.), *The Palgrave handbook of organizational change thinkers* (pp. 1-15). doi:10.1007/978-3-319-49820-1\_13-1
- By, R. T., Armenakis, A. A., & Burnes, B. (2015). Organizational change: A focus on ethical cultures and mindfulness. *Journal of Change Management*, 15(1), 1-7. doi:10.1080/14697017.2015.1009720

- Canada Health Infoway. (2017). *National change management framework*. Retrieved from <https://www.infoway-inforoute.ca/en/what-we-do/research-and-insights/change-management/national-change-management-framework>
- Carnall, C. (2018). *Managing change*. London, England: Routledge.
- Çınar, F., & Eren, E. (2015). Organizational learning capacity impact on sustainable innovation: The case of public hospitals. *Procedia-Social and Behavioral Sciences, 181*, 251-260. doi:10.1016/j.sbspro.2015.04.886
- Colicchio, T. K., Del Fiol, G., Scammon, D. L., Bowes, W. A., III, Facelli, J. C., & Narus, S. P. (2017). Development and classification of a robust inventory of near real-time outcome measurements for assessing information technology interventions in health care. *Journal of Biomedical Informatics, 73*, 62-75. doi:10.1016/j.jbi.2017.07.014
- Colicchio, T. K., Facelli, J. C., Del Fiol, G., Scammon, D. L., Bowes, W. A., III, & Narus, S. P. (2016). Health information technology adoption: Understanding research protocols and outcome measurements for IT interventions in health care. *Journal of Biomedical Informatics, 63*, 33-44. doi:10.1016/j.jbi.2016.07.018
- Davis, K. (2016). A method to measure success dimensions relating to individual stakeholder groups. *International Journal of Project Management, 34*, 480-493. doi:10.1016/j.ijproman.2015.12.009
- Denzin, N. K., & Giardina, M. D. (Eds.). (2016). *Qualitative inquiry and global crises*. Abingdon, England: Routledge.

- Diab, G. M., Safan, S. M., & Bakeer, H. M. (2018). Organizational change readiness and manager' behavior in managing change. *Journal of Nursing Education and Practice*, 8(7), 68-78. doi:10.5430/jnep.v8n7p68
- DiNapoli, J. M., O'Flaherty, D., Musil, C., Clavelle, J. T., & Fitzpatrick, J. J. (2016). The relationship of clinical nurses' perceptions of structural and psychological empowerment and engagement on their unit. *Journal of Nursing Administration*, 46(2), 95-100. doi:10.1097/NNA.0000000000000302
- Doppelt, B. (2017). *Leading change toward sustainability: A change-management guide for business, government and civil society*. Abingdon, England: Routledge.
- Drummond, M. F., Sculpher, M. J., Claxton, K., Stoddart, G. L., & Torrance, G. W. (2015). *Methods for the economic evaluation of health care programmes*. Oxford, England: Oxford University Press.
- Edmunds, M. , Peddicord, D., & Frisse, M. E. (2016). Ten reasons why interoperability is difficult. In C. A. Weaver, M. J. Ball, G. R. Kim, & J. M. Kiel (Eds.), *Healthcare information management systems: Cases, strategies, and solutions* (4th ed.; pp. 127-137). Cham, Switzerland: Springer International.
- Eickhoff, M., & Neuss, N. (2017). Topic modelling methodology: Its use in information systems and other managerial disciplines. In *Proceedings of the 25th European conference on information systems* (pp. 1327-1347). Retrieved from [http://aisel.aisnet.org/ecis2017\\_rp](http://aisel.aisnet.org/ecis2017_rp)

- Fiedler, F. E. (1964). A contingency model of leadership effectiveness. *Advances in Experimental Social Psychology*, 1, 149-190. Retrieved from doi:10.1177/000276428102400503
- Fokkema, J. P. (2016). Innovating the practice of medical speciality training. *Perspectives on Medical Education*, 5(1), 48-50. doi:10.1097/01.JAC.0000314699.04301.3e
- Fusch, P., Fusch, G. E., & Ness, L. R. (2018). Denzin's paradigm shift: Revisiting triangulation in qualitative research. *Journal of Social Change*, 10(1), 19-32. doi:10.5590/JOSC.2018.10.1.02
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research. *Qualitative Report*, 20, 1408-1416. Retrieved from <http://nsuworks.nova.edu/tqr/vol20/iss9/3>
- Ganta, V. C., & Manukonda, J. K. (2017). Leading the change in organizations. *International Journal of Research in IT and Management*, 7(1), 73-81. Retrieved from <http://euroasiapub.org/wp-content/uploads/2017/02/10IMJan-6020irjms1.pdf>
- Garrity, B. K. F., & Fiedler, R. C. (2016). A quantitative analysis of the effects of postsecondary institution conversions from not-for-profit to for-profit. *Public Organization Review*, 16, 371-389. doi:10.1007/s11115-015-0313-3
- Garvare, R., & Nyström, M. E. (2017). Reaching beyond the review of research evidence: A qualitative study of decision making during the development of clinical practice

- guidelines for disease prevention in healthcare. *BMC Health Services Research*, 17, 344-344. doi:10.1186/s12913-017-2277-1
- Gehman, J., Glaser, V. L., Eisenhardt, K. M., Gioia, D., Langley, A., & Corley, K. G. (2017). Finding theory–method fit: A comparison of three qualitative approaches to theory building. *Journal of Management Inquiry*, 27, 284-300. doi:10.1177/1056492617706029
- Georgalis, J., Samaratunge, R., Kimberley, N., & Lu, Y. (2015). Change process characteristics and resistance to organisational change: The role of employee perceptions of justice. *Australian Journal of Management*, 40, 89-113. doi:10.1177/0312896214526212
- Giardina, T. D., Baldwin, J., Nystrom, D. T., Sittig, D. F., & Singh, H. (2017). Patient perceptions of receiving test results via online portals: a mixed-methods study. *Journal of the American Medical Informatics Association*, 25, 440-446. doi:10.1093/jamia/ocx140
- Glass, C., & Cook, A. (2016). Leading at the top: Understanding women's challenges above the glass ceiling. *Leadership Quarterly*, 27(1), 51-63. doi:10.1016/j.lequa.2015.09.003
- Harvey, L. (2015). Beyond member checking: A dialogic approach to the research interview. *International Journal of Research & Method in Education*, 38, 23-38. doi:10.1080/1743727X.2014.914487

- Heckmann, N., Steger, T., & Dowling, M. (2016). Organizational capacity for change, change experience, and change project performance. *Journal of Business Research*, 69, 777-784. doi:10.1016/j.jbusres.2015.07.012
- Holloway, I., & Galvin, K. (2016). *Qualitative research in nursing and healthcare*. Hoboken, NJ: John Wiley & Sons.
- Holten, A. L., & Brenner, S. O. (2015). Managership style and the process of organizational change. *Management & Organization Development Journal*, 36(1), 2-16. doi:10.1108/LODJ-11-2012-0155
- Hornstein, H. A. (2015). The integration of project management and organizational change management is now a necessity. *International Journal of Project Management*, 33, 291-298. doi:10.1016/j.ijproman.2014.08.005
- Houngbo, P. T., Coleman, H. L. S., Zweekhorst, M., Buning, T. D. C., Medenou, D., & Bunders, J. F. G. (2017). A model for good governance of healthcare technology management in the public sector: Learning from evidence-informed policy development and implementation in Benin. *PloS One*, 12(1), 1-21. doi:10.1371/journal.pone.0168842
- Hwang, Y., Al-Arabi, M., & Shin, D. H. (2015). Understanding technology acceptance in a mandatory environment: A literature review. *Information Development*, 3, 295-306. doi:10.1177/026666615593621
- Institute for Healthcare Improvement. (2017). *IHI Triple Aim Initiative*. Retrieved from <http://www.ihi.org/Engage/Initiatives/TripleAim/Pages/default.aspx>

- Joynt, K. E., Orav, E. J., & Jha, A. K. (2014). Association between hospital conversions to for-profit status and clinical and economic outcomes. *Journal of the American Medical Association*, 312, 1644-1652. doi:10.1001/jama.2014.13336
- Kang, S., Baek, H., Jun, S., Choi, S., Hwang, H., & Yoo, S. (2018). Laboratory environment monitoring: Implementation experience and field study in a tertiary general hospital. *Healthcare informatics research*, 24, 371-375. doi:10.4258/hir.2018.24.4.371
- Kanter, R. M. (2008). *Men and women of the corporation: New edition*. New York, NY: Basic Books.
- Karaaslan, O. (2015). From “cogito ergo sum” to “vivo ergo sum”: Current theoretical trends and changing perspectives in leadership. *Open Journal of Leadership*, 4(4), 153-163. doi:10.4236/ojl.2015.44014
- Karyotakis, K. M., & Moustakis, V. S. (2014). Reinvention of the public sector: Total quality management and change management. *Singidunum Journal of Applied Sciences*, 11(2), 30-44. doi:10.5937/sjas11-6751
- Keutel, M., Michalik, B., & Richter, J. (2014). Towards mindful case study research in IS: A critical analysis of the past ten years. *European Journal of Information Systems* 23, 256-272. doi:10.1057/ejis.2013.26
- Kiel, J. M., Ciamacco, F. A., & Steines, B. T. (2016). Privacy and Data Security: HIPAA and HITECH. In C. A. Weaver, M. J. Ball, G. R. Kim, & J. M. Kiel (Eds.), *Healthcare information management systems: Cases, strategies, and solutions* (4th ed.; pp. 437-449). Cham, Switzerland: Springer International.

- Kirrane, M., Lennon, M., O'Connor, C., & Fu, N. (2017). Linking perceived management support with employees' readiness for change: the mediating role of psychological capital. *Journal of Change Management*, 17(1), 47-66. doi:10.1080/14697017.2016.1214615
- Klenke, K. (Ed.). (2016). *Qualitative research in the study of leadership*. Chicago, IL: Emerald Group Publishing Limited.
- Klonick, F. E., Lehmann-Willenbrock, N., & Kauffeld, S. (2014). Dynamics of resistance to change: A sequential analysis of change agents in action. *Journal of Change Management*, 14, 334-360. doi:10.1080/14697017.2014.896392
- Kogan, J. R., Conforti, L. N., Yamazaki, K., Iobst, W., & Holmboe, E. S. (2017). Commitment to change and challenges to implementing changes after workplace-based assessment rater training. *Academic Medicine*, 92, 394-402. doi:10.1097/ACM.0000000000001319
- Korbi, K. (2015). Managership and strategic change. *Journal of Organizational Management Studies*, 2015(1), 1-32. doi:10.5171/2015.638847
- Koppel, R. (2016). Great promises of healthcare information technology deliver less. In C. A. Weaver, M. J. Ball, G. R. Kim, & J. M. Kiel (Eds.), *Healthcare information management systems: Cases, strategies, and solutions* (4th ed.; pp. 101-125). Cham, Switzerland: Springer International.
- Kuipers, B. S., Higgs, M., Kickert, W., Tummers, L., Grandia, J., & van der Voet, J. (2014). The management of change in public organizations: A literature review. *Public Administration*, 92(1), 1-20. doi:10.1111/padm.12040

- Kuster, J., Huber, E., Lippmann, R., Schmid, A., Schneider, E., Witschi, U., & Wüst, R. (2015). Change management and dealing with resistance. In *Project management handbook* (pp. 267-281). Berlin, Germany: Springer. doi:10.1007/978-3-662-45373-5\_21
- Larson, J. A. (2015). *Organizational and process reengineering: Approaches for health care transformation*. Boston, MA: CRC Press.
- Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of Family Medicine and Primary Care*, 4, 324-327. doi:10.4103/2249-4863.161306
- Lewin, K. (1947). Quasi-stationary social equilibria and the problem of permanent change. In W. W. Burke, D. G. Lake, & J. W. Paine (Eds.), *Organization change: A comprehensive reader* (pp. 73–78). San Francisco, CA: Jossey-Bass.
- Lewis, P. A., Tutticci, N. F., Douglas, C., Gray, G., Osborne, Y., Evans, K., & Nielson, C. M. (2016). Flexible learning: Evaluation of an international distance education programme designed to build the learning and teaching capacity of nurse academics in a developing country. *Nurse Education in Practice*, 21, 59-65. doi:10.1016/j.nep.2016.10.001
- Lewis, S. (2015). Qualitative inquiry and research design: Choosing among five approaches. *Health Promotion Practice*, 16, 473-475. doi:10.1177/1524839915580941

- Lewis, S., Passmore, J., & Cantore, S. (2016). *Appreciative inquiry for change management: Using AI to facilitate organizational development*. London, England: Kogan Page.
- Lornudd, C., Bergman, D., Sandahl, C., & von Thiele Schwarz, U. (2016). A randomised study of leadership interventions for healthcare managers. *Leadership in Health Services*, 29, 358-376. doi:10.1108/LHS-06-2015-0017
- Manca, D. P. (2015). Do electronic medical records improve quality of care?: Yes. *Canadian Family Physician*, 61, 846-847. Retrieved from <http://www.cfp.ca/content/61/10/846>
- Manning, J., & Kunkel, A. (2014). Making meaning of meaning-making research using qualitative research for studies of social and personal relationships. *Journal of Social and Personal Relationships*, 31, 433-441. doi:10.1177/0265407514525890
- Marshall, C., & Rossman, G. B. (2015). *Designing qualitative research* (6th ed.). Thousand Oaks, CA: Sage Publications.
- McCallie, D. P., Jr. (2016). Clinical decision support: history and basic concepts. In C. A. Weaver, M. J. Ball, G. R. Kim, & J. M. Kiel (Eds.), *Healthcare information management systems: Cases, strategies, and solutions* (4th ed.; pp. 3-19). Cham, Switzerland: Springer International.
- Medicare Payment Advisory Commission. (2017). Hospice services. In *Report to the Congress: Medicare payment policy*, 261-287. Retrieved from [http://medpac.gov/docs/default-source/reports/mar17\\_entirereport.pdf](http://medpac.gov/docs/default-source/reports/mar17_entirereport.pdf)
- Meyers, D. L. (2016). Interoperability: E Pluribus Unum. In *Healthcare information*

- management systems (pp. 421-436). Cham, Switzerland: Springer.
- Mieronkoski, R., Azimi, I., Rahmani, A. M., Aantaa, R., Terävä, V., Liljeberg, P., & Salanterä, S. (2017). The Internet of Things for basic nursing care—A scoping review. *International Journal of Nursing Studies*, 69, 78-90.  
doi:10.1016/j.ijnurstu.2017.01.009
- Miner, J. B. (2015). *Organizational behavior 1: Essential theories of motivation and leadership*. New York, NY: Routledge.
- Morse, J. M. (2015). “Data were saturated...” *Qualitative Health Research*, 25, 587-588.  
doi:10.1177/1049732315576699
- National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research. (1979). The Belmont report: Ethical principles and guidelines for the protection of human subjects of research. Washington, DC: U.S. Department of Health and Human Services. Retrieved from hhs.gov/ohrp/humansubjects/guidance/Belmont.html
- Naus, F. P. M., Faint, C. A., & Dwyer, R. J. (2018). Are hospital efficiency and quality of care affordable without external revenue? *International Journal of Applied Management and Technology*, 17(1), 35-45. doi:10.5590/IJAMT.2018.17.1.03
- Neves, N., & Ribeiro, O. (2016). Perception of nurses’ empowerment in healthcare organization settings, *Millenium*, 2, 179-190. doi:10.29352/mill0201.14.00093
- Nilashi, M., Ahmadi, H., Ahani, A., Ravangard, R., & bin Ibrahim, O. (2016). Determining the importance of hospital information system adoption factors using

- fuzzy analytic network process (ANP). *Technological Forecasting and Social Change*, 111, 244-264. doi:10.1016/j.techfore.2016.07.008
- O'Connor , J. R., Jr., & Jackson, K. N. (2017). Interpersonal communication: A strategic perspective. In *Encyclopedia of strategic leadership and management* (pp. 317-327). Hershey, PA: IGI Global.
- Oreg, S., & Goldenberg, J. (2015). *Resistance to innovation: Its sources and manifestations*. Chicago, IL: University of Chicago Press.
- Orgambídez-Ramos, A., & Borrego-Alés, Y. (2014). Empowering employees: Structural empowerment as antecedent of job satisfaction in university settings. *Psychological Thought*, 7(1), 28-36. doi:10.5964/psyct.v7i1.88
- Pineau Stam, L. M., Spence Laschinger, H. K., Regan, S., & Wong, C. A. (2015). The influence of personal and workplace resources on new graduate nurses' job satisfaction. *Journal of Nursing Management*, 23(2), 190-199. doi:10.1111/jonm.12113
- Piper, L. R., & Schneider, M. (2015). Nurse executive leadership during organizational mergers. *Journal of Nursing Administration*, 45, 592-594. doi:10.1097/NNA.0000000000000269
- Portney, L. G., & Watkins, M. P. (2015). *Foundations of clinical research: Applications to practice*. Philadelphia, PA: FA Davis.
- Pugh, L. (2016). *Change management in information services*. Abingdon, England: Routledge.

- Ratnapalan, S., & Uleryk, E. (2014). Organizational learning in health care organizations. *Systems*, 2(1), 24-33. doi:10.3390/systems2010024
- Reynolds, H. L., & Jones, C. A. (2016). Health information crossroad: An opportunity to deliver real measurable outcomes for better health and well being. In C. A. Weaver, M. J. Ball, G. R. Kim, & J. M. Kiel (Eds.), *Healthcare information management systems* (pp. 235-241). Cham, Switzerland: Springer International.
- Ritchie, J., Lewis, J., Nicholls, C. M., & Ormston, R. (Eds.). (2013) *Qualitative research practice: A guide for social science students and researchers*. Thousand Oaks, CA: Sage.
- Robinson, O. C. (2014). Sampling in interview-based qualitative research: A theoretical and practical guide. *Qualitative Research in Psychology*, 11(1), 25-41. doi:10.1080/14780887.2013.801543
- Rocha, E. G., & Mill, D. (2017). Changes in social interactions and mobility in education through the mediation of digital information and communication technologies. *Ibero-American Journal of Education Studies*, 12, 966-982. doi:10.21723/riaee.v12.n2.9074
- Rosemann, M., & vom Brocke, J. (2015). The six core elements of business process management. In J. V. Brocke & M. Rosemann (Eds.), *Handbook on business process management 1: Introduction, methods, and information systems* (pp. 105-122). Berlin, Germany: Springer.

- Rush, J., Postelnick, M., & Schulz, L. (2015). Use of electronic health record clinical decision support tools in antimicrobial stewardship activities. *Current Treatment Options in Infectious Diseases*, 7, 90-100. doi:10.1093/cid/ciu565
- Saarnio, R., Suhonen, M., & Isola, A. (2016). Nurse managers' vision of future challenges in health care organizations. *Journal of Nursing*, 3(2), 1-8. doi:10.7243/2056-9157-3-2
- Scheuer, J. D. (2015). From resistance to relational inertia: Relational inertia related to the construction of a risk-management system in an orthopedic clinic. *Organization Studies*, 1, 1-34. doi:128db017-6176-43ce-aeb4-c4083590011f
- Schwandt, T. (2015). *The Sage dictionary of qualitative inquiry*. Thousand Oaks, CA: Sage Publications.
- Seamons, V. A., & Canary, H. E. (2017). Contradictions in surgical work teams. *Journal of Applied Communication Research*, 45(1), 42-60. doi:10.1080/00909882.2016.1248467
- Shin, D., & Konrad, A. M. (2017). Causality between high-performance work systems and organizational performance. *Journal of Management*, 43, 973-997. doi:10.1177/0149206314544746
- Silverman, D. (2016). *Qualitative research*. Thousand Oaks, CA: Sage.
- Sim, J., Saunders, B., Waterfield, J., & Kingstone, T. (2018). Can sample size in qualitative research be determined a priori? *International Journal of Social Research Methodology*, 1-16. doi:10.1080/13645579.2018.1454643
- Sittig, D. R., Longhurst, C. A., Russo, E., & Singh, H. (2016). Electronic health record

- features, functions, and privileges that clinicians need to provide safe and effective care for adults and children. In C. A. Weaver, M. J. Ball, G. R. Kim, & J. M. Kiel (Eds.), *Healthcare information management systems: Cases, strategies, and solutions* (4th ed.; pp. 21-38). Cham, Switzerland: Springer International.
- Skochelak, S. E., Hawkins, R. E., Lawson, L. E., Starr, S. R., Borkan, J., & Gonzalo, J. D. (2016). *Health systems science e-book*. Amsterdam, Netherlands: Elsevier Health Science.
- Smollan, R. K. (2015a). Causes of stress before, during and after the organizational change: A qualitative study. *Journal of Organizational Change Management*, 28, 301-314. doi:10.1108/JOCM-03-2014-0055
- Smollan, R. K. (2015b). The personal costs of organizational change: A qualitative study. *Public Performance & Management Review*, 39, 223-247. doi:10.1080/15309576.2016.1071174
- Sousa, D. (2014). Validation in qualitative research: General aspects and specificities of the descriptive phenomenological method. *Qualitative Research in Psychology*, 11, 211-227. doi:10.1080/14780887.2013.853855
- Spaulding, A., Kash, B. A., Johnson, C. E., & Gamm, L. (2017). Organizational capacity for change in health care: Development and validation of a scale. *Health Care Management Review*, 42, 151-161. doi:10.1097/HMR.0000000000000096
- Snipes, C. (2016). The use of the electronic health record in behavioral health quality improvement initiatives. In *Quality improvement in behavioral health* (pp. 193-206). Cham, Switzerland: Springer International.

- Stake, R. E. (2013). *Multiple case study analysis*. New York, NY: Guilford Press.
- Stoller, J. K. (2013). Commentary: Recommendations and remaining questions for health care managership mining programs. *Academic Medicine*, 8, 12-15.  
doi:10.1097/ACM.Ob013e318276bff1
- Sultan, N. (2015). Reflective thoughts on the potential and challenges of wearable technology for healthcare provision and medical education. *International Journal of information Management*, 35, 521-526.  
doi: 10.1016/j.ijinfomgt.2015.04.010
- Tabibi, S. J., Nasiripour, A. A., Kazemzadeh, R. B., & Ebrahimi, P. (2015). The role of organizational culture according to Hofstede model on information technology acceptance in hospital environment. *Journal of Health Management*, 17(1), 42-50.  
doi: 10.1177/0972063414560869
- Tang, H. (2017). A study of the effect of knowledge management on organizational culture and organizational effectiveness in medicine and health sciences. *E-urasia Journal of Mathematics, Science & Technology Education*, 13, 1831-1845.  
doi:10.12973/eurasia.2017.00700a
- Thompson, J. D. (2017). *Organizations in action: Social science bases of administrative theory*. London, England: Routledge.
- Thuss, M., Babenko-Mould, Y., Andrusyszyn, M. A., & Laschinger, H. K. (2016). Nursing clinical instructor experiences of empowerment in Rwanda: Applying Kanter's and Spreitzer's theories. *International Journal of Nursing Education Scholarship*, 13, 117-125. doi:10.1515/ijnes-2014-0073

- Tolentino, P. E. (2017). Technological innovation and emerging economy multinationals: the product cycle model revisited. *International Journal of Technology Management*, 74, 122-139. doi:10.1504/IJTM.2017.083610
- Underwood, M. A. (2017). Intranet exploitation of social network knowledge intelligence. In *Harnessing social media as a knowledge management tool* (pp. 273-298). Hershey, PA: IGI Global.
- van den Heuvel, M., Demerouti, E., Bakker, A. B., & Schaufeli, W. B. (2013). Adapting to change: The value of change information and meaning-making. *Journal of Vocational Behavior*, 83, 11-21. doi:10.1016/j.jvb.2013.02.004
- Watson, A. R. (2016). Impact of the digital age on transforming healthcare. In C. A. Weaver, M. J. Ball, G. R. Kim, & J. M. Kiel (Eds.), *Healthcare information management systems* (4th ed.; pp. 219-233). Cham, Switzerland: Springer International.
- Weaver, C. A., Ball, M. J., Kim, G. R., & Kiel, J. M. (2016). *Healthcare information management systems: Cases, strategies, and solutions* (4th ed.). Cham, Switzerland: Springer International.
- White, C., & Wu, V. Y. (2014). How do hospitals cope with sustained slow growth in Medicare prices? *Health Services Research*, 49(1), 11-31. doi:10.1111/1475-6773.12101
- Whittington, J. W., Nolan, K., Lewis, N., & Torres, T. (2015). Pursuing the triple aim: The first 7 years. *The Milbank Quarterly*, 93, 263-300. doi:10.1111/1468-0009.12122

- Williams, B., Perillo, S., & Brown, T. (2015). What are the factors of organisational culture in health care settings that act as barriers to the implementation of evidence-based practice? A scoping review. *Nurse education today*, 35(2), e34-e41.doi:10.1016/j.nedt.2014.11.012
- Yen, P. Y., McAlearney, A. S., Sieck, C. J., Hefner, J. L., & Huerta, T. R. (2017). Health information technology (HIT) adaptation: Refocusing on the journey to successful HIT implementation. *JMIR Medical Informatics*, 5(3). 1-9.  
doi:10.2196/medinform.7476
- Yin, R. K. (2018). *Case study research and applications: Design and methods*. Los Angeles, CA: Sage Publications, Inc.

## Appendix: Interview Protocol

### **STEP 1: Welcome and Overview of Purpose of Interview and Protocol (2-3 minutes)**

Hello. First of all, thank you for being here to participate in this one-on-one interview. My name is Sharita Speed-Crittle and I am a doctoral candidate at Walden University. I work in the healthcare industry and I want to learn more about management, management techniques, and the use of technology, as I plan to continue my healthcare career in the area of management. Specifically, I am interested in learning more about the approaches you use within your management strategies regarding IT and organizational change.

The interview will approximately take place between 45-60 minutes. I am going to facilitate the interview and would you mind if I taped the interview? It will help me stay focused on our conversation and it will ensure I have an accurate record of what we discuss.

I will erase the audio recording. The typed transcripts will be kept on my computer in a password-protected file for five years. Individuals can decide at any time to discontinue their participation. Please feel free to ask any questions you may have. Shall we get started?

### **STEP 2: Introduction (2-3 minutes)**

Please tell me about your background and experience in the healthcare industry.

### **STEP 3: Ten Questions Posed to Interviewee (4-5 minutes per question)**

- 1) As a preliminary question, what has been your experience with implementing IT change management strategies within your organization?
- 2) What IT elements are you using to guide organizational change in your work environment?
- 3) How do you deal with challenges that arise for IT users when implementing new IT change management strategies to support major organization change initiatives?
- 4) What communication methods do you use to facilitate the change management strategies implementation process?
- 5) How do you determine the success of your strategies for the implementation of IT change management strategies supporting major organization change initiatives?
- 6) What barriers or challenges have you experienced related to IT change management strategy implementation?
- 7) How did you address the key barriers related to IT change management strategy implementation?
- 8) Based on any experiences related to implementing IT, what, if anything would you have changed to improve your strategies?

**STEP 4: Closing Question (3-5 minutes)**

Is there anything you would like share regarding this topic that I did not ask?

**STEP 5: Thank participants, recap next steps, and member check (2-3minutes)**

- After the one-on-one interview, member checking, or ensuring that participants shared exactly what they intended to share by reviewing what they shared, will take place.

- Afterwards, the audio recording will be transcribed.