2018

The Survival of Healthcare in Rural Texas

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Walden University
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Abstract

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MBA, Colorado Technical University, 2013

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Dissertation Submitted in Partial Fulfillment

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Leadership and Organizational Change

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Abstract

Over 80 rural hospitals have closed in the United States since 2010, representing about half of all hospital closures during this period, and another 600-700 rural hospitals are at risk of closing shortly. The purpose of this qualitative exploratory multiple case study, which was based on transformational leadership and diffusion of innovation theories, was to gain a common understanding of financial problems and operational inefficiencies that may be impacting rural hospital leaders in the state of Texas. Data collection involved semi-structured interviews with 4 senior healthcare leaders from 3 separate regions in Texas. Data analysis included compiling, sorting, fragmenting, and reassembling of the data into 19 common themes. The 4 most common themes included poor payer mix and uninsured population, inconsistency with evidence based measures, costs of providing care exceeding reimbursement, and the movement of inpatient procedures to outpatient. The study findings may help advance the practice of leadership in both rural and urban healthcare. This study may contribute to positive social change by creating awareness of how rural hospitals are in danger of closures, and how these closures can affect urban hospitals and overall quality of life for rural Americans.

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Dedication

The dedication of my dissertation goes to my wife, Carrie, for her endless prayers and encouragement throughout this doctoral journey; your support helped push me to deliver the best possible work. I would also like to dedicate my work to my children, Ethan, Jacob, Addison, and Kinsley, who gave me plenty of distractions, just when I needed them.

Acknowledgments

I would like to express my sincere gratitude for my chair, Dr. Richard Schuttler, who not only mentored me through the entire process, he also ensured that I fully understood scholarly tone and the meaning behind his incremental gains philosophy. I would also like to thank my committee member, Dr. Jean Gordon, who helped get the quality of my work to a higher level. Thank you both for your guidance and support.

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Chapter 1: Introduction to the Study

From 2007 to 2017, Medicare and Medicaid reimbursements have continuously decreased while costs for providing healthcare service have simultaneously increased. This sudden change in the operating margin and financial flexibility has caused many rural hospitals to eliminate special services or shut down completely (Hung, Kozhimannil, Casey, & Moscovice, 2016). Leaders of large hospitals have been able to consistently stay above their operational margin by using management strategies such as capitation and bundled payment options that have brought in extra revenue or offset the loss of income from indigent claims. Hospitals are the financial stability of many rural communities. When rural hospitals are forced to shut down, the effects are experienced by many more than just the employees. For instance, many Texas residents are currently driving over 100 miles for acute care or specialty services (Goodman, 2015).

This study's findings show how transformational leadership affects the financial viability of healthcare organizations in the State of Texas and its effect on overall operational success. In Chapter 1, I identify the gap in the literature on leadership's impact on the financial and operational sustainability of rural hospitals. The following problem statement, purpose, and significance of study sections clarify the benefits of this research. In this chapter, I also present research questions and the conceptual link between leadership objectives, system thinking, and overall financial sustainability. The concluding sections of the chapter include assumptions, study scope, delimitations, and a transition into the next chapter.

Background to the Problem

According to Bolin et al. (2015), rural hospital closures reached a peak in the 1980s and continued to occur through the 1990s. During this period, Medicaid payments, the primary funding for rural hospitals, were lowered throughout the United States (Ferrier & Valdmanis, 1996). Other experts believed the root problem of hospital closures was market position and competition. Between 1980 and 1998, there was a 12% decrease in the total number of rural general hospitals due to closings, mergers, and conversions (Rosenbach & Dayhoff, 1995; Bolin et al. 2015). At the time, healthcare leaders believed rural hospitals that were not part of large systems would soon disappear (Mullner, Rydman, & Whiteis, 1990). In the mid-1990s, rural hospital closures slowed due to changes in healthcare delivery and new leadership techniques (Ricketts & Heaphy, 2000).

According to many healthcare leaders, the Emergency Medical Treatment and Labor Act (EMTALA) that was enacted in 1986 caused a significant strain on rural hospitals leaders by mandating medical treatment without providing funding (Friedman, 2011). According to Zuabi, Weiss, & Langdorf's (2016) review of 192 cases from the Office of the Inspector General of the Department of Health and Human Services, prior authorization requirements force hospitals to choose between committing EMTALA violations and dropping reimbursement. In rural populations, where Medicare populations are high, that could mean the dropping of many costly services. According to Holmes, Slifkin, Randolph, & Poley (2006) who consolidated data from the American Hospital Association and OIG reports, by 2005 40% of rural hospitals in the United States had converted to Critical Access Hospital status due to financial strain. Critical

access hospitals are limited service hospitals that capitalized on the Medicare Rural Hospital Flexibility Program that allowed small hospitals to receive interim payments to cover gaps in periods pending reimbursement (Dillon & Ballas, 2017).

Since the enactment of the Affordable Care Act in 2010, 11 rural hospitals have closed in the State of Texas (Goodman, 2015). According to Allen et al. (2013), the Affordable Care Act has forced rural providers to either get affiliated with a large player or go out of business. Expert's from the Center for Disease Control (2017) reported that rural American's are more likely to die from heart disease, cancer, chronic lower respiratory disease, and stroke than urban Americans. In 2014, there were 1,980 rural hospitals and 3,019 Urban Hospitals in the United States (American Hospital Association, 2017). In 2017, the number of rural hospitals has dropped to 1,829, and urban hospitals have increased to 3,033. The state of Texas has a total of 404 hospitals (Kaiser, 2015), and 299 rural health clinics (NACDC, 2016).

The National Rural Health Association reported that the number of rural hospitals that closed in 2014 was more than the previous 15 years combined (Holmes, 2015). Kaufman et al. (2015) cited six factors that played a role in rural hospital closures in the United States between 2010 and 2014:

- Operating margin was significantly lower in hospitals that closed.
- The ratio of cash on hand was lower in hospitals that closed.
- The hospitals that closed had a lower equity financing ratio.
- The percentage of total revenue for outpatient services was significantly lower in hospitals that closed.

- The hospitals that closed had a lower daily census and occupancy rate.
- The number of full-time staff members was significantly lower in the hospitals that closed.

In 2014, the average occupancy rate for rural hospitals was 46%, compared to 65% in urban hospitals (Moy, 2017). Many healthcare leaders believed this difference in occupancy rates for rural hospitals derived from the bypass of elective care from local critical access hospitals for larger hospitals or surgical centers (Weigel, Ullrich, Finegan, & Ward, 2015). Rural hospitals also have a predominantly public payer mix, higher levels of uninsured patients, and uncompensated care costs (NHIS, 2016). Since 2015, an optional expanded Medicaid service has been initiated that allows some reimbursement for all indigent care claims (Huff, 2016). As of 2016, rural hospitals make up roughly 40% of acute-care hospitals and just under 20% of acute-care hospital beds across the country (American Hospital Association, 2016).

Previous reports from the North Carolina Rural Health Research Program (NCRHRP, 2016) and iVantage Health Analytics (2016) have indicated that over 60 rural hospitals have closed since 2010, representing about half of all hospital closures during this period, and another 600-700 rural hospitals are at risk of closing shortly. Rural hospitals provide care and other services for 59 million Americans who live in rural areas, but statutory differences in payment structures and lower patient volumes could mean that many rural hospitals are not subject to payment incentives from current mandatory hospital-based delivery system reform programs (Adams, 2017). Rural

healthcare professionals are concerned that the combination of low occupancy rates and lower margins may accelerate hospital closures.

Problem Statement

The general problem is that community members in rural areas experience difficulty establishing access to basic healthcare services such as primary, urgent, and emergency care (Staloch, 2016). Leaders at 57 of the 2224 rural hospitals in the United States have filed for bankruptcy since 2010 (iVantage, 2013; Warden & Probst, 2017). In their survey of hospitalists in 402 rural hospitals, Hung, Kozhimannil, Casey, and Moscovice (2016) concluded that healthcare leaders are eliminating essential departments and specialties to keep operations from exceeding revenues. From interviews with 23 key leaders at six urban hospitals and five rural hospitals in Pennsyvania, Lorch, Martin, Ranade, Srinivas, and Grande (2016) found that 13 of the 19 hospital obstetric departments closed abruptly between 1997 and 2012 due to low financial margins and the high fixed costs of running obstetrics. This elimination of service has put pregnant women in rural areas at a disadvantage for medical care and delivery.

The specific problem is that between 2010 and 2015, 11 rural hospitals in Texas closed due to poor leadership, management, and the inability to adapt to economic change (Goodman, 2015). This increase in hospital closure put an estimated 800,000 Texas residents many miles away from acute care medical facilities (Kaufman et al. 2016). Hospital leaders have used multiple techniques to counter the financial problems that have been brought on by the rapid changes in healthcare, yet hospitals continue to close (Elg, 2013). Since 2010, the major contributors to economic difficulties in hospital

systems have been changes in reimbursement amounts, new policies for readmissions, and accountability measures for hospital quality (Blumenthal, Abrams, & Nuzum, 2015; Mullings, & Sankaranarayanan, 2016).

Purpose Statement

The purpose of this qualitative exploratory multiple case study was to gain a common understanding of financial problems and operational inefficiencies that may be impacting rural hospital leaders in the state of Texas. To establish adequate generalizations, I purposely sampled four executives from each of three different rural hospitals in Texas and used open-ended questions in semi-structured interviews to gain an in-depth understanding of the influence of stakeholders in promoting operational sustainability. To achieve a multiple case study perspective, each of the three facilities was considered its own case study, then I combined the collective data for reporting the common understandings and themes generated from all interviewed leaders. I interviewed the president, chief medical officer, chief operations officer, and an executive director from three separate facilities to make up a total of 12 research participants. I performed document review on published yearly financial goals and operational improvement plans for all rural areas in the region.

Conceptual Framework

The conceptual framework for this case study was grounded in the concept of the transformational leadership theory (Burns, 2003). According to Marshall and Broome (2016), transformational leadership in healthcare is a new viewpoint and context for all leadership activities. Frontline employees are empowered to facilitate change when the

coalescence of need, passion, and opportunity are present. A major contributor to the success of the transformational leadership theory in healthcare is the linkage of outcomes and activities to the explanation of the how and why of change. The conceptual framework for this study was also based, in part, on Rogers's (1995) diffusion of innovation theory. Rogers focused on the conditions that increase or decrease the likelihood of a new policy or change being adopted by the culture.

According to system dynamics professionals, organizational failure is often associated with limited cognitive skills and capabilities of leaders compared to the complexity of the system they are intended to manage (Beck, Schenker-Wicki, & Schoenenberger, 2015; Forrester, 1961). When incorporating systems thinking, organizations visualize and unite systems and variables between systems (Meadows, 2004; Senge, 2012; Von Bertalanffy, 1968). According to Reynolds (2013), framing hospitals as complex adaptive systems and incorporating systems dynamics modeling could alleviate many problems in healthcare and create new opportunities for revenue.

Research Questions

Primary: What are leader's perceptions of operational performance levels and financial problems that may be impacting hospitals in the state of Texas?

Secondary RQ1: What are the common understandings of senior hospital leaders about financial problems in hospitals in the state of Texas?

Secondary RQ2: What are the common understandings of senior hospital leaders about operational performance levels in hospitals in the state of Texas?

Nature of the Study

For this study, I chose a qualitative research method with a case study design. According to Patton (1990), qualitative research involves exploring experiences of different people to identify the essence of a shared experience. Qualitative research is a compilation of interpretive techniques and practices researchers use to describe, decode, and translate the meaning, not the frequency, of certain phenomena naturally occurring in the social world (Onwuegbuzie & Byers, 2014; Van Manen, 2015). The qualitative research method is appropriate for studying strategies based on the need for human interaction, meanings, and processes for improving operations and overall financial stability in healthcare (Gephart, 2004).

A quantitative research method is more suitable for a study with an objective that is conclusive, enumerates a problem, and determines relationships between variables (Plotnikov & Vertakova, 2014). I did not chose this method because of the lack of flexibility in the interview process. Mixed method studies focus on the real-life contextual understanding of a phenomenon using multilevel perspectives (Bernard, 2013). I decided not to use a mixed method design based on potential discrepancies between each type of data.

Grounded theory research is grounded in data from the participants involved (Moss, Gibson, & Dollarhide, 2014). Grounded theory was not appropriate for this study because grounded theory looks to move beyond mere descriptions and establish the best method (Jabareen, 2009). Phenomenological research is a systemic attempt to uncover the experiences of a particular event or concept through the study of multiple participants

(Moustakas, 1994; Van Manen 1990). A phenomenological design was not appropriate for this study because it was not structured around the lived experiences of the participants.

Researchers use case study design to gain an understanding of participants' real-life experiences of a phenomenon through detailed contextual analysis of the event or condition (Zainal, 2007). According to Stake (2013), multiple case studies are robust in data analysis and, as a result, have increased credibility. Yin (2014) explained exploratory case study design as research that holistically incorporates multiple cases to explain how, what, and why something happened. A case study was appropriate for this study because it allowed me to study the complex phenomena within the framework of the study (see Berg, Lune, & Lune, 2004).

Definitions

Operations excellence: An element of operational leadership that focuses on exceeding patient expectations and using key principles, systems, and tools to sustain or improve key performance metrics.

Systems thinking: Viewing each department or variance inside an organization as a system that is affected by other systems and other internal or external variables (Meadows, 2004; Senge, 2000).

Critical Access Hospitals (CAH): Limited service hospitals with 25 or fewer beds that are 35 miles from another hospital and have capitalized on the Medicare Rural Hospital Flexibility Program that allows small hospitals to receive interim payments to cover gaps in periods pending reimbursement (Dalton, Slifkin, Poley, & Fruhbeis, 2003)

Assumptions of the Study

To ensure the relevance of a study, realistic expectations that could be beyond the control of the researcher must be established. I made five assumptions in this study. The first assumption was that the president of each hospital system is familiar with the problems from within the community. The second assumption was that each interviewee would answer the questions truthfully and appropriately. The third assumption was that the interviews would offer an opportunity to explore common themes involving the financial and operational strategy of each hospital. The fourth assumption was that I would note some commonalities I noted between each of the rural hospitals. The final assumption was that the literature review would provide accurate information to identify the gap in the literature for this qualitative study.

Scope and Delimitations of the Study

There is a lack of information in the literature addressing how transformational leadership affects the operational and financial performance of healthcare facilities in the State of Texas. To fill this gap, I studied the experiences of 12 hospital leadership participants who have participated in transformational leadership in rural healthcare. The scope of the study included hospital leaders in Central Texas that operate in rural health areas.

I anticipate that future researchers will have to make their judgment about the relevance of this study based on the small and purposefully selected sample of 12 participants. The study was based on three hospitals in a single healthcare system in Texas, thus potentially limiting the transferability of findings to other systems in the state

or country. My decision to use only one system was based on time and financial restraints.

Limitations of the Study

According to Mitchell & Jolly (2013), limitations are procedural weaknesses of a study. A possible limitation of the study could be the quality of answers received due to restrictions from the risk management team of my partner organization. According to Loh (2013), when performing qualitative research, questions about quality, reliability, and validity must be considered throughout the research. Patton (2015) explained researcher bias as an important aspect to address via data powerful enough to overcome any doubt. According to Shenton (2004), the majority of issues with credibility can be overcome by looking at the congruency of the findings with reality.

The data collected from this research could aid future healthcare leaders in understanding current rural healthcare issues seen by successful healthcare leaders in Central and North Texas. The results of this study could also provide insights into the processes healthcare leaders use to develop a framework that continuously improves processes, decreases operating costs, and improves overall healthcare quality of patient care. Rural healthcare leaders in the United States may benefit from the findings by using them to understand the current financial problems and strong operational trends plaguing rural hospitals in Texas.

Study Significance

Significance to Practice

Hospitals in rural areas are being forced to cut services or close their doors due to the changes in regulations and reimbursement of their services (Sharfstein, 2016). According to Balasubramanian and Jones (2016), hospitals in rural areas incur a significant amount of debt from treating the increased percentage of poor or uninsured patients. Based on the Emergency Medical Treatment and Labor Act (EMTLA; Zuabi, Weiss, & Langdorf, 2016), hospital emergency departments must treat all patients, regardless of ability to pay, until they either become stable or expire. The data gathered from this study may help to fill the gap in the literature regarding financial strategy and best practices in rural healthcare in the United States.

According to Sarto and Veronesi (2016), professional bureaucracy and managerial ideology have increasingly become a focal point in healthcare leadership and operations. Success for healthcare leaders has changed from a result of a culture of innovation and strategy to one of survivability (Herd, Adams-Pope, Bowers, & Sims, 2016). This study may be significant to healthcare operations because it may help advance the practice of leadership in both rural and urban healthcare. The data gathered here may help fill the gap in the literature regarding operational effectiveness in healthcare in the United States.

Significance to Theory

Over the last decade, there has been a lack of research relating transformational leadership with healthcare operations. This study may add to the transformational leadership theory (Marshall & Broome, 2016) that links outcomes and activities to

facilitate change. Future healthcare researchers seeking to promote knowledge about healthcare management and transformational leadership may find the study substantial in its contribution to the literature.

Significance to Social Change

According to Caldwell, Ford, Wallace, Wang, & Takahashi (2016), rural status directly relates to disadvantages for most of the health care use measures. Due to this unsustainability, hundreds of thousands of residents in the state of Texas are many miles away from specialty care and acute care facilities (Goodman, 2015). According to Obeso (2016), rural communities often lack primary care, which translates into unfollowed post-hospital discharge plans from the closest facility. Verdjo and Ferreccio (2015) explained how patients with heart failure who live in rural communities are at a disadvantage because of the lack of staff education and overall technology. The data gathered in this study may be useful for future researchers and healthcare organizations working to understand best practices for leadership in healthcare. This study may contribute to positive social change through the improved productivity and morale associated with transformational leadership theory and system thinking.

Summary and Transition

In Chapter 1, I aligned the problem statement and purpose statement with the research questions and conceptual framework of the study. The unit of analysis, as indicated in the problem statement, were hospitals in Central Texas that covered lives of rural populations between 2010 and 2015. The purpose of this qualitative multiple

exploratory case study was to gain a common understanding of financial problems and operational inefficiencies that are impacting hospital leaders in Texas.

Chapter 2 consists of a review of the literature related to the study. Specifically, I review analyze the literature about how transformational leadership can affect financial and operational success in healthcare. I examine the conceptual frameworks underpinning the study, the literature on problems with rural health care, and operational leadership in healthcare.

Chapter 2: Literature Review

The specific problem that I addressed was that between 2010 and 2015, 11 hospitals in rural areas of Texas closed due to poor management or the inability to adapt to economic change (Goodman, 2015). Leaders of 57 of the 2224 rural hospitals in the United States filed for bankruptcy since 2010 (Demko, 2015; Ivantage, 2013). Recent reports have indicated that over 60 rural hospitals have closed since 2010, representing about half of all hospital closures during this period, and another 600-700 rural hospitals are at risk of closing shortly (NCRHRP 2016; iVantage Health Analytics 2016). Rural hospitals provide care and other services for 59 million Americans who live in rural areas, but statutory differences in payment structures and lower patient volumes mean that most rural hospitals are not subject to payment incentives from current mandatory hospital-based delivery system reform programs (Adams, 2017). Rural healthcare professionals are concerned that the combination of low occupancy rates and lower margins may accelerate hospital closures. The purpose of this qualitative exploratory multiple case study was to gain a common understanding of financial problems and operational inefficiencies that may be impacting hospital leaders in the state of Texas.

Chapter 2 consists of a review of the literature regarding organizational leadership and rural healthcare as they relate to hospital closures and sustainability. The study of rural healthcare distresses and improvements in recent decades are placed in historical context, including a summary of the outcomes. In the subsequent sections of this chapter, I discuss my literature review strategy as well as the conceptual basis and the framework for the study. This chapter consists of an elaborate review of the leadership challenges

that are affecting both rural and urban healthcare in the United States. Throughout the chapter, I work to identify the gap in the literature, which was associated with the use of transformational leadership in rural healthcare. I conclude the chapter with a summary that presents the key issues identified in the literature review.

Literature Search Strategy

The purpose of this qualitative exploratory multiple case study was to gain a common understanding of financial problems and operational inefficiencies that may be impacting rural hospital leaders in Texas. To better understand this issue, I reviewed information from recent literature related to current issues in rural healthcare and overall organizational leadership. This understanding of critical issues created a foundation of knowledge that I used to conduct the study. Therefore, the results from this exploratory multiple case study may contribute to the existing body of knowledge by bridging a gap in the literature and providing valuable insights to rural healthcare leaders.

For the literature review, I used multiple sources to obtain relevant information. I accessed different databases via the Walden University library, and Google Scholar was also helpful in locating relevant material. Databases searched included: ABI/INFORM Complete, Business Source Complete, Emerald Management, ProQuest, and SAGE Premier. I searched these databases for peer-reviewed journal articles and reports using the following keywords: *rural healthcare, rural hospital closures, rural health survival, rural healthcare leadership, rural hospital affordable care, rural healthcare change management, rural hospital readmissions, Emergency Medical Treatment and Labor Act, critical access hospital, organizational leadership, transformational leadership, system*

thinking, adaptive performance, learning organizations, organizational change, and *diffusion of Innovation.* Peer-reviewed journals published within the last 5 years provided the literature in my review. Other journals that may be significant to the study guided me in understanding the historical downward trends of financial and operational inefficiencies in rural healthcare.

Conceptual Framework

The conceptual framework for this case study is grounded in the transformational leadership theory (Burns, 2003). According to Marshall and Broome (2016), transformational leadership in healthcare is a new viewpoint and context for all leadership activities. Frontline employees are empowered to facilitate change when need, passion, and opportunity coalesce. A significant contributor to the success of the transformational leadership theory in healthcare is the linkage of outcomes and activities to the explanation of the how and why of change. The conceptual framework for this study is based in part on Rogers's (1995) diffusion of innovation theory. In his research, he has focused on the conditions that increase or decrease the likelihood of a new policy or change being adopted throughout the culture of the organization.

According to system dynamics professionals, organizational failure is often associated with limited cognitive skills and capabilities of leaders compared to the complexity of the system they are intended to manage (Beck et al. 2015; Forrester, 1961). When incorporating systems thinking, organizations visualize and unite systems and variables between systems (Meadows, 2004; Senge, 2012; Von Bertalanffy, 1968). In his article on systems thinking in healthcare, Reynolds (2013) explained that by framing

hospitals as complex adaptive systems and incorporating systems dynamics modeling, hospitals may be able to eliminate the primary contributing operational inefficiencies. Other benefits observed by Reynolds for establishing adaptive systems in healthcare include the creation of new opportunities for revenue and lower employee turnover due to increased morale. This conceptual framework may serve as a tool for organizing the ideas in shaping the research enquires on how rural hospital leaders could improve the survivability of healthcare facilities in areas without the same consistent flow of patients and income potential as facilities in urban areas.

Historical Overview

In their historical study of issues in rural healthcare, Holmes et al. (2006) concluded that rural hospital closures reached a peak in the 1980s and continued to steadily occur through the 1990s. During this period, Medicaid payments, which were the primary funding for rural hospitals, were lowered throughout the United States (Ferrier & Valdmanis, 1996). This sudden change was, according to many rural health leaders, the beginning of the end of rural healthcare in America (Nesbitt, Connell, Hart, & Rosenblatt, 1990). Rosenbach and Dayoff (1995) found that between 1980 and 1998, there was an 11.8% decrease in the total number of rural general hospitals. They attributed this sudden change primarily to mergers and conversions of health clinics. According to studies with rural healthcare executives during this time, the root problem of hospital closures was market position and competition (Succi, Lee, & Alexander, 1997; Buchmueller, Jacobson, & Wold, 2006). Mullner, Rydman, and Whiteis (1990) used data gathered from structured interviews with healthcare leaders to predict that rural

hospitals that were not part of large systems would soon disappear. Ricketts and Heaphy (2000) concluded that rural hospital closures slowed in the mid-1990s primarily due to changes in healthcare delivery and new leadership techniques. Rural hospitals began to adapt to their communities' needs to generate a higher level of accountability under managed care and to maximize the use of available resources (Byrd & McCue, 2003).

According to many healthcare leaders, the EMTALA, which was enacted in 1986, caused a significant strain on rural hospitals leaders by mandating treatment without providing funding (Friedman, 2011). In their review of 192 cases from the Office of the Inspector General of the Department of Health and Human Services, Zuabi et al. (2016) found that the new EMTALA prior authorization requirements had forced hospitals to choose between either committing an EMTALA violation or dropping reimbursement altogether. In rural populations where Medicare populations are high, that could mean the dropping of many costly services. Terp at al. (2016), in their study of the 4,772 EMTALA investigations that were performed by the Office of the Inspector General in 2015, that 2,118 cases or 44% were cited for non-compliance of the Emergency Medical Treatment and Labor Act. According to the authors, when facilities are cited for an EMTALA violation, they have between 23 and 90 days to execute corrective actions or they must close their doors (Terp et al. 2017). Of the 2,118 citations given between 2005 and 2015, only 12 hospitals had provider agreements terminated by CMS (Terp at el. 2016).

Holmes, Slifkin, Randolph and Poley (2006) estimated from their consolidation of data from the American Hospital Association and OIG reports that by 2005, 40% of rural

hospitals in the United States will have been forced to convert to CAH status due to financial strain. CAH's are limited service hospitals that capitalized on the Medicare Rural Hospital Flexibility Program that allowed small hospitals to receive interim payments to cover gaps in periods pending reimbursement (Dalton, Slifkin, Poley, & Fruhbeis, 2003). Scalise (2004) explained how the number of CAH's are rapidly increasing due to the changes in healthcare reimbursement and that in many situations, converting to CAH status may not be the right answer. According to Scalise, since CAH restricts many areas of potential growth but also guarantees reimbursement on Medicare patients, it only makes sense to convert if over half the patient population is either on Medicare or indigent care.

Since the enactment of the Affordable Care Act in 2010, 11 rural hospitals have closed their doors in Texas (Goodman, 2015). According to Allen et al. (2013), the Affordable Care Act has forced rural providers to either get affiliated with a significant player to go out of business. Experts from the Centers for Disease Control (2017) reported that rural American's are more likely to die from heart disease, cancer, chronic lower respiratory disease, and stroke than urban Americans. In 2014, there were 1,980 rural hospitals and 3,019 urban hospitals in the United States (American Hospital Association, 2017). In 2017, the number of rural hospitals had dropped to 1,829, and urban hospitals had increased to 3,033. Texas has a total of 404 hospitals (Kaiser, 2015), and 299 rural health clinics (NACDC, 2016). According to the United States Census Bureau (2016), about 60 million people live in rural parts of the United States. This ratio

equates to nearly 20% of the population that are at an increased risk to die from heart disease, cancer, chronic lower respiratory disease, and stroke.

The National Rural Health Association reported that in 2014, the number of rural hospitals that closed was more than the previous 15 years combined (Holmes, 2015). Kaufman et al. (2015) cited six hospital factors that played a role in rural hospital closures in the United States between 2010 and 2014. First, operating margin was significantly lower in hospitals that closed. Second, the ratio of cash on hand was lower in hospitals that closed. Third, the hospitals that closed had a lower equity financing ratio. Fourth, the percentage of total revenue for outpatient services was significantly lower in hospitals that closed. Fifth, the hospitals that closed had a lower daily census and occupancy rate. Sixth, the number of full-time staff members was significantly lower in the hospitals that closed.

In his managed care mortality study, Moy (2017) concluded that from 1999 to 2014, the average occupancy rate for rural hospitals was 46%, compared to 65% in urban hospitals. Rural hospitals also have a predominantly public payer mix, higher levels of uninsured patients, and uncompensated care costs (National Health Interview Survey [NHIS], 2016). Since 2015, an optional expanded Medicaid service has been initiated that allows some reimbursement for all indigent care claims (Huff, 2016). As of 2016, rural hospitals make up roughly 40% of acute-care hospitals and just under 20% of acute-care hospital beds across the country (American Hospital Association, 2016).

North Carolina's Rural Health Research Program and iVantage Health Analytics both reported that over 60 rural hospitals have closed since 2010, representing about half

of all hospital closures during this period, and another 600-700 rural hospitals are at risk of closing shortly (NCRHRP 2016; iVantage Health Analytics 2016). Rural hospitals provide care and other services for 59 million Americans who live in rural areas, but statutory differences in payment structures and lower patient volumes mean that most rural hospitals are not subject to payment incentives from current mandatory hospital-based delivery system reform programs (Adams, 2017). Adams (2017) summarized this as being an unfair advantage for more extensive programs. According to Allen at al. (2013), for rural providers to survive, they must find a way to get affiliated with a larger regional facility. Rural healthcare professionals are concerned that the combination of low occupancy rates and lower margins may accelerate hospital closures.

Organizational Leadership

Gardner (1993), who was instrumental in establishing Medicare, summarized the importance of leadership as the creation of the state of mind that is society. Gardner went on to explain how leaders can serve as symbols that can motivate society to move past their current obligations and pursue a dream that is worthy of their best efforts. Antonakis and Day (2017), summarized leadership as a science, where process outcomes are studied, and leader's characteristics and attributes are viewed based on the outcomes of the guidance concerning the given process. Organizational leaders have been defined by many leadership philosophers as the development of leadership skills and abilities across all levels of an organization (Bolman & Deal, 2017; Decman et al. 2017; Anning-Dorson et al. 2017).

Resick, Hanges, Dickson, and Mitchelson (2006) concluded from their study involving data from the Global Leadership and Organizational Effectiveness project that all leaders should have a mindset that can tolerate high levels of ambiguity, and quickly adapt to every type of cultural challenge. Gehrke & Claes (2015) defined the process of factoring in cultural differences as being, for many years, nothing more than a challenge, or problematic. Bernard-Stevens (2016) explained in his leadership essay that our world today has more leadership programs than any other time in history and the majority of leaders may only be in their positions because of their desire to be a figure of authority. They have lost or never understood what qualities inaugurate true leadership.

Maxwell (2011), explains organizational leadership as consisting of five distinct levels of leadership. The first and lowest level of leadership is positional. This level is given their authority based on the position they hold. The second level of leadership as defined by Maxwell is permission. At this stage of leadership, employees follow you because they want to follow. The third stage of leadership is the production stage. At the production stage, leaders start producing results and building their level of credibility and influence. Employees follow this type of leader because of more than just a relationship. The fourth level of leadership is the development stage. At this level, leaders can reproduce more leaders. The fifth level of leadership is the pinnacle level. At this level, leadership devotes their lives to creating their legacy within the organization. Organizations have increasingly experienced issues with leaders hired from within the organization that is unable to gain respect in their positions. When assessing current employee's potential for promotion, their abilities are rated based on the performance of

the employee in their current role (Lazear, 2004). According to the Peter Principle employees rise until they are at a level of incompetence (Peter & Hull, 1969). Benson, Li, and Shue (2016) summarized in their review of 214 sales firms the costs of managerial mismatch are substantial. The authors explained how the best workers do not always make the best managers, but when high performing workers are not given promotions, the performance of the top performers tends to decline. The authors discussed finding a balance between promoting high performing candidates and candidates with high managerial potential.

Organizational Leadership in Healthcare

The complexity of healthcare compliance and the inability to diffuse ideas and innovations has caused problems in organizational leadership in healthcare that are entirely different than many types of organizations (Flodgren, Goncalves-Bradley & Pomey, 2016; Fitzgerald, 2017). The Institute of Medicine established the triple aim as a way to help guide healthcare leaders to focus on the initial problems facing care in the United States (Giddens, 2017). The triple aim includes improving the costs of providing care, population health outcomes, and the enhancement of the patient care experience (Barry et al. 2016).

According to Kindig and Stoddart (2003), population health is the overall distribution of health outcomes within a population or community. Feldman et al. (2016) devised after performing a case study of patients from both high and low-income communities throughout the United States that the increased availability of electronic healthcare records has dramatically improved overall population health. Whittington,

Nolan, Lewis, and Torres (2015) found that by creating a foundation for population management, managing services at scale for the population, and establishing a system to improve and sustain work, organizations can manage the issues centered around the triple aim. According to Storkholm, Mazzocato, Savage, and Savage (2017), the sudden changes in culture have caused many healthcare employees to see the triple aim as a threat to clinical care and quality.

Elshaug et al. (2017) concluded from their study of medical utilization that system-level factors such as the allocation of resources and medical overuse policies are the primary misled actions in healthcare today. Fearis and Petrie (2017) suggested that if leaders are not aware of the changes in best practices, how to properly motivate employees, and improvements in technology innovation, keeping up with the increased challenges will continue to plague hospital systems. Changes in policies such as the Patient Protection and Affordable care act has put an increased strain on the understanding of successful leadership strategies in rural healthcare (Allen et al. 2013). Sarto and Veronesi (2016) concluded from their historical healthcare study that for the last 30 years, healthcare operations models have all followed a professional bureaucracy that was influenced by a leader-centric managerialism ideology. Empowering frontline staff and taking advantage of physician expertise in leadership decision making instead of the common managerialism ideology are new trends that may prove evolutionary in hospital financial survivability (Kaynak, 2016; Herd, Adams-Pope, Bowers, & Sims, 2016).

Transformational Leadership

Burns (1978) summarized transformational leadership as a leader's ability to raise a subordinate's motivational level to achieve higher outcomes and improve performance to a higher level. Bass (1985) concluded from his research on the development of transformational leadership that transformational leaders are built upon the establishment of four essential components; Idealized influence, inspirational motivation, intellectual stimulation, and individualized stimulation.

1. Idealized influence characterizes leaders who represent a trustworthy role model to follow and exert extra effort in the novel and complex environments.

2. Inspirational motivation allows leaders to set, articulate, and communicate a compelling vision of the future that empowers followers to take initiatives in changing the organization.

3. Intellectual stimulation enables leaders to encourage subordinates to question beliefs and assumptions, reframe problems, take risks, and look for new ways of doing things.

4. Through individualized consideration, leaders treat followers on a one-on-one basis, focus on their strengths, and help them cope with stressful situations.

Harms and Credé (2010) pointed out that for transformational leadership to be established, leaders must act as mentors to their followers by encouraging learning, achievement, and individual development. The actual merging of emotional intelligence with transformational intelligence allows leaders to inspire subordinates to improve process output while also improving morale. The increased morale stems from the

decreased amount of non-value added activity that is currently being performed (Hoeft, 2014). Peng and Weichun (2011) determined from their study of emotional intelligence that individual-level transformational leadership can enhance individual employee creativity by developing follower's creative identity. According to Peng and Rode (2010), transformational leadership expects supporters to question assumptions, challenge the status quo, and continuously improve processes. They also motivate followers by emphasizing the importance of the subordinate to the overall contribution of the organization. Van Rossum, Simons, Van der Eng, and Ten (2016), more recently summarized transformational leadership as the ability to inspire followers to do more than what is expected. Holmes, Slifkin, Randolph & Poley (2006) determined that the increased popularity of leadership styles such as transformational leadership has stemmed from the rapid increase in healthcare costs in adjunction to the steady decrease in reimbursement rates for providing care to patients.

Organizations are facing the constant need to adapt and change to cope with the changes involved with the business, social, cultural, and political landscapes. Cotae (2013) determined in his research on multinational enterprises and organizational learning that paradigms in today's field of organizational behavior are seen using one of two particular comparisons. The first comparison shows the relationship that organizations use between voluntarism and determinism. Companies use a determinism structure that focuses on allowing certain people in organizations to be decision makers. The volunteerism approach allows a sort of latitude for decision-making to spread the

ability for decision-making. The methodical versus emergent dimension measures whether decisions are based on concrete standards or intuition.

According to Bass (1985), Transformational leadership is a style that can be taught at all levels of leadership. Gordon (2017) noted that transformational leadership has the potential to create disappointment based on the emotional investment that the transformational leader must invest in followers. Based on Charbonnier-Voirin, A., El Akremi, A., and Vandenberghe's (2010) linear modeling from data collected from 120 employees in the aerospace industry suggested that transformational leadership subsumes components that all refer to behaviors which should facilitate the emergence of adaptive performance. The model factored in the use of both group and team-based decision-making models. Wihler, Meurs, Wiesmann, Troll, and Blickle, (2017) found by studying behaviors of 247 nurse supervisors that by maximizing corporate aspects of extraversion, social competency, and climate for the initiative, hospitals can dramatically increase adaptive performance

Systems thinking

All organizations are made up of interrelated and interdependent parts that have direct and indirect effects on each other (Sterman, 2000). Changing any one part of the system can have many effects on other parts of the system. Richmond, Peterson & Soderquist, (2001) explained that by evolving your thinking, communicating, and learning capacity you're able to grow as a system. The authors explained how understanding that each part of the system effects one another is just the beginning of

systems thinking. The ability of understanding when to pull on each system and how they affect each other is a growth potential for all organizations.

Meadows (2008) recognized in her analysis of system thinking designs that thinking in systems is the ability to change thinking from the visualization of individual parts or silos to understanding the sum of all the parts, silos, and intangibles as the same system. This unique ability of understanding of how non-cell values such as communication play within the organization and keeping multidepartment employees working on the same goals and vision allows companies to create synergistic flow within the organization. Pellissier (2011) explained in his research how the use of a system-thinking design forces the organization into organizing dynamics involved in a living system. The use of system thinking and transformational leadership has been seen as such a successful implementation in many manufacturing companies within the United States, that many businesses have adopted systems thinking outside of manufacturing and the United States. Hajro and Pudelko (2010) explained the success Japanese manufacturers have had using transformational leadership in the form of multinational teams and how that success has inspired other western organizations to adopt aspects of this style of leadership. Senge and Sterman (1992) found that in their case study from the insurance industry that by increasing local decision-making and teaching managers to think regarding systems, rather than cells, companies can reach higher levels of productivity in much less time.

Systems thinking in Healthcare

Incorporating a systems-thinking approach within a continuous improvement setting has been an accomplished structure in the automotive and manufacturing environments that have migrated recently into healthcare. Zijm and Klump (2017) looked at systems thinking as an opportunity to explore the effects systems play on our organizations in a way that continually improves every internal and external process related to the system as a whole. According to research performed by Emanuel (2016), 3.2 trillion dollars was spent on healthcare in the United States last year, and over half of the money spent was considered waste from poor processes, defensive medicine, and medical fraud. Healthcare professionals are beginning to look at lean principles that focus on increasing overall productivity while improving or maintaining employee morale (Morales Méndez & Rodriguez, 2017). This process of increasing productivity and morale is accomplished by decreasing the non-value add tasks that are involved in healthcare. Employees that have gone to school for many years can spend more time doing the work they love and less time walking around and following guidelines that do not make sense (Dennis, 2016).

The dynamic complexity of healthcare is so intertwined with interlinking processes and systems that many healthcare leaders are unable to separate many aspects of their system. This complexity has been seen as an unavoidable component of healthcare for many years (Mutale et al. 2015). According to Phillips, Stalter, Dolansky, and Lopez (2016), nursing graduates of bachelor level degree programs are poised for leadership due to their involvement in healthcare practice. According to Canadian

healthcare leaders, the ability to incorporate systems-level thinking into healthcare leadership practice relieves the natural tension between organizational identity, system loyalty, and individual identity (Marchildon, & Fletcher, 2016). Since 2007, nursing education professionals have proposed the integration of systems thinking into the nursing education criteria (American Association of Colleges of Nursing, 2009). The National Quality and Safety Education for Nurses (QSEN) found through an immense literature review that initiating four primary attributes of systems thinking may improve critically needed quality and safety initiatives for all hospital settings including overall patient lifespan (Stalter et al. 2016). The four primary attributes of system thinking that were adopted by QSEN included a dynamic system, holistic perspective, pattern identification, and transformation. According to research by Rosenbaum and Stewart (2004), the World Health Organization (WHO) has been pushing the use of a system-wide approach to guide intervention design and evaluation and research of the treatment and vaccination of disease. This system thinking approach should, according to professionals from WHO, help maximize the use of resources and shared knowledge of disease from all over the world. Mutale et al. (2015), found in their study of three separate healthcare facilities in Zambia that by introducing systems thinking approach, each facility was able to achieve better health outcomes, in less time, and with improved employee morale.

Adaptive Performance

Like system thinking, another essential leadership aspect of transformational leadership is adaptive performance. According to Charbonnier-Voirin, El Akremi, and

Vandenberghe (2010), adaptive performance involves the ability to work creatively and learn new skills, the capacity to manage stressful situations, as well as the capability to accommodate diverse social contexts. These dimensions are all directly related to variables that should be addressed by transformational leaders. Charbonnier-Voirin, El Akremi, and Vandenberghe (2010), found in their study involving 35 working teams that a leader can successfully adopt both transformational leadership and adaptive performance in both individual and group facets. According to the study, this can be done by developing best practices that foster the acceptance of both group and team-based decision-making. These best practices many times evolves around complex system thinking. Stone, Huang, Reid, and Deutsch, (2016) used research from Toyota Production Systems professions Shigeo Shingo and Taiichi Ohno to show how not only do our beliefs have a strong effect on our behavior, but the systems that we are involved in have an equally profound effect on our behavior.

Learning Organizations

According to Revans (1980), for an organization to survive, the rate of learning within the company must greater than the rate of change of the external environment. Watkins and Marsick's framework for becoming a learning organization (1993) explains how organizations must shift toward intertwining learning into the everyday practice of work experience. Senge described how aspects such as system thinking, shared goals and visions, and teamwork could be interconnected into a learning organization type framework (2006). Employees are empowered with the ability to change the organization. According to Gould (2000), learning must be spread to multiple levels of

the organization, and involve the broad dynamics of adaptation, change, and environmental alignment. Baldwin (2016) discussed the importance of utilizing a reflective approach when transitioning into becoming a learning organization. Learning happens all the time, but the distinction of learning is recognized as practice more so than actual learning.

In the healthcare environment, skills and knowledge are continuously outdated due to advances in technology and medical science (Khosravi, Sharifi, Fayaz-Bakhsh, & Hosseini, 2016). The dynamic process of organizational learning enables organizations to be able to improve the progression of both technology and medical sciences continuously. Wenger (1998) stated that ‘Learning is the engine of practice and practice is the history of that learning.' The basis for learning organizations is to allow creativity and shared experiences without the fear of being devalued. If companies are to act and grow with each learned experience, then the culture of change must shift to allow the adoption of each experience. Like living organisms, organizations should flourish if allowed to adapt and change with each situation (Morgan, 2016). As technology changes and new theories arise, the practice of learning in the organization evolves. Therefore, each organization must devise its own evolving distinctive practice of continuous learning (Nyhan et al. 2003)

Organizational Change

Caligiuri (2006) described the current global economy as being more complex and dynamic than ever before. Changes in cultural and socio-economic conditions such as technology and Internet-based operations, economic growth, and leadership practice

have consistently changed how companies must operate to obtain sustainable growth. Charles Handy (1989) challenged managers to shift from considering change a temporary interruption in process stability, to the mentality that change must be a continuous reality. According to Bordia, Restubog, Jimmieson, & Irmer, (2011), the poor change management history of a company hurts employee attitudes which include job satisfaction, turnover, and openness to change.

Burnes (2005) recommended moving past relying on small-scale incremental changes and large-scale radical changes into a hybrid of both small and large continuous change. Dawson (2003) challenged transformational leaders to move beyond facilitating change on a system level, toward a governance approach that continually challenges how things are done. According to Catrien, Termeer, Dewulf, and Biesbroek (2017), organizational change consists of three specific dimensions: the depth of change, the scope of change, and the speed of change. The depth of change refers to the level or order of change involved. The first most basic level of change involves change within the existing mindset. Second order change involves aims to get past the current process mindset and move to a new perspective. Many organizational change practitioners have argued of a third order that involved changing the way we change (Bartunek, 1997; Catrien, Termeer, Dewulf, & Biesbroek, 2017).

According to Holmes (2015), rural hospitals are increasingly under increasing financial stress from changes in governing policies, and fluctuations in population health. Rural hospitals are more financially fragile, meaning they have very low profitability and liquidity. According to research by Emanuel (2016), the United States spent around 3.2

trillion dollars in 2015. Trends magazine (2016), noted that over half of the healthcare cost is considered waste. A large part of the healthcare waste derives from wasteful clinical processes and administrative complexity. Steve Hoeft's the power of ideas in healthcare (2015), explains how the empowerment of frontline staff and the use of tools such as huddle boards and Gemba walks can visualize or even remove the waste that is affecting each department. This process potentially improves the practices of the department and the experiences of the patients. Van Rossum, Aij, Simons, van der Eng, and Ten Have (2016) expounded on the importance of the role leader's play in their organizations with the establishment of organizational change within shared governance and the establishment of long-term value-producing processes that are consistently looked at for improvement.

Organization Turnover

A study performed by Nadiri and Tanova (2016) of 178 frontline employees in hospitals throughout North Cyprus found that intrinsic rewards such as empowerment and autonomy of staff were key drivers in maintaining staff. If employees are not empowered or provided with the autonomy of decision making, they risk becoming dissatisfied and either leave the organization or lower their productivity (Karatepe & Karadas, 2012). An 18-year study from the National Longitudinal Survey of Youth found that healthcare employees that work long hours suffered from an increased trajectory of body mass index and decreased overall health which leads to reduced job satisfaction and high turnover of staff (Kramer & Son, 2016).

A survey of 270 hospitals staffed housekeeping, and dietary service workers that were employed at two US hospitals found that the leading cause of employee turnover was poor support from immediate supervisors (Nichols, Swanberg, & Bright, 2016). According to Collins and Mossholder (2014), interactional fairness is one of the primary contributors toward job satisfaction for employees that are embedded in their jobs. Farrar, Kaplan, & Thorne (2017) explained interactional fairness as being the quality of the treatment provided to staff from authority figures. Gillet, Fouquereau, Bonnaud-Antignac, Mokounkolo, and Colombat (2013) defined working life quality as the collaboration between an employee's needs and organizational resources. According to Woodhead, Northrop, and Edelstein (2014), job-related stress is the leading influence that affects employee turnover in hospitals.

Collins et al. (2015) estimated from their review of employee turnover in US hospitals that the expense for every turnover in an organization, an estimated 32% to 114% of the lost employee's annual salary is lost (Collins et al. 2015). The majority of the expense comes from lost productivity and the finding and training of the new employee. According to Adams (2016), the cost of turnover for one nurse can be double the cost of the nurse's annual pay. Adams associated adverse patient outcomes including surgical death rates to nursing turnover. Stroth (2010) estimated that surgical death rates rise seven percent per patient added to a nurse's workload. These type of costs can be crippling to hospitals with high turnover rates.

Diffusion of Innovation

According to Rogers (2010), the diffusion of innovation theory refers to the explanation of how over time an idea or product gains momentum and spreads through an organization or entire population. This spread is essentially the process of understanding how an idea is communicated through perceived information. Ramanathan, Ramanathan, and Karpuzcu (2016), described Rogers diffusion of innovation theory as having five primary attributes which include observability, compatibility, relative advantage, complexity, and trial-ability. Observability refers to the ability to make innovations visual to potential adopters. Compatibility refers to whether the innovation is agreeable to the social-cultural values and beliefs or perceived needs of the prospective adopter. Relative advantage is the ability to prove that the desired change is superior to the current state. Complexity refers to the difficulty of the innovation to be used and understood. Trialability is the ability for the innovation to be tested and experimented before being universally adopted. Agarwal and Prasad (2000) stressed the idea that the relative advantage aspect of an innovation must be linked with the overall attitude of the population to be successful in improving the culture and ability of Diffusion of Innovations.

Diffusion of Innovations in Healthcare

Rogers (1995) incorporated an S-curve to model corporate response to the adoption of innovations over time, which reflects the overall motivation to innovate. From this study, Rogers found that for innovation to self-sustain, it must be widely adopted. In healthcare, when change is needed, not only is the culture not set to accept

the diffusion but also there is a lack of understanding of how to speed the rate of diffusion of innovation. This resistance to change and lack of leadership understanding may be why many healthcare improvement leaders find the change in healthcare difficult to sustain (Wellman, Jeffries, & Hagan, 2016; Parkin, 2009). Aslani and Naaranoja (2015) described in their review of systematic-qualitative research of primary healthcare centers that the innovation process in the healthcare sector is condemned to failure because of the complexity of healthcare financial operations. The results from a multiple case study performed by Parston et al. (2015) indicated that diffusion of innovation in healthcare is unsuccessful primarily due to four specific enablers that are absent in the healthcare environment. The four specific enablers that are absent in the healthcare environment are a lack of vision and strategy that includes aspects of innovation of diffusion, a particular agency designed to promote the diffusion of innovations, dedicated funding, and systematic communication barriers.

Karash (2017) introduced innovations in his review of innovation in healthcare as being a barrier in itself. Since people are by nature, resistant to change, the idea of many hospitals around the country making changes, makes innovation easier to accept. For instance, if a hospital makes an improvement that improves 30-day readmissions or lowers rates of nosocomial infections, then other hospitals are much more apt to review changes in operations. Many of the current innovations that have been considered easy to spread include the sharing of evidence-based practices, or new best operational practices.

According to Pellissier (2011), business is a complex system that cannot be controlled as one would do a machine. The system's environment changes along with the

employees and stakeholders of the company. Technology and best practices are also variables that change and grow with time. Developing organizations were particularly prone to this constant changing. A term that business leaders may be familiar with is innovation as renovation. The beginning of the continuum is the creative discovery of the business, then entrepreneurship, and then finally commercial exploitation. Afsar, Cheema, and Saeed, (2017) found in their study on 441 nurses and 73 doctors that nurses perception of value congruence impacts their perception of empowerment, which translates to acts of innovation. Innovation as renovation is the outcome of a series of interrelated activities on a continuum (Poutanen, Soliman, & Ståhle, 2016).

The spread of new approaches through rural healthcare practice can be seen as the diffusion of innovation. The new approach would be considered the innovation, while the rural health providers and administrators would be the population. Examples that have spread throughout rural healthcare include new payment structures like bundled payments and capitation agreements, and technological innovations (Tsai, Joynt, Wild, Orav, & Jha, 2015). These ideas were started small and practiced before spreading to become the standard in rural health operations.

Leadership Challenges

According to Woolliscroft (2016), physicians profoundly affect the delivery of healthcare. They influence variables ranging from working conditions and professional standards to payment schemes and certification requirements (Detsky & Gropper, 2016). Research from BMC Health Services found that while hospital clinicians can be motivated to provide a high level of care, they depend heavily on their supportive

environment to achieve a high standard of practice (Denis & Gestel, 2016). Detsky and Gropper (2016) summarized physician leadership participation as being critical to the success of the organization. Their research leaned on their unique perspective on resource allocation and clinical efficiency. Stoller, Goodall, and Baker (2016) added credibility as the primary contributor to the successful leadership characteristics of physician leaders. Their research included an interview with Dr. Toby Cosgrove, CEO of Cleveland Clinic, who explained that physicians respect other physicians because they believe they fully understand the insights and needs of all physicians. Stoller, Goodall, and Baker (2016) also added the impact of physician leadership credibility toward external stakeholders such as patients, pharmaceutical companies, and elite employees.

Ackerly et al. (2011) summarized physicians that are successful as leaders and being accidents of the system. According to a recent study which consisted of focus groups around 17 separate general medical practitioners with leadership roles, many leaders in healthcare have had little or no organizational leadership training (Spehar, Sjøvik, Karevold, Rosvold, & Frich, 2017). Physicians are also often the last members of care teams to embrace new methods for delivering care to patients. Since leaders are by nature, put in a position of social power, having a leader that has experienced doing the work of the physicians they lead, can help establish the need for change (Chiu, Balkundi, & Weinberg, 2017; Detsky & Gropper, 2016).

Stevens (2016) determined from his research that for many healthcare leaders to stay ahead in their field, they must create systems that walk the thin line of what is ethical and what is legal thus creating huge disparities in healthcare administration. Pfeffer

(2015) claimed that the majority of work environments are horrible because of poor leadership, and that results in toxic organizational culture. Bordia, Restubog, Jimmieson, and Irmer's (2011) exploration of negative impacts of poor employee turnover pointed out a major flaw that many companies, including healthcare, are facing. Gordon (2017) noted that trust and related concepts are intuitively woven through what the author calls the fabric of leadership. Bligh (2017) determined that confidence in leadership is tied to two essential building blocks. The establishment of competence in the leader's ability to lead effectively, and the creation of benevolence and integrity.

Backmann and Hoegl (2014) summarized in their research on establishing trust in organizations that when leaders have a fear of being vulnerable with team members, then an absence of confidence overrides trust. Farh and Cheng (2000) introduced paternalistic leadership as a leadership style that incorporates a combination of strong discipline and authority with fatherly benevolence and moral integrity. Mansur, Sobral, and Goldszmidt (2017) expounded on the ability for paternalistic leaders to be able to establish trust, loyalty, and respect by their show to the generosity and genuine care toward subordinates and not abusing their given authority. Lenioni (2006) discussed the idea of leadership being ambitious in coming to frontline staff and asking for help. According to many leaders, this absence of trust that is created within leadership, along with the fear of conflict is the core of establishing a department or team that can work together and solve problems. Caligiuri (2006) discussed the idea that maybe the best organizational model could be not to have a model at all or even a leader. This idea rests on the ability to have

an organizational model that is a process that is not set and can be continually improved to the point that the organization does not require leadership.

Hospital readmissions have caused new challenges within rural healthcare leadership. Recent studies have shown how new technology and individualized discharge plans in addition to routine discharge care has improved readmission percentages (Mitchell, at al., 2016). Cardarelli, Bausch, Murdock, and Chyatte (2017) found in their study involving community healthcare in Kentucky that when rural hospitals can develop programs around preventing readmissions, they can save an estimated $7.03 for every $1.00 spent. The challenge leadership is facing is how to sacrifice the time and resources needed for programs like this when the hospitals operating margin is consistently at dangerous levels (Kaufman et al. 2015).

Hospitals rely on their ability to provide service to patients and to maximize profits based on reimbursement given for any particular treatment (Wooliscroft, 2016). Due to competition with market share, healthcare organizations today are looking for unique ways to increase patient volumes. For instance, some healthcare organizations are offering capitated programs, or bundled payment options to insurance companies and self-insured corporate plans, which offer incentives for patients to visit certain facilities for service. Often these strategies provide savings for patients, but at the costs of driving long distances for healthcare. Many rural hospitals have seen dramatic decreases in patient volumes over the last decade due to losing patients to programs or incentives that rural hospitals are unable to counter (Kaufman et al. 2016; Thomas, Holmes, & Pink, 2016).

Rationale for Changes Forcing Hospital Closures

Holmes, Slifkin, Randolph, and Poley, (2006) concluded from their historical study of issues in rural healthcare, that rural hospital closures reached a peak in the 1980s and continued to occur through the 1990s steadily. According to research performed by Ferrier and Valdmanis (1996), Medicaid payments were lowered in the 1980's, which was what the authors found to be the onset of rural hospital closures in the United States. Blank (1993) linked the sudden closures with the peak of poverty in the United States. The poverty rate in the United States consistently stayed above 15 percent through the mid 80's and did not drop to under 13 percent until 1989. At this time, according to research performed by Soldo (1980), 25 percent of people aged over 65 lived near or below the poverty level. This research pointed out that the elderly Americans are living longer than ever before and are requiring a larger percentage of healthcare support. Medicaid programs went through several transformations in the 1980's to combat the issue of healthcare costs contributing to the increased poverty level of the elderly (Tanehbaum, 1995).

Wishner and Solleveld (2016) found in their review of hospital closures that high uninsured rated and a payer mix dominated by Medicare and Medicaid were primary contributors to closures in rural hospitals. The enactment of the affordable care act brought in an additional 16 million Americans that were previously uninsured (Nakra, Nakra, 2016). Medicaid has also invested 3.6 billion dollars in providing free annual health screens and prevent severe issues in Medicaid's aging population (Abrams, Nuzum, Mika, & Lawlor, 2011).

Medicaid's Expansion in the 1980s

The Deficit Reduction Act of 1984 mandated the coverage of children up to the age of 5 that fell under the Aid to Families with Dependent Children (AFDC) Act of 1965. And, in 1985 the Consolidated Omnibus Budget Reconciliation Act of 1985 mandated the coverage for AFDC eligible pregnant women. In 1986, the Omnibus Reconciliation Act of 1986 required states to cover the treatment of all emergency medical conditions for all patients including illegal immigrants.

According to many healthcare leaders, the emergency medical treatment and labor act (EMTALA) which was enacted in 1986 caused a significant strain on rural hospitals leaders by mandating treatment without providing funding (Friedman, 2011). In 1987, the Omnibus Reconciliation Act of 1987 introduced new quality of care requirements for hospitals and nursing homes and began monitoring and enforcing compliance with Medicaid standards. In 1988, the Medicare Catastrophic Coverage Act required states to pay all Medicare premiums and cost-sharing for Medicaid beneficiaries that fell under 100 percent of the federal poverty level (FPL). In 1989, the minimum poverty level for the requirement of coverage was increased from 100 percent of the FPL to 133 percent. In 1990, the Omnibus Budget Reconciliation Act of 1990 mandated the coverage of children aged 6 through 18 in families that fell below 100 percent of the FPL.

The Patient Protection and Affordable Care Act of 2010

The Patient Protection and Affordable Care Act of 2010 (PPACA) was enacted based on the argument that healthcare should be allotted to everyone regardless of financial or cultural status (Congress, 2010). The primary goals of PPACA were to

minimize the number of uninsured Americans and make healthcare available to everyone at an affordable price (Gable, 2011). The Congressional Budget Office predicted an increase in reimbursement for services provided by primary care providers by an additional 8.3 billion dollars by 2019 (Davis, Abrams, & Stremikis, 2011). The PPACA is expected to alleviate the problem in rural areas of the United States that currently have a 25 percent uninsured population to close to 100 percent. Medicaid has invested 3.6 billion dollars in providing free annual health screens and prevent severe issues from arising. (Abrams, Nuzum, Mika, & Lawlor, 2011)

Friedman, Owen & Perez (2016) linked hospital closures to the Medicaid expansion by using a regression model that highlighted that states that expanded Medicaid were 2.2% more likely to close than hospitals in states that did not expand. According to the authors, the financial benefits of the affordable care act may be poorly targeted to the hospitals that are most vulnerable to closing. Allen et al. (2013) summarized the enactment of the Affordable Care Act of 2010 as the enforcement of a rule that has forced rural providers to either get affiliated with a large player to go out of business. Over the past five years, an increase in smaller hospitals has been bought out or sold to larger hospital systems. This merge has according to many experts (Baltic, 2014; Kaplan, 2016) been because of an increase in potential reimbursement from the larger system per case, and the decreased costs for healthcare supplies due to bulk purchasing capabilities.

Soni, Hendryx, & Simon (2017), found using data from the American Community Survey that the Affordable Care Act resulted in significant increase in the percentage of

patients with some form of insurance. The authors noted that the financial gains in patients with insurance were heavily offset by the reductions in individuals with personal insurance. Baker, Bundorf, Devlin, and Kessler (2016) found in their quantitative review of hospital reimbursement since the initiation of the Affordable Care Act that new advanced Medicare programs are reimbursing hospitals an average of twelve percent less per visit and much less for paid insurance programs. The authors discussed the financial strain that decreased reimbursement could hold over hospitals providing more services for less reimbursement.

Gap in the Literature

The purpose of this qualitative exploratory multiple case study was to gain a common understanding of financial problems and operational inefficiencies that may be impacting rural hospital leaders in the state of Texas. The majority of qualitative scholarly articles in this literature review consist of data concentrated on transformational leadership, contextual performance, and organizational behavior associated with healthcare leadership as a whole. Very little data exists on how financial problems and operational inefficiencies are affected in rural healthcare.

A review of associated literature in this current study revealed a gap in the literature that leads to the use of Roger's (2010) framework of innovation of diffusion where over time an idea or product gains momentum and spreads through an organization or entire population. This framework has been researched and tested in healthcare clinical practice. For example innovations for peripheral nerve blocks for ambulatory orthopedic extremity surgery were tested at a local level before rolling out as a best practice for all

orthopedic extremity surgeries. Another diffusion of innovation in healthcare can be seen in the role of leadership and governance in large healthcare networks. This innovation includes improving the practice of contractual and relational governance within a national setting (Denis & Van Gestel, 2015). These innovations were piloted in a small setting before rolling out into the much more extensive network.

Summary and Conclusions

The purpose of this qualitative exploratory multiple case study was to gain a common understanding of financial problems and operational inefficiencies that may be impacting rural hospital leaders in the state of Texas. In this chapter, I reviewed the historical trends of closures of rural hospitals in the United States and reiterated the problems that are challenging rural healthcare leaders. This review included relevant research on transformational leadership, contextual performance, and organizational behavior, and the relationship they hold in healthcare. The absence of literature regarding transformational leadership practice and contextual performance in rural healthcare is delineated along with a summary of current leadership strategies that have been unsuccessful. I have also summarized relevant theories and concepts used by researchers including systems thinking, learning organizations, and relevant framework from Roger's innovation of diffusion. Together, the studies outlined offer preliminary evidence that transformational leadership, along with systems that capitalize on continuous improvement are pivotal in the survival of rural healthcare. Further, these studies have shown that the diffusion of innovation is a process that rural healthcare lacks and may

provide a link for all rural hospitals to communicate organizational successes and failures.

Chapter 3: Research Method

When reviewing the literature, I identified a research gap regarding the inability of rural health leaders to adapt and spread innovations that may aid in the survival of rural healthcare. Therefore, the purpose of this exploratory multiple case study was to gain an in-depth understanding of what financial problems and operational inefficiencies are affecting rural healthcare. I also wanted to gain more insights into how understanding and spreading innovations in rural healthcare can aid in its survival.

Chapter 3 contains information on the research methodology I used to adequately answer the research question and generate additional information to address the gap in the related literature. Other topics in Chapter 3 include the research method and rationale, research design and rationale, research question, role of the researcher; strategy for selection of research participants, and instrumentation. Chapter 3 also includes procedures for recruitment, participation, and data collection, the data analysis plan, a discussion of issues of trustworthiness, and ethical procedures.

Research Question

Researchers design their primary research questions to guide them throughout the data collection process (Miles et al. 2014). The central research question for this qualitative exploratory multiple case study was: How can leaders gain a common understanding of financial problems and operational inefficiencies that may be impacting hospitals in the state of Texas? I subdivided this into two secondary research questions including (a) What are the common understandings of senior hospital leaders about financial problems in hospitals in the state of Texas? and (b) What are the common

understandings of senior hospital leaders about operational inefficiencies in hospitals in the state of Texas? These primary and secondary research questions were helpful in directing the study and filling the current gap in knowledge of financial problems and operational inefficiencies that are currently impacting rural healthcare.

Research Method and Rationale

For this study, I chose as qualitative research method with a case study design. According to Patton (1990), qualitative research involves exploring experiences of different people to identify the essence of a shared experience. Qualitative research is a compilation of interpretive techniques and practices researchers use to describe, decode, and translate the meaning, not the frequency, of certain phenomena naturally occurring in the social world (Onwuegbuzie & Byers, 2014; Van Manen, 2015). The qualitative research method is appropriate for studying strategies based on the need for human interaction, meanings, and processes for improving operations and overall financial stability in healthcare (Gephart, 2004).

A quantitative research method is more suitable for a study with an objective that is conclusive, enumerates a problem, and determines relationships between variables (Plotnikov & Vertakova, 2014). I did not chose this method because of the lack of flexibility in the interview process. Mixed method studies focus on the real-life contextual understanding of a phenomenon using multilevel perspectives (Bernard, 2013). I decided not to use a mixed method design based on potential discrepancies between each type of data.

Research Design and Rationale

Researchers use case study design to gain an understanding of participants' real-life experiences of a phenomenon through detailed contextual analysis of the event or condition (Zainal, 2007). According to Stake (2013), multiple case studies are robust in data analysis and, as a result, have increased credibility. Yin (2014) explained exploratory case study design as research that holistically incorporates multiple cases to explain how, what, and why something happened. A case study was appropriate for this study because it allowed me to study the complex phenomena within the framework of the study (see Berg, Lune, & Lune, 2004).

Grounded theory research is grounded in data from the participants involved (Moss, Gibson, & Dollarhide, 2014). Grounded theory was not appropriate for this study because grounded theory looks to move beyond mere descriptions and establish the best method (Jabareen, 2009). Phenomenological research is a systemic attempt to uncover the experiences of a particular event or concept through the study of multiple participants (Moustakas, 1994; Van Manen 1990). A phenomenological design was not appropriate for this study because it was not structured around the lived experiences of the participants.

Role of the Researcher

Peredaryenko and Krauss (2013) summarized the role of the qualitative researcher as that of a data collection instrument. The data is collected through the researcher instead of through non-human tools such as questionnaires and machines (Denzin & Lincoln, 2003). In my role as the researcher, I was the primary instrument for collecting

data from the researcher participants. I conducted semi-structured face-to-face interviews with rural hospital leaders and reviewed documents related to financial strain. Tessier (2012) suggested that to improve reliability, data collected through interviews can be collected using a combination narrative. Janesick (2011) explained that a qualitative researcher must train the eyes to see, the ears to hear, and the mouth and body to communicate. Therefore, to meet these recommendations for data collection, I also included field notes of all observations and transcribed tape recordings.

The triangulation method is commonly used in qualitative research to ensure data collected is accurate and of high quality. Researchers may enhance the credibility of their study through triangulation by keeping an audit trail that documents the researcher's decisions, field notes kept during the interview process, and records of interview transcripts (Cope, 2014; Shenton, 2004). I reviewed secondary data from organizational documents against the data from the face-to-face interviews to satisfy the methodological requirement for data triangulation.

When the researcher is the primary data collection instrument, personal biases can affect the trustworthiness of the study (Parker & Henfield, 2012). Personal values and beliefs, demographic paradigms, preconceptions, cognitive bias, and ethnocentrism are elements that contribute to researcher bias (Pezalla, Pettigrew, & Miller-Day, 2012). Collins and Cooper (2014) emphasized the importance of researchers taking full responsibility for the quality of the study when serving as both the collector and interpreter of the data.

Research Participant Selection Logic

My selection of the research participants for the study was contingent upon their position within the hospital system and whether they controlled a sector that is considered rural Texas. The intent for using a sampling procedure was to provide variable levels of influence within multiple rural areas of Texas. According to Stake (2006), a recommended 4-10 cases should be studied to establish a sufficient amount of interactivity between cases and to lead to qualitative generalizations. To establish adequate generalizations, I purposely sampled four leaders from each of three hospitals in Central and North Texas. I used open-ended questions in one-on-one semi-structured interviews to gain an in-depth understanding of the influence of stakeholders in promoting operational sustainability. To achieve a multiple case study perspective, each of the three facilities was considered its own case study. I then combined the collective data to report the common understandings and themes generated from all interviewed leaders.

Instrumentation

According to Simon and Goes (2011), the ideal quantitative study is one in which the researcher's role is theoretically non-existent. Simon and Goes expounded on the need for researchers to make participants feel as if the researchers were not observing them at all. Researchers generally assume that participants act differently when they know they are being observed. In qualitative research, the researcher is considered a data collection instrument. Agee (2009) concluded that the researcher needs to see research questions as tools for discovery as well as tools for clarity and focus. The data is

collected through the researcher instead of through non-human tools such as questionnaires and machines (Denzin & Lincoln, 2003). I collected the data for this study using semi-structured interviews and document review.

The interview protocol I developed (Appendix A) served as a data collection instrument. The interviews were audio-recorded and participants were given the opportunity to review their transcribed interview for accuracy before data analysis. Interviews with open-ended questions aid the researcher in acquiring detailed information while allowing interviewees to ask follow-up questions when necessary (Jacob & Furgerson, 2012). All participants were recorded upon consent to ensure credibility and consistency during the data collection process.

Expert Validation

According to Anseel et al. (2015), expert validation is the process of obtaining feedback on research design from experts in the field. In addition to feedback from my dissertation chair and committee member, I used the faculty experts' directory on the Walden University website to find an additional six qualitative case study experts to review my interview questions for quality and alignment. Three of the six experts responded to my inquiry. I communicated with these faculty experts through email.

The expert validation involved three willing participants who teach qualitative research methods and serve on dissertation committees. The comments from the three experts were helpful in revising my initial interview questions (see Appendix C) to the final interview protocol (see Appendix A). The first expert suggested that I incorporate Agee's (2009) reflective process into the alignment of my questions. The second expert

the public health program suggested that I adjust the wording of my questions to include the word *perspective* and to adjust operational inefficiencies to the primary problems such as filling hospital beds and maintaining reimbursement. The third expert suggested that my questions could be considered quantitative and offered feedback in improving the qualitative design.

Document Review

Qualitative researchers perform document analysis to verify data, gain understanding, or develop empirical knowledge of a subject (Corbin & Straus, 2008). The document review process can be used to gather data that supports research and can be used to meet the requirements of data triangulation (Dworkin, 2012). I reviewed the supporting documents to include publicly available data consisting of system goals for all health facilities located in areas deemed as rural Texas.

Procedures for Recruitment, Participation, and Data Collection

Recruitment of study participants occurred after obtaining approval from the Walden University Institutional Review Board to conduct the study. I adhered to the guidelines of the board and began the recruitment once I was ready to begin the data gathering process. I submitted the required documentation including the application form that contained information on the data collection process.

Letters of Cooperation

I sent a letter of cooperation to the research departments or human resources departments that support each potential interviewing location. The letter outlined my intent to gain access to the organization and obtain permission to conduct the research. I

also created and circulated a flyer (Appendix B) to recruit research participants from within the Central Texas area.

Informed Consent

According to Regmi et al. (2017), obtaining informed consent from every participant involved in research is a mandatory ethical practice. Informed consent is the process that allows participants to be informed about their role, risks, and rights before enrolling in the study. To obtain informed consent from all participants, I provided each participant with information about the purpose of the study, the use of the data that was to be collected, and the requirements of the participants.

Data Collection Plan

The data collection techniques that were used in this study included semi-structured interviews and document review. Purposeful sampling was performed to ensure rich data is obtained from a diverse perspective toward rural healthcare in Texas. Based on evidence of best practices by Seidman (2013), the interview process should involve the conceptualization of the interview, the establishment and acceptance of interviewees, facilitation of the analysis plan, collection and transcription of the data, presentation of the data, and the sharing of lessons learned will all research stakeholders. According to Stake (2006), a recommended 4-10 cases should be studied to establish a sufficient amount of interactivity between cases to lead to qualitative generalizations. To establish adequate generalizations, I purposely sampled four leaders from three hospitals with open-ended questions in semi-structured interviews to gain an in-depth understanding of the influence of stakeholders in promoting operational sustainability.

The research study involved one-on-one interviews with the leaders of three hospital systems across Central and North Texas. To achieve a multiple case study perspective, each of the three facilities was considered its own case study, and then the collective data was combined for reporting the common understandings and themes generated from all interviewed to provide the fourth of the multiple case study design. Each facility was considered its own case study, and then the collective data was combined for reporting the common understandings and themes generated from all interviewed.

Each interview was transcribed, and member checking used to ensure that the transcripts match the intended response of the participant. The transcription of the audio recording occurred within 48 hours of the interview in which I personally transcribed the answers to each question. The interviewee immediately received an email with the attached transcript and the request for any corrections within two weeks. Any changes to the transcribed responses were accepted within the two week period. After two weeks, a follow-up email was sent thanking the participant for interviewing and notifying them of the finalized transcription. According to Harper, M., and Cole, P. (2012), member checking not only allows the participant to verify the accuracy of their statements, but it also gives the participant a sense of relief that their feelings were validated and that they are not alone. Other factors that will be involved in the interview process included creating a positive connection with the participant and showing gratitude for the participant's willingness to participate in the interview process (Collins & Cooper, 2014). The interview protocol (Appendix A) was used to promote consistency throughout the data collection phase and increase the dependability of the study.

Data Analysis Plan

The data analysis was performed on the data collected during semi-structured interviews and document review. Stake (1995), explained data analysis as the being a process of giving meaning to both first impressions and final compilations. According to Yin (2014), data analysis in qualitative research should evolve through five distinct steps. The data should initially be compiled and sorted into a database. The data should then be broken down into smaller fragments or pieces. The broken down data should then be reassembled based on themes. The data is then reassembled or interpreted into a new narrative. Finally, conclusions are made based on the common themes. The enormous amount of data that I will be receiving from the interviews could be easily lost in translation if not coded properly (Miles, Huberman, and Saldana, 2014). The purpose of an exploratory case study is to move toward a better understanding of a proposed problem, to develop data and ideas toward significant lines of relation, and then to evolve the conceptualities of the analysis for future learning (Blumer 1969).

The data analysis plan connected to the overarching research question: How can leaders gain a common understanding of financial problems and operational inefficiencies that may be impacting hospitals in the state of Texas? The interview questions were designed to generate data from each selected participant that would address the questions that are detailed in Appendix A. The sources of data consisted of semi-structured interviews with leaders in rural health locations in Texas and document review. The data obtained from each interview was hand-coded in Microsoft excel and recorded for accuracy. The hand coding process involved reviewing the transcripts to

identify common themes and phrases. Each interview transcript was thoroughly examined to avoid missing any key concepts.

NVivo version 11 was used to organize the data. Woods, Paulus, Atkins and Macklin (2016) discovered in their comparison of coding techniques that using NVivo can give the researcher a unique advantage by integrating the use of indexing of data categories and the creation of nodes that can be sorted or further quantitated. The use of both hand-coding and electronic (NVivo) to capture data enhanced the reliability of the study.

Issues of Trustworthiness

In quantitative research, the quality of the instruments affects the outcome of reliability and appropriateness of the research (Marshall, & Rossman, (2014). In qualitative research, the researcher is the primary instrument of data collection. Parker & Henfield (2012) explained how personal biases could affect the trustworthiness of the study when the researcher is the primary instrument of the data collection. Personal values and beliefs, demographic paradigms, preconceptions, cognitive bias, and ethnocentrism are elements in contributing researcher bias when the researcher is the primary instrument of data collection (Pezalla, Pettigrew, & Miller-Day, 2012). Collins and Cooper (2014) expounded on the importance of researchers to take full responsibility for the quality of the study when posed with being both the collector and interpreter of the data.

Credibility

According to Loh (2013), when performing qualitative research, questions about quality, reliability, and validity are problems that must be considered throughout the research. Patton's (2015) philosophy is that credibility in qualitative research suffers because of the researcher's preconceived culture or experiences. He describes this as through bias, and past experiences have such a powerful impact on research, that it should be a priority to promote ideas and theory with data powerful enough to overcome any doubt. According to Shenton (2004), the majority of issues with credibility can be overcome by looking at the congruency of the findings with reality. Using correct operational measures for the concepts being studied. Another method that Shenton discusses is using triangulation. Triangulation is the use of different methods to verify results. The typical setting would be to use observation, focus groups, and individual interviews.

Transferability

Transferability refers to the ability of the research finding to be applied to other settings in similar conditions (Watkins, 2012). Schofield (1993) inferred that for transferability to be appropriate, a substantial amount of information must be provided about the phenomenon studied. To ensure the transferability of the study, I adequately described the findings of the study including all developed patterns, codes, and themes (Miles, Huberman, 2011; Saldana, 2015). The sampling strategy that was used in selecting the sites for the study involved critical case sampling. Critical case sampling only looks at sites and subgroups within each site that appears to generate the maximum

potential benefit to the study. Palinkas, Horwitz, and Green (2013) argued that if a theory can work in the harsh conditions of the critical case study, then it should be able to work anywhere. This study could be transferable to other states with similar rural healthcare conditions as Texas.

Dependability

Dependability in qualitative research can be described as the verification of accuracy in the conceptualization, data collection, and result in an interpretation of the study (Marshall & Rossman, 2014; Houghton et al. 2013). Tobin and Begley (2004) explained dependable research as having well-established data. To increase the dependability of the study, I thoroughly inspected every process that aids in contributing to the results and describe the processes in detail. Houghton et al. (2013) promoted the use of reflexive journaling and the creation of an audit trail to increase dependability. For this study, I created an audit trail that supports the processes that aided me in achieving the results of the study. I also kept reflexive journals that contained personal reflections during the interview process. I initiated an expert validation process, where three qualitative case study experts validated the capability of my interview questions.

Confirmability

Confirmability refers to the degree to which the results of the study can be confirmed by others (Cope, 2014). To ensure the confirmability of this study, I maintained an audit trail by using reflective journaling throughout the data collection process. According to Watkins (2012), the researcher can enhance confirmability by minimizing researcher bias. Janesick (2011) explained that as a researcher conducting a

qualitative study, outside factors like personal bias could affect the overall integrity of the research. To minimize bias, I included all personal reflections toward personal experiences, culture, or bias in reflexive journals during the data collection process (Anney, 2014). To minimize bias, I abided by the guidelines for promoting research confirmability and making a conscious effort to be aware of potential bias in this study.

Ethical Procedures

The rural healthcare leaders were recruited for this study from within the central Texas area. IRB approval for the study was obtained before commencing the study. Since none of the interviewees work with me, there was no conflict of interest or concern for power differentials. The study was on a volunteer basis, and the interviewees had the right to leave the interview at the time, as stated in the expression of interest form and the informed consent form.

Stake (1995) suggests that qualitative researchers have an ethical obligation to minimize the potential misrepresentation or misunderstanding of the study. The information obtained in this study will be kept confidential and will not be used outside of this study. The data collected will be saved for 5 years, then the interview notes and transcripts will be shredded.

Summary

In Chapter 3, I described the research methodology for the proposed study that served as an underpinning guide for the study. The research design was established and intended to serve as a guide for the interview questions that are designed to answer questions that solve the overarching research question. The other significant contents are

issues with trustworthiness and how it can be accomplished in research through credibility, transferability, dependability, and confirmability.

Chapter 4: Results

The purpose of this qualitative multiple case study was to gain a common understanding of financial problems and operational inefficiencies that may be impacting rural hospital leaders in the state of Texas. To address the purpose of the study, I conducted a qualitative analysis of the semi-structured interviews with the 12 participants, and a document review of the system and annual hospital goals. NVivo 11 software was used to organize the data from each of the interviews. The central research question was: What are leader's perceptions of operational performance levels and financial problems that may be impacting hospitals in the state of Texas?

My review of associated literature revealed a gap in the literature, which led me to use Rogers's (2010) diffusion of innovation framework. This framework holds that over time an idea or product gains momentum and spreads through an organization or entire population. In this chapter, I present the research results based on the perspectives of the research participants. This chapter also includes information related to the research setting, demographics, data collection, data analysis, and evidence of trustworthiness.

Research Setting

This qualitative multiple case study involved interviewing rural hospital leaders from three separate Texas regions. I interviewed four specifically-selected participants in each region and performed document review on past and current facility goals. I conducted the first interviews in the first selected region. The selected participants included a hospital president, vice president of clinics, vice president of hospital operations, and clinic director. The interviews were then scheduled and performed in the

second selected area. The selected participants included a hospital president, chief operating officer, clinic director, and hospital nursing director. The interview process was then moved to the third selected region. The selected participants included a hospital president, vice president of hospital operations, vice president of clinics, and clinic director.

Demographics

I commenced data collection after obtaining approval from Walden University's Institutional Review Board to conduct the study. The obtained IRB approval number from Walden University was 04-02-18-0536040. To recruit participants, I emailed an expression of interest flyer (Appendix D) to each potential participant. All 12 candidates to whom I sent a flyer agreed to be part of the study. The participants involved in the study are categorized below by gender, position, and region.

Table 1

Participant Demographic Data

Participant	Gender	Position	Texas region
Participant 1	Male	President	Region 1
Participant 2	Male	Vice president, clinics	Region 1
Participant 3	Female	Vice president, operations	Region 1
Participant 4	Male	Clinic director	Region 1
Participant 5	Male	President	Region 2
Participant 6	Male	Chief operating officer	Region 2
Participant 7	Male	Clinic director	Region 2
Participant 8	Female	Nursing director	Region 2
Participant 9	Male	President	Region 3
Participant 10	Male	Chief operating officer	Region 3
Participant 11	Female	Vice president, clinics	Region 3
Participant 12	Female	Clinic director	Region 3

Data Collection

The data collection techniques I used in this study included semi-structured interviews and document review. I used purposeful sampling to ensure that rich data would be obtained from participants with diverse perspectives on rural healthcare in Texas. According to Seidman (2013), best practices for the interview process should involve conceptualization of the interview, establishment and acceptance of interviewees, facilitation of the analysis plan, collection and transcription of the data, presentation of the data, and sharing of lessons learned will all research stakeholders. According to Stake (2006), four to 10 cases should be studied to establish a sufficient amount of interactivity between cases to lead to qualitative generalizations. To establish adequate generalizations, I purposely sampled four executives from each of three different rural hospitals in Texas and used open-ended questions in semi-structured interviews to gain an in-depth understanding of the influence of stakeholders in promoting operational sustainability. This research study involved one-on-one interviews with the leaders of three hospital systems across Central and North Texas. To achieve a multiple case study perspective, each of the three facilities was considered its own case study, then I combined the collective data for reporting the common understandings and themes generated from all interviewed leaders.

I transcribed each interview and used member checking to ensure that the transcripts matched the intended response of the participant. I personally transcribed the participants' audio-recorded answers to each question within 48 hours of their interview. The interviewee immediately received an email with the attached transcript and the

request for any corrections within 2 weeks. Any changes to the transcribed responses were accepted within the 2-week period. After 2 weeks, I sent a follow-up email thanking the participant for interviewing and notifying them of the finalized transcription. According to Harper and Cole (2012), member checking not only allows the participants to verify the accuracy of their statements, but also gives them a sense of relief that their feelings were validated and that they are not alone. Other factors involved in the interview process included creating a positive connection with the participant and showing gratitude for the participant's willingness to participate in the interview process (see Collins & Cooper, 2014). I used an interview protocol (Appendix A) to promote consistency throughout the data collection phase and increase the dependability of the study.

Data Analysis

I analyzed the data collected during semi-structured interviews and document review. Stake (1995) explained data analysis as a process of giving meaning to both first impressions and final compilations. According to Yin (2014), data analysis in qualitative research should evolve through five distinct steps. The data is initially compiled and sorted into a database. The data is then broken into smaller fragments or pieces. The data is then reassembled based on themes or interpreted into a new narrative. Finally, conclusions are made based on the common themes. In not coded properly, the enormous amount of data that I received from the interviews could have overwhelmed the study (Miles, Huberman, & Saldana, 2014). The purpose of an exploratory case study is to move toward a better understanding of an identified problem, to develop data and ideas

toward significant lines of relation, and then to evolve the conceptualities of the analysis for future learning (Blumer 1969).

The data analysis plan was connected to the overarching research question: How can leaders gain a common understanding of financial problems and operational inefficiencies that may be impacting hospitals in the state of Texas? The interview questions were designed to generate data from each selected participant that would address the questions listed in Appendix A. The sources of data consisted of semi-structured interviews with leaders in rural health locations in Texas and document review. I hand-coded the data obtained from each interview in Microsoft Excel and recorded them for accuracy. The hand coding process involved reviewing the transcripts to identify initial themes and phrases. The initial themes and phrases were then categorized into common themes. Any code that did not appear a minimum of three times or relate to another code did not advance to a theme. I thoroughly examined each interview transcript to avoid missing any key concepts.

I used NVivo 11 to organize the data. Woods et al. (2016) discovered in their comparison of coding techniques that using NVivo can give the researcher a unique advantage by integrating the use of indexing of data categories and the creation of nodes that can be sorted or further quantitated. My use of both hand- and electronic coding (NVivo) to capture data enhanced the reliability of the study.

Evidence of Trustworthiness

In quantitative research, the quality of the instruments affects the reliability and appropriateness of the research (Marshall & Rossman, 2014). In qualitative research, the

researcher is the primary data collection instrument. Parker and Henfield (2012) explained how personal biases could affect the trustworthiness of a study when the researcher is the primary data collection instrument. Personal values and beliefs, demographic paradigms, preconceptions, cognitive bias, and ethnocentrism are elements that contribute to researcher bias (Pezalla et al. 2012). Collins and Cooper (2014) noted the importance of researchers taking full responsibility for the quality of the study when serving as both the collector and interpreter of the data.

Transferability

Transferability refers to the potential for the research finding to be applied to other settings in similar conditions (Watkins, 2012). Schofield (1993) contended that a substantial amount of information must be provided about the phenomenon studied to ensure transferability. To ensure transferability, I have adequately described the findings of the study including all developed patterns, codes, and themes (Miles & Huberman, 2011; Saldana, 2015). I used critical case sampling to select the sites for the study. Critical case sampling only looks at sites and subgroups within each site that appears to generate the maximum potential benefit to the study. Palinkas, Horwitz, and Green (2013) argued that if a theory can work in the harsh conditions of the critical case study, then it should be able to work anywhere. This study could be transferable to other states with rural healthcare conditions similar to those in Texas.

Dependability

Dependability in qualitative research relies on the verification of accuracy in the problem conceptualization, the data collection, and accuracy in the interpretation of the

results of the study (Marshall & Rossman, 2014; Houghton et al. 2013). Tobin and Begley (2004) explained dependable research as having well-established data. To increase the dependability of the study, I thoroughly inspected every process that contributed to the results and describes the processes in detail. Houghton et al. (2013) promoted the use of reflexive journaling and the creation of an audit trail to increase dependability. For this study, I created an audit trail that supported the processes that aided me in achieving the results of the study. I also kept reflexive journals that contain personal reflections during the interview process. I initiated an expert validation process, where three qualitative case study experts validated my interview questions.

Confirmability

Confirmability refers to the degree to which the results of the study can be confirmed by others (Cope, 2014). To ensure the confirmability of this study, I maintained an audit trail by using reflective journaling throughout the data collection process. According to Watkins (2012), the researcher can enhance confirmability by minimizing researcher bias. Janesick (2011) explained that as a researcher conducting a qualitative study, outside factors like personal bias could affect the overall integrity of the research. To minimize bias, I included personal reflections regarding personal experiences, culture, or bias in reflexive journals during the data collection process (Anney, 2014). Further, I made a conscious effort to be aware of potential bias in this study.

Study Results

This qualitative multiple case study involved interviews with 12 healthcare leaders in three rural areas of Texas. In this section, I present the themes that emerged from the semi-structured interviews and document review. Each participant's interview was transcribed for accuracy and served as the primary method of generating themes. I have presented the themes by order of the highest occurrence, and by order of the questions asked via the interview protocol. I have also included themes that emerged from the document review to meet the need of triangulation.

Research Question

The central research question for the study was: What are leader's perceptions of operational performance levels and financial problems that may be impacting hospitals in the state of Texas?

Table 2

Interview Question 1 Data

Codes	Themes	Total number of occurrences	Number of occurrences with president/c-suite	Number of occurrences with VPs or director
Payer mix	Poor payer mix and	5 (42%)	3	2
CMS	uninsured	4 (33%)	1	3
Uninsured	population cause financial strain.	2 (17%)	1	1
Spending	Costs are too high to	7 (58%)	2	5
Low volume	provide service.	2 (17%)	0	2
Variability	Variability and poor	3 (25%)	1	2
Process-improvement	processes lead to financial distress.	6 (50%)	1	5
Pay-for-performance	Shift toward pay for performance or	3 (25%)	2	1
Continuum- of care	continuum of care.	3 (25%)	2	1

Table 3

Interview Question 1 by Region

Codes	Themes	Number of occurrences in Region 1	Number of occurrences in Region 2	Number of occurrences in Region 3
Payer mix	Poor payer mix and	1	1	3
CMS	uninsured	0	0	3
Uninsured	population cause financial strain.	0	1	2
Spending	Costs are too high to	4	3	0
Low volume	provide service.	1	0	1
Variability	Variability and poor	0	1	2
Process-improvement	processes lead to financial distress.	1	2	3
Pay-for-performance	Shift toward pay for performance or	1	2	0
Continuum-of care	continuum of care.	1	1	0

Emergent Themes

Emergent Theme 1

The first theme was that poor payer mix and a high uninsured population cause financial strain. Emergent Theme 1 resulted from the analysis of the data collected from the semi-structured interview question; what do you view are the driving forces toward financial viability of hospitals in TX? Eleven of the twelve (92%) interviewees attributed having a poor payer mix or increased percentage of uninsured patients toward the driving forces of the financial viability of hospitals in Texas. Participant 1 described hospital leadership as fighting and being under a barrage of attacks from payers trying to lower reimbursement to levels below the expenses of the patient. Participant 5 explained

financial viability as "stemming from the growth of the state to have more solid employers to grow in its number of people that are employed." Participant 5 stated that "Medicaid and Medicare reimbursement has lowered to the point in which hospitals are relying heavily on its commercial health insurance patients to cover the deficit incurred from government payers or uninsured patients."

Participant 6 stated, "the payer mix by large is much poorer in the rural areas than it is in urban areas," and explained that "most rural hospitals rely heavily on governmental funding like subliminal payments, and low volume discounts." He went on to explain how "when Congress cuts funding, it hurts rural hospitals much more than urban hospitals. There is no other place to go to get additional revenue or volume." Participant 7 stated that "Texas' worst decision over the last six years was not to expand Medicaid." Participant 7 explained that "many currently uninsured would have qualified for Medicaid expansion." According to Participant 7, there was no consideration for how not expanding Medicaid would affect the rural areas. Participant 10 stated that "the many larger hospitals can stay profitable because of the large Medicaid population that surrounding rural facilities are currently seeing." Participant 10 explained how "larger hospitals are being hit hard by payer shifts when rural hospitals close."

Participant 11 discussed the argument that the less time you are in the hospital, the better. Participant 11 stated "the way we look at it is we must provide the patient with the care they need. We are not going to give them fewer pain meds if inpatient vs. outpatient." Participant 12 discussed the challenges of being defined as a hospital. Participant 12 stated "If you don't maintain a daily census of two then you may not be

considered a general hospital. There is a lot of dollars tied up potentially in being a general hospital. Also, critical access hospitals methodology is antiquated, so people think you get cost-based reimbursement "it's not a big deal" well for our hospitals they either were not status as that or don't qualify doesn't mean the same pressures don't exist. It just means we do not have access to the extra funding."

Emergent Theme 2

The second theme was that costs are too high to provide service. Emergent theme 2 emerged from the data analysis of the semi-structured interview question; what do you view are the driving forces toward financial viability of hospitals in TX? Six of the twelve (50%) interviewees attributed high costs, inflation, and low patient volumes toward the driving forces of the financial viability of hospitals in Texas. Participant 1 explained that "we are seeing diminishing revenue that is not covering the cost of current patient expenses. And the expense side we are seeing inflation that is above and beyond producer price index. That is an unsustainable equation the expenses are going up higher than the revenue." Participant 3 stated "To be able to survive we must drive down costs. We must be able to cut costs and still be able to produce what we need to produce with the same quality." Participant 4 explained profitability in clinics as "the process of understanding how to drive down costs and increase RVU's." Participant 10 described cost containment and expense reduction as "the leading contributors toward financial viability."

Emergent Theme 3

The third theme that emerged was that variabiliy and poor processes lead to finacial distress. Emergent Theme 3 emerged from the data analysis of the semi-structured interview question; what do you view are the driving forces toward financial viability of hospitals in TX? Nine of the twelve (75%) interviewees attributed variability and poor processes toward the driving forces of the financial viability of hospitals in Texas. Participant 2 explained "improper or inaccurate coding" as being "the driving factor of financial struggles." Participant 4 described variability in how physicians are treating patients as contributing factor to financial sustainment. Participant 4 stated, "physicians must learn to do things they haven't done in the past."

Participant 7 explained how "local politics affect goals and vision of the facility." Participant 7 stated, "when your local stakeholders are giving you one direction, and your company stakeholders are giving you another, it is difficult to understand where and what initiatives to give the most attention." Participant 9 explained the "need to take variability out of all healthcare processes." Participant 9 stated that "as a not-for-profit, we make 3-4 cents on every dollar. In English, that's 3-4 pennies. That's not a whole lot. How can we continue to take costs out without affecting the quality of care? You're going to have to take the variability out."

Participant 10 stated, "you can go into any hospital and watch how no two nurses do it the same." Participant 10 further stated, "how do we allow a little autonomy because every patient is a little different too, but we have a standard process around everything?" Participant 11 discussed the improvements in data analytics and electronic medical

records. Participant 11 stated “Being able to show variability and did that variability at that higher cost really have a higher quality. If the answer is no, then we need to move that higher cost. It can be as simple as its two separate drugs. We can go to Walgreens and buy a name brand drug, or we can get a generic. If the generic is just as effective, then let’s go with that.”

Emergent Theme 4

The fourth theme that emerged was the shift toward pay for performance or continuum of care. Emergent Theme 4 emerged from the data analysis of the semi-structured interview question; what do you view are the driving forces toward financial viability of hospitals in TX? Six of the twelve (50%) interviewees attributed shifting toward pay for performance or continuum of care toward the driving forces of the financial viability of hospitals in Texas. Participate 1 explained the hospital business as being “fragile because of the lack of responsibility for well-care.” Participant 2 explained the” difficulty to control spending and still meet goals for pay for performance.” Participant 2 stated “it’s hard to live in both worlds, with our current quality/finance goals and expectations to move toward pay for performance. Are we moving toward pay for performance or not? If not, then it will determine how we operate.”

Participant 9 stated “We are in a parallel right now. We must continue to be on the fee for service model and continue to take care of per click that comes through. We’ve got to position ourselves what we call Value based contracts. What I mean it’s a simple analogy, if the insurer gives us 10 dollars to manage the patient, we get the 10 dollars and we keep them well. It’s the health part, not the sick part. It’s the wellness

management of a patient. You have to think outside the hospitals four walls and have a continuum of care in place that we are checking on the patient with phone calls, home visits using technology so. Obviously, the mechanism we pay for that is not in place yet. All tense in purpose we think value-based contracts are going to grab hold in 2019 so we have to prepare our platform so that we are ready."

Table 4

Interview Question 2 Data

Codes	Themes	Total number of occurrences	Number of occurrence with president/c-suite	Number of occurrence with VP's or director
Good	Positive Outlook	6 (50%)	5	1
Easier		3 (25%)	3	0
Worse	Negative Outlook	2 (17%)	0	2
Too difficult		1 (08%)	0	1
Inconsistent empirical results	Inconsistency in rollout or lack of empirical results	5 (42%)	3	2
		3 (25%)	1	2
Workload	Workload difficulty or changing how we operate	5 (42%)	0	5
Proactive change		3 (25%)	0	3

Table 5

Interview Question 2 by Region

Codes	Themes	Number of occurrences in Region 1	Number of occurrence in Region 2	Number of occurrence in Region 3
Good Easier	Positive Outlook toward evidence-based measures	4 1	1 1	2 1
Worse Too difficult	Negative Outlook toward evidence-based measures	0 0	1 1	1 0
Inconsistent empirical results	Inconsistency in rollout or lack of empirical results	3 1	0 2	1 0
Workload Proactive change	Workload difficulty or changing how we operate	3 3	1 0	1 0

Emergent Theme 5

The fifth theme that emerged was the positive outlook toward evidence-based measures. Emergent Theme 5 emerged from the data analysis of the semi-structured interview question; what are your perspectives toward how changing evidence-based measures or clinical guidelines are impacting your employees? Nine of the twelve (75%) interviewees explained the shift toward measuring evidence-based measures as being positive for their organization. Participant 1 explained, “evidence-based measures are being represented as a good thing.” Participant 1 stated, “they are easy to understand, follow, and very consistent.” Participant 2 stated “They don’t fall into the category of different directions from physicians or providers. It provides more measures for safety measures for quality and better measures for outcomes.” Participant 4 stated “moving

toward pay for performance type quality measures are necessary and good for healthcare."

Participant 5 stated "we are a pretty strong follower of all the things that are evidence-based and we work hard to do those things. I do not see things day in and day out that are impacting our employees in a negative way. Just as evidence comes down the pike that says there are better ways of doing things. We tend toward adopting that." Participant 9 explained how" healthcare is made up of scientist that are data-driven." According to participant 9, because healthcare employees are generally data-driven, change with supporting evidence is easy to obtain.

Emergent Theme 6

The sixth theme that emerged was the negative outlook toward evidence-based measures. Emergent Theme 6 emerged from the data analysis of the semi-structured interview question; what are your perspectives toward how changing evidence-based measures or clinical guidelines are impacting your employees? Three of the twelve (25%) interviewees explained the shift toward measuring evidence-based measures as being negative for their organization. According to participant 6, "there might not be the brain power or body count needed to execute the requirements." Participant 6 stated "you can't just pluck someone off the street to manage change. It takes effort, talent, and training. As things get more and more complicated and you lose your talent pool mandated change becomes a more of a risk than reward." Participant 7 associated implemented evidence-based measures as being unfunded mandates. Participant 7 stated "We are told these things for value-based purchasing, we are told to work on health management. It's just

how our company is aligning itself. But, some are fairly mandated. We need to do all these things but yet, either we hold funding until we achieve these things, or they are going to reduce funding until we participate."

Emergent Theme 7

The seventh theme that emerged was inconsistency and lack of empirical results. Emergent Theme 7 emerged from the data analysis of the semi-structured interview question; what are your perspectives toward how changing evidence-based measures or clinical guidelines are impacting your employees? Three of the twelve (25%) interviewees attributed inconsistency in the rollout of evidence-based change or lack of empirical results toward how changing evidence-based measures, or clinical guidelines are impacting your employees. Participant 1 expounded on the necessity of making changes regarding evidence-based guidelines consistent across all areas of healthcare. Participant 1 stated "The assumption in question is that we have a significant penetration of evidence-based measures. And in healthcare and we don't we are still at the tip of adoption of evidence measures." Participant 3 discussed the widespread freelance practice of medicine based on each physician's preference instead of consistently followed best practices.

Participant 5 stated "the challenges with rural areas in adopting the right evidence-based measures." According to participant 5, "evidence-based guidelines change based on size, location, population, and types of specialties." Participant 6 described the adoption of evidence-based measures as" only being successful with empirical results." Participant 6 stated "you can't just say you're going to do X because

it's going to make it safer. Well, show me how it's going to be safer. You can't do X because you're going to have a better outcome. Well, show me the better outcome. Once you're able to generate the information to support the hypothesis, then you will get there. In the past, we didn't have that we are getting that now. If you have the follow-up phone call if you do this do that, then the chances are they will not be readmitted to your hospital." According to Participant 10, "best practices change so often that physicians are getting into the habit of referring to books for every case." Participant 10 explained that "this process is turning out newer physicians into robots on an assembly line."

Emergent Theme 8

The eighth theme that emerged was workload difficulty or changing how we operate. Emergent Theme 8 emerged from the data analysis of the semi-structured interview question; what are your perspectives toward how changing evidence-based measures or clinical guidelines are impacting your employees? Eight of the twelve (67%) interviewees attributed workload difficulty or changing our operational flow toward how changing evidence-based measures, or clinical guidelines are impacting your employees. Participant 3 discussed the need for having a "proactive approach toward looking after the patient and preventative measures." Participant 3 stated, "It's impacting our employees because they are doing more and more that they haven't done in the past." Participant 4 indicated "We are working toward more and more working toward the top end our knowledge, education, and certification. And we have to to survive. We have people that are having to be stretched in their roles to be able to reach these measures."

Participant 7 explained that "most rural facilities most folks have 2 or 3 or 4 jobs, so it's not uncommon for someone to do multiple roles." Participant 7 stated "so if you have these unfunded mandates that keep rolling out that we have to meet and be compliant by a certain date. If they are capital intensive like facility upgrades or EMR upgrades, there may not be enough cash in the bank to fund it." Participant 11 discussed the administrative burden that implementing evidence-based practices causes on a daily basis. Participant 11 stated, "in some ways, evidence-based guidelines has hurt clinical judgment."

Table 6

Interview Question 3 Data

Codes	Themes	Total number of occurrences	Number of occurrence with president/c-suite	Number of occurrence with VP's or director
Service lines	Closing service	5 (42%)	4	1
outpatient	lines or moving	4 (33%)	1	4
	services to outpatient			
Increased cost	New rules and the	4 (33%)	1	3
Rapid changes	cost of providing	10 (83%)	4	6
Pay for performance	care exceeding reimbursement	2 (17%)	1	1
Payer mix	Decreased	4 (33%)	2	2
Medicare/caid	reimbursement or	6 (50%)	2	4
Cost to patient	poor payer mix	2 (17%)	0	2
Reimbursement		5 (42%)	1	4

Table 7

Interview Question 3 by Region

Codes	Themes	Number of occurrences in Region 1	Number of occurrence in Region 2	Number of occurrence in Region 3
Service lines outpatient	Closing service lines or moving services to outpatient	1 2	1 1	3 1
Increased cost Rapid changes Pay for performance	New rules and the cost of providing care exceeding reimbursement	0 4 1	1 3 0	3 3 1
Payer mix Medicare/caid Cost to patient Reimbursement	Decreased reimbursement or poor payer mix	0 0 1 4	1 3 1 1	3 3 0 0

Emergent Theme 9

The ninth theme that emerged was closing service lines or moving services to outpatientEmergent Theme 9 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Nine of the twelve (75%) interviewees attributed the closing of service lines or moving services to outpatient as primary contributors to how reimbursement changes are impacting the operations of your organization the most. According to participant 1 “our healthcare model in this country is not a sustainable model.” Participant 1 stated, “the reimbursement that we are seeing is forcing us to create a sustainable model of care.” Participant 2 explained, “the future of

rural healthcare is only being able to sustain an emergency department and primary care clinics." Participant 2 stated "in rural areas, people will have to travel to get more tertiary things. That will not be any different than any other service in rural areas. You need a certain population base to be able to support highly specialized things."

According to participant 7, "Re-statusing from inpatient to observation is a revenue reduction situation for a rural hospital." Participant 8 stated "you've got a change in status in patients, inpatients to observation, inpatient procedures to outpatient procedures. All those things are driving down revenue." Participant 9 stated "a year ago we made the hard decision to close a swing bed program (SNF) because it was losing more than 300,000 a year. When we did the analysis, we would not be able to break even on it. It goes back to your core business. You had to give up on this one service line, and a few people lost their jobs. If you continue to have that, then it could continue to erode this hospital. To keep more things open we had to make this decision to close one thing. I think you already see this with the Cleveland Clinic, others you have to pick your core things your good at you can't be good at everything."

Participant 10 discussed the huge shift toward outpatient care. Participant 10 stated "Not all hospitals have adapted to this new model. The systems that are doing well have adopted this. And adapt and built their workforce toward shorter stays, quicker TATA, same day visits for things that used to be four days. Cost structure needs to reflect what you want to become."

Emergent Theme 10

The tenth theme that emerged was the new rules and the cost of providing care exceeding reimbursement. Emergent Theme 10 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? All twelve (100%) interviewees attributed new rules and the cost of providing care exceeding reimbursement as primary contributors to how reimbursement changes are impacting the operations of your organization the most. Participant 1 explained how "reimbursement changes are causing hospital systems to evaluate how we provide care." Participant 1 state "There is no one model. Some are value-based, some are capitated, and some are a fee for service. It forces organizations to talk about the things that we do not like talking about in this country." Participant 2 discussed rationing or providing appropriate care, necessary care to our patient population, affordable care. Participant 3 described the need to move toward pay for performance in all hospitals. Participant 4 stated, "there are more and more rules that we have to follow, and less reimbursement for the added work."

According to participant 5 "the tremendous change from fee for service Medicare to Medicare advantage programs and risk-bearing contracts." Participant 5 further stated, "denials have gone up based on the recent changes for reimbursement." Participant 6 explained the "challenging transition of managing while moving toward the integration of an integrated delivery system with one medical record system." Participant 6 stated "this will help that as we move toward taking a risk on our senior citizen patients and providing the best quality care at the lowest possible costs for them. It will also help get

some dollars up front to invest in home-based therapy's and other outpatient kinds of activities to keep folks well as opposed to treating them while they are sick." Participant 7 discussed the issues of lacking a strong lobby for rural hospitals. Participant 7 explained "Rural hospital lack money to invest in the rural lobby. The rural hospital may invest a couple of hundred dollars in the rural lobby that is a pittance to the 100 million that pharmacology companies have to invest."

Participant 8 discussed the challenges with buying power while trying to buy drugs or other supplies. Participant 8 stated "we have GPO's and things but it is not as strong and sophistication what big companies have hospitals have to buy sometimes thousands and thousands of items. You have to benchmark, and price manages thousands and thousands of items. This takes a lot of sophistication, and there are not a lot of resources within the rural hospitals. We have a hard time at our organization. We pay 35 dollars for a 12 pack of batteries when you can go to home depot and buy them for 10. So, if we can't figure it out can you imagine how hard it is for rural hospitals?"

Emergent Theme 11

The eleventh theme that emerged was decreased reimbursement or poor payer mix. Emergent Theme 11 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? All twelve (100%) interviewees attributed decreased reimbursement or poor payer mix as primary contributors to how reimbursement changes are impacting the operations of your organization the most. Participant 1 explained how "drops in reimbursement are causing us to evaluate how we

are providing care." According to Participant 2, "Reimbursement as a whole we continue to see that go down dramatically." Participant 2 stated "Insurance companies pay less and less for things. Our net revenue has dropped per patient quite a bit. Some are denial related; some are other things. I really wish we could focus one way or another if we could get contracts for per member per month. At least you would know. At least you have to meet that. The way healthcare is, the more and more of the costs are being pushed to the patient. The patient is not used to paying as much. So, we are getting more and more bad debt. Patients are not used to paying their deductibles and paying anything on the front end. This is a shift for our patients. It's hard to collect on these things. The more that this happens and the more that we move toward things like HAS's."

Participant 3 stated, "I think it will be harder and harder for us." Participant 4 explained that "Medicaid and Medicare haven't been as much of a problem as our insurance payers. At first, with Obamacare, we were told that Medicare would be paying for everything. But it does not seem as if that will ever happen." Participant 5 noted that "the long-term change that will impact all healthcare providers is the movement toward Medicare advantage and risk-bearing contracts." Participant 6 explained that "rural hospitals have the worst payer mix." Participant 6 stated "Wall street journal said Rural America has now overtaken urban project America in terms of unhealthy, worst life expectancy and lifestyle in the nation. It used to be intercity as worst things. Now it's rural America. Partly because of methamphetamines and opioid. But a big part is because of the closing of so many rural hospitals and outward migration of almost every professional to the city. A lot of the movement away that has impacted the payer mix."

Participant 7 discussed the lack of reimbursement for uninsured that would have been covered if Texas would have expanded to Medicaid. Participant 7 stated "So, Texas not doing this the district project which is pennies. You're lucky if you get a half million dollar project. If you lose 5 million dollars in revenue and you get a half a million from a project, it's not a good trade-off. There is a lot of a lack of understanding of the rural environment. A lot of those safety net revenue sources are drying up for rural hospitals. It is an issue for urban hospitals, but it is the lifeblood of rural hospitals."

Participant 8 discussed the changes in rural hospitals around the EDs, outpatient clinics, and outpatient imaging and how reimbursement rates have dropped significantly. Participant 8 stated, "there is downward pressure on Medicaid and Medicare reimbursement which ultimately drive the revenue for most rural hospitals." Participant 9 explained how" the reimbursement decline is happening faster than we can respond with expense management." Participant 9 stated "If the decline is 25% you probably cannot make up 25% dollar for dollar as fast. That's where we have to have a sustainable model of cost avoidance as much as possible. Like the analogy with losing weight. It's a lot easier to lose the weight than to keep it off. You can return to your bad habits. We could fire a lot of people, but eventually, we will need those people back. So what process can you put in place so that it eventually becomes part of your DNA that we always just do A, B, and C. And because you do A, B, and C, then this happens from a reimbursement standpoint, and then this happens from a quality standpoint."

Participant 10 stated "So, the affordable care act came out hospitals decided to take less money but then when they did not expand to all those that did not have

insurance. Meaning the Supreme Court allowed the States to make a decision was a double-dip whammy we got less money from the government governmental payers Medicaid/Medicare, and then, those that don't have insurance or a means to pay still don't have insurance. So your poor payers (Medicaid/Medicare) become poorer, and those that didn't have means still don't have means. Those like you and me are not going to continue to have year over year increases in our healthcare premiums make up for the other two buckets. We have got to do something to be able to generate revenue. I still want to have the access and high quality but how do you take my costs down. I think that's with alignment and eventually just like the airline industry or the pharmacies you're going to get down to 4 or 5 10 top healthcare systems."

Participant 11 discussed the downturn in Medicare reimbursement. Participant 11 stated "We have an older population, as they continue to cut Medicare reimbursement it is making it harder to stay in the black. Medicare seems to be a constant piggybank for some systems. Affordable care was supposed to issue so many more people by Medicaid. Texas never opened up Medicaid, so we only took the cut. Most hospitals systems are seeing the same issues. If you have an ED, then you will see a larger amount of uninsured populations. BCBS negotiations are easier for larger systems. Small hospital systems have no leverage when negotiating with Blue Cross. All the resources will be going to larger systems and making it more and more difficult."

Table 8

Interview Question 4 Data

Codes	Themes	Total number of occurrences	Number of occurrence with president/c-suite	Number of occurrence with VP's or director
Over bedded	Over bedded or declined need	5 (42%)	0	5
Under bedded	Under bedded or growth	3 (25%)	3	0
Outpatient	Movement toward Outpatient	10 (83%)	4	6
Technology	Advances in technology, restructuring beds	7 (58%)	3	4
Restructure		7 (58%)	3	4

Table 9

Interview Question 4 by Region

Codes	Themes	Number of occurrences in Region 1	Number of occurrence in Region 2	Number of occurrence in Region 3
Over bedded	Over bedded or declined need	2	2	1
Under bedded	Under bedded or growth	1	1	1
Outpatient	Movement toward Outpatient	3	3	4
Technology		2	1	4
Restructure		2	2	3

	Advances in technology, restructuring beds

Emergent Theme 12

The twelth theme that emerged was over bedded hospitals or declined need for beds. Emergent Theme 12 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Five of the twelve (42%) interviewees attributed over bedded hospitals or declined need for beds as toward their perspectives on the need for inpatient hospital beds in the future. Participant 4 stated "it seems like we will need fewer beds because we will do a better job keeping everyone out of the hospital. We are doing better already. The more that we do preventatively. The more we can get pts in and improve access and follow up on patients that have been in the hospital, and we are actively managing that patient the ability to keep them out increases."

Participant 7 stated "I don't think any rural hospitals in Texas will be full any time soon. Most of them have 20-30 beds and stay 20-30% full." Participant 8 explained that "rural hospitals would not be able to hire the staff or physicians to cover that many beds." Participant 10 implied that inpatient hospital bed utilization should decrease substantially. Participant 10 stated "We are over-bedded in most communities. In the past, we have admitted more patients because of the increased reimbursement. Now as things are changes with reimbursement, the needs to beds were always overstated. (Midnight rule came into effect) There is a lot of hospitals currently running at 50%

capacity. We should see a contraction of hospital beds. Currently, we are building smaller sized (25, 30) bed hospitals. Focusing on outpatient, transferring the cases that require higher levels of care."

Emergent Theme 13

The thirteenth theme that emerged was under bedded hospitals or area growth in covered lives. Emergent Theme 13 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Three of the twelve (25%) interviewees attributed under-bedded hospitals or area growth toward their perspectives on the need for inpatient hospital beds in the future. Participant 1 stated "In the foreseeable future I think we will need as many hospital beds. Unless we stop doing the procedures that we are doing. And I believe that as we advance in technology and medicine will require the same number of beds and as we push things to outpatients. The wildcard in this is anyone going to pay for it. If they stop paying for it or come up with a process in who gets what, then that will reduce the demand, and that will reduce the need for inpatient beds." Participant 3 explained "We have the baby boomers now. They need more and more care. With that type of population, how do you keep that many people out of the hospital?"

Participant 5 stated "I think just because the number of Medicare recipients will grow by 50 percent in the next 15 years and that next cadre of folks whose going to continue to age and need services there will continue to be upward pressure on the need for hospital beds. If there 50 percent more people that are over 65. It's hard to imagine

how to will keep the need for hospital beds flat. It doesn't mean we need 50 percent more hospital beds because we will hopefully be keeping more out." Participant 9 explained "That's a catch 22. If you believe the statistics, they say that 1240 people are going to move to Texas every day for the next five years. 70 percent are going to live between Dallas, San Antonio, and Houston; within that triangle. So there will be a need. If you're in a growth market and you're managing your efficiencies appropriately, then there is going to be a need for hospital beds."

Emergent Theme 14

The fourteenth theme that emerged was the movement from long inpatient procedures to outpatient procedures. Emergent Theme 14 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Ten of the twelve (83%) interviewees attributed the movement from long inpatient procedures to outpatient procedures toward affecting the need for inpatient hospital beds in the future. Participant 2 stated "We are doing a better job proactively. You will start to see that impacting the admission rates. We are keeping them fewer and fewer days. You did not see that ten years ago. The things that we are now doing in an outpatient setting to manage disease should cut down on how many people are admitted to the hospital." According to Participant 8, "to make your revenue goal with all the changes moving inpatient procedures to outpatient procedures, you're going to have to find a way to supplant the lost revenue, or it's going to be the same situation as the urban and suburban areas."

Emergent Theme 15

The fifteenth theme that emerged was the advances in technology and restructuring bed usage. Emergent Theme 15 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Ten of the twelve (83%) interviewees attributed advancements in technology and the restructuring of the usage of beds toward affecting the need for inpatient hospital beds in the future. Participant 1 stated "The things that patients are in hospitals, for the most part, cannot be done at home. We will always see advancement in technology for things that are currently being done in inpatient will be done in outpatient, but at the same advancement, we will be able to do new things that we cannot do right now. We always create new ways to take care of people that in the past we could not. So we will identify new ways of addressing diseases that will require inpatient beds." Participant 2 noted that "some hospitals had been built substantially over-bedded, and because of that, the beds are having to be redeployed for other purposes than traditional inpatient medicine."

Participant 6 stated, "I could see the future of rural healthcare as being around good diagnostic imaging, testing a strong outpatient clinic presence 24-hour emergency room to handle emergencies and some short stay observation work." Participant 7 explained "I see there are opportunities and challenges around operations. We have things like swing beds and moving from LTAC to inpatient. There are so many regulations now that make innovation challenging. You also don't have the sophistication in the rural hospitals that you do in other places." Participant 8 stated that "the only

reason why a rural hospital has to hold on to a really sick patient or to have inpatients to speak of is 1) there is a requirement for their license or status, or 2) it's a high dollar case." Participant 9 specified "there will be a balance between technology and medicine. The things that used to be in the hospital will be on an outpatient basis. So to answer your question, I think the need for hospital beds will slow, but I think that it will be marketed dependent. Meaning at times, you will need more beds. I think that here we will need more beds."

Table 10

Interview Question 5 Data

Codes	Themes	Total number of occurrences	Number of occurrence with President/C-Suite	Number of occurrence with VP's or Director
Good	Measuring quality is good	5 (42%)	2	3
Not relatable	Current quality metrics are not relatable	8 (67%)	4	4
Change	Measuring quality is turning into forced change	7 (58%)	0	7
Low incentive	Low or no incentive to measure quality	9 (75%)	3	6

Table 11

Interview Question 5 by Region

Codes	Themes	Number of occurrences in Temple	Number of occurrence in College Station	Number of occurrence in Marble Falls

Good	Measuring quality is good	2	1	2
Not relatable	Current quality metrics are not relatable	3	2	3
Change	Measuring quality is turning into forced change	4	1	2
Low incentive	Low or no incentive to measure quality	2	4	3

Emergent Theme 16

The sixteenth theme that emerged was measuring quality is good. Emergent Theme 16 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the move toward measuring quality and these incentives impacting upon your employees? Five of the twelve (42%) interviewees described measuring quality and the incentives that are impacting their employees as being a good or positive. Participant 1 stated "Having quality measure and incentivizing quality is a good thing. Many times people in general when they are uniquely metric driven, they may reach the letter of the law without hitting the spirit of the law. They may get to the outcome without actually enhancing what the intent was. Improving the patients' lives. An example would be as a quality metric in the ER door to doc time, the intent is for us to see the patient, dx them, get better outcomes. The intent is not that one quality metric. Many times we forget what the ultimate outcome is. We are measuring steps in the process and not also the final outcome. If the quality metrics are set up correctly, then the employees will embrace it, and welcome it and support it and the result will be engagement in the work."

Participant 5 stated "I think anything we do that makes thing better for our patients is what we need to be focusing on. Our employees will certainly rally around trying to do the right things for our patients." Participant 6 explained, "I think our folks will embrace whatever we must to do to deliver better outcomes for our patients." Participant 8 stated "we all want to provide the high-quality care I don't think anyone wants to do a poor quality job. To the extent of how you can understand and impact metrics and get staff and providers engaged that why many of us got into the industry and really got into doing the things, we are doing. I think everyone, in general, would agree that we want to provide high-quality care." Participant 10 stated "Having an approach that incorporates quality is always a good thing."

Emergent Theme 17

The seventeenth theme that emerged was current quality metrics are not relatable. Emergent Theme 17 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the move toward measuring quality and these incentives impacting upon your employees? Eight of the twelve (67%) interviewees described measuring quality and the incentives that are impacting their employees as not being relatable to staff. Participant 3 stated, "For our patient's sake, we have to do a better job focusing on measuring quality measures."

Participant 9 explained "the issues with making quality metrics applicable to all staff." Participant 9 stated "Readmission rate does not mean a lot to me as a staff RN. So, then you have to take it back to your huddle board with a statement that they can impact. Maybe to get out of bed twice a day, this helps with ambulatory. So you have to tie the

goal back to something that is meaningful to them that you can connect the dots to drive the quality." Participant 11 stated "If quality metrics were kept consistent, they would be more impactful. We are constantly changing them. People are tired of it. Every year we are changing it. It creates burnout. Our RNs and staff have always given high-quality care. The constant changes in measures are making quality measures a disincentive. A lot of staff are becoming tuned out from it."

Emergent Theme 18

The eighteenth theme that emerged was measring quality is turning into forced change. Emergent Theme 18 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the move toward measuring quality and these incentives impacting upon your employees? Seven of the twelve (58%) interviewees described measuring quality and the incentives that are impacting their employees as turning into forced change for the hospitals or employees. Participant 4 stated "The days of reacting toward pts illness I think we should be over with. We need to be more proactive in taking care of our patient's needs. And the things and be more proactive in treating and preventing their diseases instead of reacting. How that affects our employees. We are no longer able to be fat and happy with the productivity side of things. It has increased the workload for our employees quite a bit to be proactive and help our patients and prevent disease, and better treat them."

Participant 5 expounded on the need to be more proactive. Participant 5 stated "We have to do more work on front end and back end of the visit like phone calls to better treat our patients. There is a lot more work for our CMAs to do now than five years

ago. Back then CMAs would put pts in the room do vitals and go to the next. Now they spend hours making sure that every patient for the next day has everything they need. Chart view, phone calls. When they get into the room, they now have history, medication checks, a lot more than they used to do. We need more staff to do all these things. If you get paid for performance, how do you incentivize the employee?"

Participant 8 stated "There is an external expectation from those that cut the checks, CMS and payers and things. Our things are they all have their own deal. One set of CMS measures, one set of Humana measures, BCBS. There are similarities, but there are differences. You have to decide which rabbit to chase. Most people choose the CSM rabbit because it's the biggest and there are a lot of similarities between them and what the payers expect." Participant 11 stated "Everyone is weighing the cost of benefits, so we are trying to go after this amount of revenue, and we have to do all things, but they are cutting the pool every year. Reduced, reduced, and reduced! Eventually, we will get to the point where it is not worth the money or effort to do it. Just say forget it, it's not worth my time or effort. And we will not get the benefit." Participant 13 stated, "How ironic you have these situations where we require you to do these things it's going to take more time, resources and effort and by the way, we are going to pay you less to do it."

Emergent Theme 19

The nineteenth theme that emerged was low or no incentives to measure quality. Emergent Theme 19 emerged from the data analysis of the semi-structured interview question; what are your perspectives on the move toward measuring quality and these incentives impacting upon your employees? Nine of the twelve (75%) interviewees

described measuring quality and the incentives that are impacting their employees as having low or no incentive. Participant 7 discussed the huge amount of quality metrics, the expectation, and unfunded mandates. Participant 7 stated, "A lot of these are internally imposed by our organization (for a good reason), but they are still internally imposed." Participant 7 also stated "eventually people are going to look at other revenue sources to supplant their revenue and see what is paying well. How are we going to do that with all the unfunded mandates?"

Participant 9 stated "On my performance evaluation with my staff, quality has to be a part of it. If quality is not part of it, then it will not be important to them. From a big picture standpoint, we give up money to be in these quality programs. To be Medicare value-based purchasing. We have to make sure to use a poker analogy. Not only to win our Anny back we have to win the poker game and get money from someone else. And for our organization, it would be millions of dollars. If we were in the top tenth percentile for quality metrics across the boards, it would be millions of dollars we would add to our bottom line."

Summary

In chapter 4, I discussed the research setting, demographics, data collection, and data analysis, evidence of trustworthiness, transferability, dependability, confirmability, and emergent themes of the study. The data for the emergent themes resulted from the 12 interview responses received from the healthcare leaders interviewed for the study. The participants provided information to address the research question relating to leaders perceptions of operational performance levels and financial problems that may be

impacting hospitals in the state of Texas? Participant responses were hand-coded based on their responses. The coded responses were then categorized into themes. Codes that appear less than three times were not considered a theme. Chapter 5 includes the interpretation of the research findings, limitation of the study, recommendations, and implications for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Leaders of 57 of the 2224 rural hospitals in the United States filed for bankruptcy since 2010 (Demko, 2015; Ivantage, 2013). The purpose of this qualitative exploratory multiple case study was to gain a common understanding of financial problems and operational inefficiencies that may be impacting rural hospital leaders in the state of Texas. The study involved a purposive sample of 12 research participants from three different areas of Texas.

A qualitative multiple case study design was most fitting for this study to collect robust data and, as a result, increase credibility (see Stake, 2013). To establish adequate generalizations, I purposely sampled four executives from each of three different rural hospitals in the state of Texas. I used open-ended questions in semi-structured interviews to gain an in-depth understanding of the influence of stakeholders in promoting operational sustainability. To achieve a multiple case study perspective, each of the three facilities was considered its own case study, then I combined the collective data for reporting the common understandings and themes generated from all interviewed leaders. I interviewed the president, chief medical officer, chief operations officer, and an executive

Interpretation of Findings

During data analysis I identified numerous themes in the semi-structured interview and document review data. I matched these themes with those in the literature reviewed in Chapter 2 to determine if there was a scholarly consensus regarding the

findings. The following is the presentation of study findings as confirmed by the literature review and conceptual framework.

Research Question

What are leader's perceptions of operational performance levels and financial problems that may be impacting hospitals in the state of Texas?

Emergent Theme 1

The first significant theme from an analysis and interpretation of the data collected from the semi-structured interview question was that poor payer mix and uninsured populations cause financial strain. Eleven of the 12 (92%) interviewees attributed having a poor payer mix or increased percentage of uninsured patients as the driving forces negatively impacting financial viability of hospitals in Texas. The first major theme supported Adams' (2017) findings. Adams (2017) discovered that statutory differences in payment structures and lower patient volumes mean that most rural hospitals are not subject to payment incentives from current mandatory hospital-based delivery system reform programs.

According to the findings of the study, the sudden shift in payer mix and increased uninsured populations in rural areas of Texas have been one of the most significant contributors to financial strain. These findings are consistent with Wishner and Solleveld's (2016) summary rural hospital closures. In their review of hospital closures Wishner and Solleveld, found that a high uninsured rate and a payer mix dominated by Medicare and Medicaid were primary contributors to closures in rural hospitals. Friedman, Owen, and Perez (2016) linked hospital closures to the Medicaid

expansion by using a regression model highlighting that states that expanded Medicaid were 2.2% more likely to close than hospitals in states that did not expand. According to the participants of the study, Texas was not a state that expanded Medicaid.

Emergent Theme 2

The second major theme was that costs are too high to provide service. This theme resulted from an analysis and interpretation of the data collected from the semi-structured interview question, "What do you view are the driving forces toward financial viability of hospitals in TX?" Six of the 12 (50%) interviewees attributed high costs, inflation, and low patient volumes as the forces negatively impacting the financial viability of hospitals in Texas. One participant noted, "To be able to survive, we must drive down costs. We must be able to cut costs and still be able to produce what we need to produce with the same quality." According to Emanuel (2016), $3.2 trillion was spent on healthcare in the United States in 2015, and over half of the money spent was considered waste from poor processes, defensive medicine, and medical fraud.

Study participants highlighted rural hospitals' inability to afford the right specialized care or to keep low-volume work streams open. This type of variability supports the system thinking methodology that seeks to visualize and unite systems and variables between systems (Meadows, 2004; Senge, 2012; Von Bertalanffy, 1968). According to system dynamics professionals, organizational failure is often associated with limited cognitive skills and capabilities of leaders compared to the complexity of the system they are intended to manage (Beck et al. 2015; Forrester, 1961).

Emergent Theme 3

The third major theme was variability and poor processes. The third major theme resulted from an analysis and interpretation of the data collected from the semi-structured interview question; what do you view are the driving forces toward financial viability of hospitals in TX? Nine of the 12 (75%) interviewees attributed variability and poor processes toward the driving forces of the financial viability of hospitals in Texas. The third major theme supports findings by Harms & Credé (2010). Harms & Credé (2010) pointed out that for transformational leadership to be established, leaders must act as mentors to their followers by encouraging learning, achievement, and individual development.

The actual merging of emotional intelligence with transformational intelligence allows leaders to inspire subordinates to improve process output while also improving morale (Harms & Credé, 2010). The increased morale stems from the decreased amount of non-value added activity that is currently being performed (Hoeft, 2014). The dynamic complexity of healthcare is so intertwined with interlinking processes and systems that many healthcare leaders are unable to separate many aspects of their system. This complexity has been seen as an unavoidable component of healthcare for many years (Mutale et al. (2015).

Emergent Theme 4

The fourth major theme was the shift toward pay for performance or continuum of care. This theme resulted from an analysis and interpretation of the data collected from the semi-structured interview question; what do you view are the driving forces toward

financial viability of hospitals in TX? Six of the 12 (50%) interviewees attributed shifting toward pay for performance or continuum of care toward the driving forces of the financial viability of hospitals in Texas. One participant explained the hospital business as being "fragile because of the lack of responsibility for well care." Another participant stated, "we think value-based contracts are going to grab hold in 2019 so we have to prepare our platform so that we are ready." Elshaug et al. (2017), concluded from their study of medical utilization that system-level factors such as the allocation of resources and medical overuse policies are the primary misled actions in healthcare today. Fearis and Petrie (2017) suggested that if leaders are not aware of the changes in best practices, how to properly motivate employees, and improvements in technology innovation, keeping up with the increased challenges will continue to plague hospital systems. Changes in policies such as the Patient Protection and Affordable care act has put an increased strain on the understanding of successful leadership strategies in rural healthcare (Allen et al. 2013).

Emergent Theme 5

The fifth major theme was that rural hospital leaders had a positive outlook toward evidence-based measures. This theme emerged from analysis of participant responses to the semi-structured interview question, "What are your perspectives toward how changing evidence-based measures or clinical guidelines are impacting your employees?" Nine of the 12 (75%) interviewees explained the shift toward evidence-based measures as being positive for their organizations. Participant responses included "they are easy to follow and understand" and "moving toward pay for performance type

quality measures are necessary and good for healthcare." Another participant noted that "because healthcare employees are generally data-driven, change with supporting evidence is easy to obtain." This data is consistent with findings from Karash (2017) that showed many of the current innovations that have been considered easy to spread include the sharing of evidence-based practices, or new best operational practices.

Emergent Theme 6:

The sixth major theme was negative outlook toward evidence-based measures. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives toward how changing evidence-based measures or clinical guidelines are impacting your employees? Three of the 12 (25%) interviewees explained the shift toward measuring evidence-based measures as being negative for their organization. One participant noted that "implementing evidence-based measures are coming across as unfunded mandates." Another participant stated, "As things get more and more complicated and you lose your talent pool, mandated change becomes more of a risk than a reward." Karash (2017) contended that innovations in healthcare may be barriers in themselves. Since people are resistant to change, the idea of many hospitals around the country implementing changes at the same time makes innovation easier to accept. For instance, if a hospital makes an improvement that improves 30-day readmissions or lowers rates of nosocomial infections, then other hospitals are much more apt to review changes in operations.

Emergent Theme 7

The seventh major theme was inconsistency and lack of empirical results. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives toward how changing evidence-based measures or clinical guidelines are impacting your employees? Three of the 12 (25%) interviewees attributed inconsistency in the rollout of evidence-based change or lack of empirical results to how changing evidence-based measures, or clinical guidelines, are impacting your employees. A participant noted "the widespread freelance practice of medicine based on each physician's preference instead of consistently followed best practices." This theme confirmed findings from Spehar et al. (2017) that showed physicians as being the last members of care teams to embrace new methods for delivering care to patients. Since leaders are put in a position of social power, having leaders who have experienced doing the work of the physicians they lead can help establish the potential need for change (Chiu, Balkundi, & Weinberg, 2017; Detsky & Gropper, 2016).

Emergent Theme 8

The eighth major theme was workload difficulty or procrastination of change. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives toward how changing evidence-based measures or clinical guidelines are impacting your employees? Eight of the 12 (67%) interviewees attributed workload difficulty or changing operational flow to how changing evidence-based measures or clinical guidelines are impacting employees. One participant noted, "It's impacting our employees because they are doing more and more that they haven't done in

the past." Another stated, "We have people that are having to be stretched in their roles to be able to reach these measures." The findings behind this theme support the diffusion of innovation theory I discuss in Chapter 2 (see Rogers 2010). According to Rogers (2010), the diffusion of innovation theory refers to the explanation of how over time an idea or product gains momentum and spreads through an organization or entire population. This spread is essentially the process of understanding how an idea is communicated through perceived information.

Emergent Theme 9

The ninth major theme was closing service lines or moving services to outpatient. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Nine of the 12 (75%) interviewees attributed the closing of service lines or moving services to outpatient as primary contributors to how reimbursement changes are impacting the operations of your organization the most. According to one participant "our healthcare model in this country is not a sustainable model." Another participant stated "a year ago we made the hard decision to close a swing bed program (SNF) because it was losing more than 300,000 a year. When we did the analysis, we would not be able to break even on it." Aslani and Naaranoja (2015) described in their review of systematic-qualitative research of primary healthcare centers that the innovation process in the healthcare sector is condemned to failure because of the complexity of healthcare financial operations. One participant of the study stated that

"the systems that have done well have adapted and built their workforce toward shorter stays, quicker TATA, same day visits for things that used to be four days."

Emergent Theme 10

The tenth major theme was new rules and the cost of providing care exceeding reimbursement. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? All 12 (100%) interviewees attributed new rules and the cost of providing care exceeding reimbursement as primary contributors to how reimbursement changes are impacting the operations of your organization the most. This theme aligns well with Hoeft's (2015) research on waste removal that was discussed in chapter two. Steve Hoeft's the power of ideas in healthcare (2015), explains how the empowerment of frontline staff and the use of tools such as huddle boards and waste walks can visualize or even remove the waste that is affecting each department. This process potentially improves the practices of the department and the experiences of the patients. According to research performed by Emanuel (2016), 3.2 trillion dollars was spent on healthcare in the United States last year, and over half of the money spent was considered waste from poor processes, defensive medicine, and medical fraud.

Emergent Theme 11

The eleventh major theme was decreased reimbursement or poor payer mix. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your

organization the most? All 12 (100%) interviewees attributed decreased reimbursement or poor payer mix as primary contributors to how reimbursement changes are impacting the operations of your organization the most. These findings aligned with Moy's (2017) managed care mortality study that from 1999 to 2014 the average occupancy rate for rural hospitals was 46% compared to 65% in urban hospitals. Rural hospitals also have a predominantly public payer mix, higher levels of uninsured patients, and uncompensated care costs (NHIS 2016). Baker, Bundorf, Devlin, and Kessler (2016) found in their quantitative review of hospital reimbursement since the initiation of the Affordable Care Act that new advanced Medicare programs are reimbursing hospitals an average of twelve percent less per visit and much less for paid insurance programs.

Emergent Theme 12

The twelfth major theme was over bedded hospitals or declined need for beds. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Five of the 12 (42%) interviewees attributed to bedded hospitals or declined need for beds as toward their perspectives on the need for inpatient hospital beds in the future. This theme is supported by findings from Mullner, Rydman, and Whiteis, (1990) that predicted that if rural hospitals that were not part of large systems would soon all disappear. According to Allen at al. (2013), for a rural provider to survive, they must find a way to get affiliated with a larger, regional facility. Holmes, Slifkin, Randolph & Poley (2006) estimated from their consolidation of data from the American Hospital Association and OIG reports that by 2005 40% of rural

hospitals in the United States will have been forced to convert to Critical Access Hospital (CAH) status due to financial strain.

Emergent Theme 13

The thirteenth major theme was under bedded hospitals or area growth. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Three of the 12 (25%) interviewees attributed under-bedded hospitals or area growth toward their perspectives on the need for inpatient hospital beds in the future. This theme is congruent with research from Song and Ferris (2017) that found that by 2060, the total number of U.S. seniors aged 65 and older will have doubled to 100 million. Song and Ferris (2017) argued that the decreases in length of stay and improvements in technology will outweigh the large increase in elderly patients. Many urban hospitals have seen increases in patient volumes over the last decade due to the dramatic decrease rural hospitals have seen due to programs or incentives that rural hospitals are unable to counter (Kaufman et al. 2016; Thomas, Holmes, & Pink, 2016).

Emergent Theme 14

The fourteenth major theme was the movement from long inpatient procedures to outpatient procedures. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Ten of the 12 (83%) interviewees attributed the movement from long inpatient procedures to outpatient procedures toward affecting the need for inpatient hospital beds in the future. According

to one participant, “to make your revenue goal with all the changes moving inpatient procedures to outpatient procedures, you’re going to have to find a way to supplant the lost revenue.” Another participant stated “some cases that used to be big long hospital stays and large revenue generators are now being done in a few hours on an outpatient basis.”, This theme is supported by findings from Berend, Lombardi, Berend, Adams, and Morris (2018) that explained hip, knee, and shoulder arthroplasty as now being safely performed as outpatient procedures, just by implementing surgical and protocol refinements. According to the authors, these procedures were in the past, long hospital inpatient stays.

Emergent Theme 15

The fifteenth major theme was advances in technology and restructuring bed usage. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Ten of the 12 (83%) interviewees attributed advancements in technology and the restructuring of the usage of beds toward affecting the need for inpatient hospital beds in the future. One participant notes “We always create new ways to take care of people that in the past we could not. So we will identify new ways of addressing diseases that will require inpatient beds.” Another stated “I think the need for hospital beds will slow, but I think that it will be marketed dependent. Meaning at times, you will need more beds. I think that here we will need more beds.”

This theme is consistent with Meadow (2008) system thinking designs. Meadows (2008) recognized in her analysis of system thinking designs that thinking in systems is

the ability to change thinking from the visualization of individual parts or silos to understanding the sum of all the parts, silos, and intangibles as the same system. This unique ability of understanding of how non-cell values such as communication play within the organization and keeping multidepartment employees working on the same goals and vision allows companies to create synergistic flow within the organization. In the healthcare environment, skills and knowledge are continuously outdated due to advances in technology and medical science (Khosravi, Sharifi, Fayaz-Bakhsh, & Hosseini, 2016). The dynamic process of organizational learning enables organizations to be able to improve the progression of both technology and medical sciences continuously.

Emergent Theme 16

The sixteenth major theme was measuring quality is good for our organization and employees. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the move toward measuring quality and these incentives impacting upon your employees? Five of the 12 (42%) interviewees described measuring quality and the incentives that are impacting their employees as being a good or positive. One participant noted "many times people reach the letter of the law without hitting the spirit of the law. They may get to the outcome without actually enhancing what the intent was. Improving the patients' lives." Another participant noted, "measuring quality is great for our organization and employees, the key is knowing which key indicator to try to improve and when to move on to another." This theme is supported by Watkins and Marsick's framework for becoming a learning organization

(1993). According to Watkins, and Marisick (1993), organizations must be able to shift intertwining learning into the everyday practice of their work experience. According to Revans (1980), for an organization to survive, the rate of learning within the company must be higher than the rate of change of the external environment.

Emergent Theme 17

The seventeenth major theme was current quality metrics are not relatable to staff. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the move toward measuring quality and these incentives impacting upon your employees? Eight of the 12 (67%) interviewees described measuring quality and the incentives that are impacting their employees as not being relatable to staff. One participant explained how forced metrics from leadership are sometimes not relatable to staff. Another participant stated "Readmission rate does not mean a lot to me as a staff RN. So, I'm required to take it back to my huddle board with a metric that can impact Readmissions. Maybe it's to get my patient out of bed twice a day; this helps with ambulatory."

According to Marshall and Broome (2016), transformational leadership in healthcare is a new viewpoint and context for all leadership activities. Frontline employees are empowered to facilitate change when the coalescence of need, passion, and opportunity are present. Wihler, Meurs, Wiesmann, Troll, and Blickle, (2017) found by studying behaviors of 247 nurse supervisors that by maximizing corporate aspects of extraversion, social competency, and climate for the initiative, hospitals can dramatically increase adaptive performance.

Emergent Theme 18

The eighteenth major theme was measuring quality is turning into forced change. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the move toward measuring quality and these incentives impacting upon your employees? Seven of the 12 (58%) interviewees described measuring quality and the incentives that are impacting their employees as turning into forced change for the hospitals or employees. One participant explained, "eventually, we will get to the point where it is not worth the money or effort to do it." Another participant stated, "you have these situations where we require you to do these things it's going to take more time, resources and effort and by the way, we are going to pay you less to do it." Gillet, Fouquereau, Bonnaud-Antignac, Mokounkolo, and Colombat (2013) defined working life quality as the collaboration between an employee's needs and organizational resources. According to Woodhead, Northrop, & Edelstein (2014), job-related stress is the leading influence that affects employee turnover in hospitals.

Emergent Theme 19

The nineteenth major theme was low or no incentive to measure quality. This theme resulted from the data analysis of the semi-structured interview question; what are your perspectives on the move toward measuring quality and these incentives impacting upon your employees? Nine of the 12 (75%) interviewees described measuring quality and the incentives that are impacting their employees as having low or no incentive. One participant stated, "A lot of these are internally imposed by our organization (for a good reason), but they are still internally imposed." Another participant stated "eventually

people are going to look at other revenue sources to supplant their revenue and see what is paying well. How are we going to do that with all the unfunded mandates?"

This theme is consistent with the results from Cardarelli, Bausch, Murdock, and Chyatte's (2017) study involving readmission prevention in Kentucky. Cardarelli, Bausch, Murdock, and Chyatte (2017) found in their research involving community healthcare in Kentucky that when rural hospitals can develop programs around preventing readmissions, they can save an estimated $7.03 for every $1.00 spent. The challenge leadership is facing is how to sacrifice the time and resources needed for programs like this when the hospitals operating margin is consistently at dangerous levels (Kaufman et al. 2015).

Limitations of the Study

As explained in chapter 1, all 12 participants were available during the data collection period. All documents were reviewed and recorded adequately. There were no limitations to the study related to document access. The first potential limitation of the study could be the quality of answers received due to unclear restrictions from the risk management team. According to Loh (2013), when performing qualitative research, questions about quality, reliability, and validity are problems that must be considered throughout the research. To minimize inaccurate results, I included a guarantee of confidentiality with the consent form and gave all applicants two weeks to review transcripts for anything that should be removed or changes in the study.

Another limitation is that participants involved were within a four-hour drive in Texas; as such rural hospital survivability aspects in far North or far West regions were

not considered. To ensure the transferability of the study, I adequately described the findings of the study including all developed patterns, codes, and themes (Miles, Huberman, 2011; Saldana, 2015). The sampling strategy that was used in selecting the sites for the study involved critical case sampling. Critical case sampling only looks at sites and subgroups within each site that appears to generate the maximum potential benefit to the study. Palinkas, Horwitz, and Green (2013) argued that if a theory can work in the harsh conditions of the critical case study, then it should be able to work anywhere.

Recommendations

Future studies may consider the recommendations discussed in this chapter. For this study, I maximized every resource and opportunity available to get the best possible outcome. The research findings were based on the feedback from a leader's perspective in each of the areas. Future research could thus include insights based on the lived experiences of the front-line staff in each of the areas. An applied mixed method or quantitative approach including perspectives from leaders in multiple states could further enhance the findings of this study. The 12 participants (100%) offered various recommendations for the survivability of rural healthcare in Texas. The following recommendations are based on the emergent themes that reflect the perspectives of the research participants.

Recommendation 1

The first recommendation was to decrease the cost of providing care. According to the research findings, all 12 participants (100%) explained the cost of providing care as being a primary contributor to financial sustainment. 3.2 trillion dollars was spent on

healthcare in the United States last year, and over half of the money spent was considered waste from poor processes, defensive medicine, and medical fraud Emanuel (2016). One participant stated "as a not-for-profit, we make 3-4 cents on every dollar. Hoeft's the power of ideas in healthcare (2015), explains how the empowerment of frontline staff and the use of tools such as huddle boards and waste walks can visualize or even remove the waste that is affecting each department. With the cost of healthcare going up and the reimbursement for providing care going down, something must be down to decrease the cost of providing care.

The only way that I can see for hospitals to survive is to put in a mechanism to capture the waste, decrease that waste, and in turn provide cheaper care that is more efficient and has better quality. Staff currently know and understand that waste is part of their daily practice. The issue is that they believe it is just part of the job. Empowering staff with a platform (like a huddle board) to visualize the waste they are seeing and try ways to eliminate that waste daily could potentially decrease the cost of providing care and increase the quality of work.

Recommendation 2

The second recommendation was to provide an online platform that gathers best practice standard work and advice for using evidence-based measures. Themes 5 (positive outlook toward evidence-based measures), 7 (inconsistency and lack of empirical results), 16 (measuring quality is good), and 17 (current quality metrics are not relatable) led to the recommendation of rapidly spreading best practices and advancements in technology. One participant explained, "every payer has their own set of

best measures." This participant stated "they all have their own deal. One set of CMS measures, one set of Humana measures, BCBS. There are similarities, but there are differences. You have to decide which rabbit to chase." By providing an easily accessible universal system that gathers all best practice standard work and encourages facilities to share meaningful metrics that have improved evidence-based measures, hospitals may be able to save valuable time and rapidly spread best practices and advancements in technology.

Recommendation 3

The third recommendation was to encourage the move toward payment by performance for all hospitals by giving better incentives for keeping patients out of the hospital. Themes 6 (negative outlook toward evidence-based measures), 7 (inconsistency and lack of empirical results), 8 (workload difficulty or procrastination of change), and 19 (there is low or no incentive to measure quality) led to the recommendation of finalizing the move toward payment by performance for all hospitals. According to one participant, "moving toward Medicare advantage programs and risk-bearing contracts are going to bode well for our country and our providers." Another participant stated, "It's a challenging transition for us to manage but getting some dollars up front to invest on home-based therapy's and other outpatient kinds of activities to keep folks well as opposed to treating them while they are sick." Another participant noted that "managed care should eventually help by making things like patient satisfaction and number of patients relevant." One participant stated "instead of just reacting, we need to help our patients, prevent disease, and treat them better. In my opinion, until hospitals are

incentivized to keep patients out of the hospital indefinitely, the strategy for hospital systems will be to provide as one participant noted "sick care."

Recommendation 4

The fourth recommendation was to prepare for a population shift with baby boomers. Themes 1 (poor payer mix and uninsured population cause financial strain), 13 (under-bedded hospitals or area growth), and 15 (advances in technology and restructuring bed usage) led to the recommendation of preparing for population shift with baby boomers. According to Song & Ferris (2017), by 2060, the total number of U.S. seniors aged 65 and older will have doubled to 100 million. One study participant noted "We have the baby boomers now. They need more and more care. With that type of population, how do you keep that many people out of the hospital?" Auerbach, Buerhaus, & Staiger (2015) estimated that based on the average age of the nursing population, 40% of the current nursing population will retire, which will result in an increased shortage of registered nurses to 1 million by 2020. With more people reaching the age that requires more care, and fewer workers available to provide that care, something has to change that will allow the survival of rural healthcare with the decrease of both reimbursement decreases in payer mix and lack of capacity due to nursing shortages.

Recommendation 5

The fifth recommendation was to incorporate telemedicine in rural hospitals. Themes 2 (costs are too high to provide service), 9 (closing service lines or moving services to outpatient), 10 (new rules and cost of providing care exceeding reimbursement), and 15 (advances in technology and restructuring bed usage) led to the

recommendation of incorporating telemedicine in rural hospitals. One study participant explained "if we had an APP that could help the patient do a stress test, we probably could keep some of our chest pain cardiology patients within the rural community with telemedicine connectivity to cardiology. The same goes for neurology. That's another area that gets transferred a lot". Another stated "To the extent for us to be able to bring telemedicine to every bedside I think we will be able to manage patient effectively right within their community. And the same thing can be said for clinics. I don't think we will be able to hire enough family practice providers, pediatricians, internal med providers, to meet the needs of the communities". Another asked the question "How can we have telemedicine as part of our practices to help the APPS and MDs that are there providing the best possible care to our communities?"

Recommendation 6

The sixth recommendation was to add an intermediate classification for hospitals between critical access status and smaller facilities with a poor payer mix. Themes 1 (poor payer mix and uninsured population cause financial strain), 10 (new rules and the cost of providing care exceeding reimbursement), and 11 (decreased reimbursement or poor payer mix) contributed the recommendation of adding an intermediate classification for hospitals between critical access status and smaller facilities with poor payer mix. According to one participant, by adding an intermediate classification, "there would be a way of recognizing there are huge challenges that relate to how these hospitals operate like critical access facilities, but they don't get the benefit of cost-based reimbursement."

Implications

Implications for Practice

The research outcome may be valuable for the professional applications of the research recommendations. According to Herd, Adams-Pope, Bowers, & Sims (2016), success as healthcare leaders has changed from a culture of innovation and strategy to survivability. Hospital leaders and other experts may use the information from the study to formulate strategies toward hospital operational and financial sustainment. The results for each emergent theme may be significant to healthcare operations because it may help advance the practice of leadership in both rural and urban healthcare.

Implications for Theory

The research findings addressed the research gap in the related literature. The recommendations of this study may help link outcomes and activities to facilitate the need for change (Marshall and Broome, 2016). Future healthcare researchers seeking to promote knowledge about healthcare management and transformational leadership may find the study substantial in its contribution to the literature.

Implications for Social Change

The results of this study have potential implications for effecting positive social change in the lives of people in rural areas of the United States. According to Caldwell, Ford, Wallace, Wang, and Takahashi (2016), rural status directly relates to disadvantages for most of the health care quality based measures. Due to this unsustainability, hundreds of thousands of residents in the state of Texas are many miles away from specialty care and acute care facilities (Goodman, 2015). According to Obeso (2016), rural

communities often lack primary care, which transitions into unfollowed post-hospital discharge plans from the closest facility. This study may contribute to positive social change by creating awareness on how rural hospitals are in danger of closures, and how these closures can affect urban hospitals and overall quality of life for rural Americans.

Conclusion

The purpose of this qualitative exploratory multiple case study was to gain a common understanding of financial problems and operational inefficiencies that may be impacting rural hospital leaders in the state of Texas. To establish adequate generalizations, I purposely sampled four executives from three different rural hospitals in the state of Texas with open-ended questions in semi-structured interviews to gain an in-depth understanding of the influence of stakeholders in promoting operational sustainability. To achieve a multiple case study perspective, each of the three facilities was considered its own case study, then the collective data was combined for reporting the common understandings and themes generated from all interviewed leaders to provide the fourth of the multiple case study design.

I recruited 12 participants that participated in a semi-structured interview, and I reviewed the documents on progress toward facility goals. Comments from participants suggested that by decreasing the cost of providing care and eliminating the chance of providing care with little or no reimbursement, rural hospitals should have a higher chance of survivability. Other comments included telemedicine programs, moving toward pay for performance models, and adding a new classification for hospitals between critical access status and smaller facilities with poor payer mix.

References

Abrams, M., Nuzum, R., Mika, S., & Lawlor, G. (2011). *Realizing health reform's potential*. Retrieved from https://www.commonwealthfund.org/publications/issue-briefs/2011/jan/realizing-health-reforms-potential-how-affordable-care-act-will

Ackerly, D. C., Sangvai, D. G., Udayakumar, K., Shah, B. R., Kalman, N. S., Cho, A. H., . . . Dzau V. J. (2011). Training the next generation of physician–executives: an innovative residency pathway in management and leadership. *Academic Medicine*, *86*(5), 575-579. doi:10.1097/ACM.0b013e318212e51b

Adams, S. L. (2016). Influences of turnover, retention, and job embeddedness in nursing workforce literature. *Online Journal of Rural Nursing & Health Care*, *16*(2), 168-195. doi:10.14574/ojrnhc.v16i2.405

Afsar, B., Cheema, S., & Saeed, B., (2017) Do nurses display innovative work behavior when their values match with hospitals' values? *European Journal of Innovation Management*, *21*(1), 157-171. doi:10.1108/EJIM-01-2017-0007

Agee, J. (2009). Developing qualitative research questions: A reflective process. *International Journal of Qualitative Studies in Education (QSE), 22(*4), 431-447. doi:10.1080/09518390902736512

Almoosa, K. F., Luther, K., Resar, R., & Patel, B. (2016). Applying the new institute for healthcare improvement inpatient waste tool to identify "waste" in the intensive care unit. *Journal for Healthcare Quality, 38*(5), e29–e38. doi:10.1097/jhq.0000000000000040

Anning-Dorson, T., Anning-Dorson, T., Odoom, R. K., Odoom, R. K., Acheampong, G., Acheampong, G., . . . Tweneboah-Koduah, E. (2017). Innovation and organizational

development: The role of organizational leadership. *African Journal of Economic and Management Studies*, *8*(3), 338-351. doi:10.1108/AJEMS-06-2016-0091

Antonakis, J. (2017). *The nature of leadership*. Thousand Oaks, CA: Sage Publications.

Aslani, A., & Naaranoja, M. (2015). A systematic-qualitative research for diffusion of innovation in the primary healthcare centers. *Journal of Modelling in Management*, *10*(1), 105-117. doi:10.1108/JM2-04-2013-0016

Auerbach, D. I., Buerhaus, P. I., & Staiger, D. O. (2015). Will the RN workforce weather the retirement of the baby boomers? *Medical Care, 53*(10), 850-856. doi:10.1097/MLR.0000000000000415

Backmann, J., & Hoegl, M. (2014). To trust or not to trust: Vulnerability-based rrust in interorganizational partnerships. *Academy of Management Proceedings, 2014*(1), 14134–14134. doi:10.5465/ambpp.2014.14134abstract

Baker, L. C., Bundorf, M. K., Devlin, A. M., & Kessler, D. P. (2016). Medicare Advantage plans pay hospitals less than traditional medicare pays. *Health Affairs (Project Hope)*, *35*(8), 1444-1451. doi:10.1377/hlthaff.2015.1553

Baldwin, M. (2016). *Social work, critical reflection and the learning organization*. New York, NY: Routledge.

Baltic, S. (2014, February 24). Monopolizing medicine: Why hospital consolidation may increase healthcare costs. *Medical Economics*. Retrieved from http://www.medicaleconomics.com/health-law-policy/monopolizing-medicine-why-hospital-consolidation-may-increase-healthcare-costs

Berend, K. R., Lombardi, A. V., Berend, M. E., Adams, J. B., & Morris, M. J. (2018). The outpatient total hip arthroplasty. *The Bone & Joint Journal, 100-B*, 31–35. doi:10.1302/0301-620x.100b1.bjj-2017-0514.r1

Berg, B. L., Lune, H., & Lune, H. (2004). *Qualitative research methods for the social sciences* (Vol. 5). Boston, MA: Pearson.

Bhatt, P. B., Forster, K., & Welter, T. L. (2015). Survive or thrive? Becoming a successful value-based enterprise. *Healthcare Financial Management, 69*(7), 62-68. Retrieved from https://www.hfma.org/preparingforvalue/

Blank, R. M. (1993). Why were poverty rates so high in the 1980s? D. Papadimitriou & E. Wolff (1993.), *In Poverty and prosperity in the USA in the late twentieth century* (pp. 21-57). London, England: Palgrave Macmillan.

Bligh, M. C. (2017). Leadership and Trust. *Leadership Today* (pp. 21-42). Switzerland: Springer International Publishing.

Blumenthal, D., Abrams, M., & Nuzum, R. (2015). The Affordable Care Act at 5 years. *New England Journal of Medicine*, *372*(25), 2451-2458. doi:10.15868/socialsector.25102

Bolman, L. G., & Deal, T. E. (2017). *Reframing organizations: Artistry, choice, and leadership*. Hoboken, New Jersey: John Wiley & Sons.

Bolin, J. N., Bellamy, G. R., Ferdinand, A. O., Vuong, A. M., Kash, B. A., Schulze, A., & Helduser, J. W. (2015). Rural healthy people 2020: New decade, same challenges. *The Journal of Rural Health*, *31*(3), 326-333. doi:10.1111/jrh.12116

Bordia, P., Restubog, S., Jimmieson, N. & Irmer, B. (2011). Haunted by the past: Effects of poor change management history on employee attitudes and turnover. *Group &*

Organization Management, 40(1), 1-32. doi:10.1177/1059601110392990

Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health services research*, *42*(4), 1758-1772. doi:10.1111/j.1475-6773.2006.00684.x

Buchmueller, T. C., Jacobson, M., & Wold, C. (2006). How far to the hospital?: The effect of hospital closures on access to care. *Journal of health economics*, *25*(4), 740-761. doi:10.1016/j.jhealeco.2005.10.006

Byrd, C., & McCue, M. J. (2003). Can your hospital remain independent?. *Healthcare Financial Management*, *57*(9), 40-44. Retrieved from: http://www.hfma.org/

Caldwell, J. T., Ford, C. L., Wallace, S. P., Wang, M. C., & Takahashi, L. M. (2016). Intersection of living in a rural versus urban area and race/ethnicity in explaining access to health care in the United States. *American Journal of Public Health*, *106*(8), 1463-1469. doi:10.2105/ajph.2016.303212

Caligiuri, P. (2006). Developing global leaders. *Human Resource Management Review, 16*(2), 219–228. doi:10.1016/j.hrmr.2006.03.009

Cardarelli, R., Bausch, G., Murdock, J., & Chyatte, M. R. (2017). Return-on-Investment (ROI) Analyses of an Inpatient Lay Health Worker Model on 30-Day Readmission Rates in a Rural Community Hospital. *The Journal of Rural Health*. doi:10.1111/jrh.12250

Carey, M. A., & Asbury, J. E. (2016). *Focus group research*. Routledge.

Charbonnier-Voirin, A., El Akremi, A., & Vandenberghe, C. (2010). A multilevel model of transformational leadership and adaptive performance and the moderating role of climate for innovation. *Group & Organization Management, 35*(6), 699–726.

doi:10.1177/1059601110390833

Chiu, C. Y. C., Balkundi, P., & Weinberg, F. J. (2017). When managers become leaders: The role of manager network centralities, social power, and followers' perception of leadership. *The Leadership Quarterly*, *28*(2), 334-348. doi:10.1016/j.leaqua.2016.05.004

Collins, B. J., & Mossholder, K. W. (2017). Fairness means more to some than others: Interactional fairness, job embeddedness, and discretionary work behaviors. *Journal of Management*, *43*(2), 293-318. doi:10.1177/0149206314527132

Collins, S. K., McKinnies, R. C., Matthews, E. P., & Collins K. S. (2015). A ministudy of employee turnover in US hospitals. *The Health Care Manager, 34*, 23-27. doi:10.1097./HCM.0000000000000038

Cope, D. G. (2014). Methods and meaning: Credibility and trustworthiness of qualitative research. *Oncology Nursing Forum, 41,* 89-91. doi:10.1188/14.ONF.89-91

Cotae, F. F. (2013). Organizational learning and the internationalization sigmoid. *Journal of Economics, Business and Management,* 355–359. doi:10.7763/joebm.2013.v1.77

Cunningham, J., Salomone, J., & Wielgus, N. (2015). Project management leadership style: A team member perspective. *International Journal of Global Business, 8*(2). Retrieved from http://www.gsmi-ijgb.com/Pages/IJGBV8N2.aspx

Davis, K., Abrams, M., & Stremikis, K. (2011). How the affordable care act will strengthen the nation's primary care foundation. *Journal of General Internal Medicine*, *26*(10), 1201. doi:10.1007/s11606-011-1720-y

Decman, J. M., Badgett, K., Shaughnessy, B., Randall, A., Nixon, L., & Lemley, B. (2017). Organizational leadership through management: Superintendent perceptions. *Educational Management Administration & Leadership*, doi:10.1177/1741143217714255

Denis, J. L., & van Gestel, N. (2015). Leadership and innovation in healthcare governance. *The Palgrave International Handbook of Healthcare Policy and Governance*, 425–440. doi:10.1057/9781137384935_26

Denis, J. L., & van Gestel, N. (2016). Medical doctors in healthcare leadership: theoretical and practical challenges. *BMC health services research*, *16*(2), 158. doi:10.1186/s12913-016-1392-8

Dennis, P. (2016). *Lean production simplified: A plain-language guide to the world's most powerful production system.* New York: Productivity Press.

Denzin, N. &Lincoln, Y. (2003). *The Landscape of Qualitative Research: Theories and Issues.* 2nd ed. London: Sage

Detsky, A. S., & Gropper, M. A. (2016). Why physician leaders of health care organizations should participate in direct patient care. *Ann Intern Med*, *165*, 519-20. doi:10.7326/M16-0820

Dillon, K., & Ballas, K. (2017). Aligning Financial Models With Health Care Delivery. In *Health Reform Policy to Practice* (pp. 121-137) doi:10.1016/B978-0-12-809827-1.00008-2

Elg, M., Palmberg Broryd, K., & Kollberg, B. (2013). Performance measurement to drive improvements in healthcare practice. *International Journal of Operations & Production Management*, *33*(11/12), 1623–1651. doi:10.1108/ijopm.07-2010-0208

Elshaug, A. G., Rosenthal, M. B., Lavis, J. N., Brownlee, S., Schmidt, H., Nagpal, S., ... & Saini, V. (2017). Levers for addressing medical underuse and overuse: achieving high-value health care. *The Lancet*. doi:10.1016/S0140-6736(16)32586-7

Emanuel, E. J. (2016). How Can the United States Spend Its Health Care Dollars Better?. *JAMA*, *316*(24), 2604-2606. doi:10.1001/jama.2016.16739

Farrar, J., Kaplan, S. E., & Thorne, L. (2017). The Effect of Interactional Fairness and Detection on Taxpayers' Compliance Intentions. *Journal of Business Ethics*, *1*(14), doi:10.1007/s10551-017-3458-x

Farh, J. & Cheng, B. (2000). A cultural analysis of paternalistic leadership in Chinese organizations. In Management and organizations in the Chinese context (pp. 84-127). Palgrave Macmillan UK.

Fearis, K., & Petrie, A. (2017). Best practices in early phase medical device development: Engineering, prototyping, and the beginnings of a quality management system. *Surgery*, *161*(3), 571-575. doi:10.1016/j.surg.2016.08.052

Feldman, K., Stiglic, G., Dasgupta, D., Kricheff, M., Obradovic, Z., & Chawla, N. V. (2016). Insights into population health management through disease diagnoses networks. *Scientific reports*, *6*, 30465. doi:10.1038/srep30465

Finke, D. (2016). The path toward a more sustainable healthcare future. *Healthcare Financial Management Apr. 2015: 128.* Retrieved from https://www.hfma.org/Content.aspx?id=29459

Fitzgerald, L. (2017). *The 2 Diffusion of Innovations. Challenging Perspectives on Organizational Change in Health Care*. New York, NY: Routledge publishing

Fleece, J., & Houle, D. (2011). *New health age: The future of health care in America*. Chicago, IL: Sourcebooks, Inc.

Flodgren, G., Gonçalves-Bradley, D. C., & Pomey, M. P. (2016). External inspection of compliance with standards for improved healthcare outcomes. *The Cochrane Library*. doi:10.1002/14651858.CD008992.pub3

Gable, L. (2011). The Patient Protection and Affordable Care Act, public health, and the elusive target of human rights. *The Journal of Law, Medicine & Ethics*, *39*(3), 340-354. doi:10.1111/j.1748-720X.2011.00604.x

Ganglmair-Wooliscroft, A., & Wooliscroft, B. (2016). Diffusion of innovation: The case of ethical tourism behavior. *Journal of Business Research*, *69*(8), 2711-2720. doi.org/10.1016/j.jbusres.2015.11.006

Gardner, J. (1993). *On leadership*. New York, NY: Simon and Schuster.

Giddens, J. (2017). Transformational leadership: What every nursing dean should know. *Journal of Professional Nursing.* doi:10.1016/j.profnurs.2017.10.004

Gillet, N., Fouquereau, E., Bonnaud-Antignac, A., Mokounkolo, R., & Colombat, P. (2013). The mediating role of organizational justice in the relationship between 130 transformational leadership and nurses' quality of work life: A cross-sectional questionnaire survey. *International Journal of Nursing Studies, 50*, 1359-1367. doi:10.1016/j.ijnurstu.2012.12.012

Goodman, M. (2015). A list of 11 rural hospitals that have closed in Texas since 2010. *Healthcare business magazine of North Texas,* Retrieved from

http://healthcare.dmagazine.com/2015/09/17/a-list-of-11-rural-hospitals-that-have-closed-in-texas-since-2010/

Hagaman, A. K., & Wutich, A. (2017). How many interviews are enough to identify metathemes in multisited and cross-cultural research? Another perspective on Guest, Bunce, and Johnson's (2006) landmark study. *Field Methods*, *29*(1), 23–41. doi:10.1177/1525822x16640447

Harper, M., & Cole, P. (2012). Member checking: Can benefits be gained similar to group therapy?. *The Qualitative Report, 17*(2), 510-517. Retrieved from http://nsuworks.nova.edu/tqr/vol17/iss2/1

Hatch, J. A. (2002). *Doing qualitative research in education settings.* Albany, NY: SUNY Press.

Hayes, C. W., Batalden, P. B., & Goldmann, D. (2015). A 'work smarter, not harder 'approach to improving healthcare quality. *BMJ Qquality & Safety, 24*(2), 100-102. doi:10.1136/bmjqs-2014-003673

Herd, A., Adams-Pope, B., Bowers, A., & Sims, B. (2016). Finding what works: leadership competencies for the changing healthcare environment. *The Journal of Leadership Education*, *15*(4), 217–233. doi:10.12806/v15/i4/c2

Hoeft, S., Pryor, R. (2014). *The power of ideas to transform healthcare, engaging staff by building daily lean management systems.* New York, NY: CRC Press.

Holmes, G. M., Slifkin, R. T., Randolph, R. K., & Poley, S. (2006). The effect of rural hospital closures on community economic health. *Health Services Research*, *41*(2), 467-485. doi:10.1111/j.1475-6773.2005.00497.x

Hung, P., Kozhimannil, K. B., Casey, M. M., & Moscovice, I. S. (2016). Why are obstetric units in rural hospitals closing their doors? *Health Services Research, 51*(4), 1546–1560. doi:10.1111/1475-6773.12441

Jabareen, Y. (2009). Building a conceptual framework: philosophy, definitions, and procedure. *International Journal of Qualitative Methods*, *8*(4), 49–62. doi:10.1177/160940690900800406

Jacob, S. A., & Furgerson, S. P. (2012). Writing Interview Protocols and Conducting Interviews: Tips for Students New to the Field of Qualitative Research. *The Qualitative Report*, *17*(42), 1-10. Retrieved from http://nsuworks.nova.edu/tqr/vol17/iss42/3

Janesick, V. J. (2011). "Stretching" exercises for qualitative researchers (3rd ed.). Thousand Oaks, CA: Sage Publications.

Godlewski, J. (2010). Seven habits of highly resilient organizations (approaches to achieving business continuity). *Strategic Direction, 26*(10). doi:10.1108/sd.2010.05626jad.005

Gould, N. (2000). Becoming a learning organization: a social work example. *Social Work Education, 19*(6), 585-596. doi.org/10.1080/02615470020002317

Grant, E. E. (2016). Belling the cat: Implementation of a prospective payment reimbursement system for critical access hospitals, its likely success, and political implications of this policy move. . *Louis UJ Health L. & Pol'y*, *10*, 323.

Kaplan, D. (2016). Health care payments. *SAGE Business Researcher.* doi:10.1177/237455680207.n1

Karatepe, O. M., & Karadas, G. (2012). The effect of management commitment to service quality on job embeddedness and performance outcomes. *Journal of Business Economics and Management*, *13*(4), 614-636. doi:10.3846/16111699.2011.620159

Kaufman, B. G., Thomas, S. R., Randolph, R. K., Perry, J. R., Thompson, K. W., Holmes, G. M., & Pink, G. H. (2015). The rising rate of rural hospital closures. *The Journal of Rural Health, 32*(1), 35–43. doi:10.1111/jrh.12128

Khosravi, B., Sharifi, M., Fayaz-Bakhsh, A., & Hosseini, M. (2016). Assessment of the status of learning organization from viewpoint of nurses in an Iranian healthcare organization. *Journal of Payavard Salamat*, *9*(6), 500-509. http://payavard.tums.ac.ir/article-1-5888-en.html

Kindig, D., & Stoddart, G. (2003). What is population health?. *American Journal of Public Health*, *93*(3), 380-383. doi:10.2105/ajph.93.3.380.

Kramer, A., & Son, J. (2016). Who cares about the health of health care professionals? An 18-year longitudinal study of working time, health, and occupational turnover. *ILR Review*, *69*(4), 939-960. 10.1177/0019793916640492

Lazear, E. P. (2004). The peter principle: A theory of decline. *Journal of Political Economy, 112*(S1), S141–S163. doi:10.1086/379943

Leggott, K. T., Martin, M., Sklar, D., Helitzer, D., Rosett, R., Crandall, C., & Mercer, D. (2016). Transformation of anesthesia for ambulatory orthopedic surgery: A mixed-methods study of a diffusion of innovation in healthcare. *Healthcare, 4*(3), 181–187. doi:10.1016/j.hjdsi.2015.09.003

Lencioni, P. (2006). *The five dysfunctions of a team*. Hoboken, NJ: John Wiley & Sons.

Loh, J. (2014). The narrative as the practical and the practice: Toward the preparation of teachers. *International Teacher Education: Promising Pedagogies (Part A)*, 195–212. doi:10.1108/s1479-368720140000022013

Mansur, J., Sobral, F., & Goldszmidt, R. (2017). Shades of paternalistic leadership across cultures. *Journal of World Business, 52*(5), 702-713. doi.org/10.1016/j.jwb.2017.06.003

Marchildon, G. P., & Fletcher, A. J. (2016). Systems thinking and the leadership conundrum in health care. *Evidence & Policy: A Journal of Research, Debate and Practice, 12*(4), 559–573. doi:10.1332/174426415x14449988605954

Marshall, C., & Rossman, G. B. (2014). *Designing qualitative research*. Sage publications.

Maxwell, J. C. (2011). *The 5 levels of leadership: Proven steps to maximize your potential*. Nashville, TN: Center Street Publishing

Meadows, D. H. (2008). *Thinking in systems: A primer.* White River Junction, VT: Chelsea Green Publishing Company.

Miles, M. B., Huberman, A. M., & Saldana, J. (2013). *Qualitative data analysis*. Sage.

Mitchell, D. (2014). Advancing grounded theory: using theoretical frameworks within grounded theory studies. *The Qualitative Report, 19*(36), 1-11. Retrieved from http://nsuworks.nova.edu/tqr/vol19/iss36/

Mitchell, S. E., Martin, J., Holmes, S., van Deusen Lukas, C., Cancino, R., Paasche-Orlow, M., & Jack, B. (2016). How hospitals reengineer their discharge processes to reduce readmissions. *Journal for healthcare quality: official publication of the National Association for Healthcare Quality*, *38*(2), 116. doi:10.1097/JHQ.0000000000000005

Morales Méndez, J. D., & Rodriguez, R. S. (2017). Total productive maintenance (TPM) as a tool for improving productivity: a case study of application in the bottleneck of an auto-parts machining line. *The International Journal of Advanced Manufacturing Technology, 92*(1-4), 1013–1026. doi:10.1007/s00170-017-0052-4

Morgan, G. (2016). Commentary: Beyond Morgan's eight metaphors. *Human relations*, *69*(4), 1029-1042. doi:10.1177/0018726715624497

Moustakas, C. (1994). *Phenomenological research methods*. Sage.

Moy, E. (2017). Leading causes of death in nonmetropolitan and metropolitan areas—United States, 1999–2014. *MMWR. Surveillance Summaries*, *66*. doi:10.15585/mmwr.ss6601a1.

Mullings, L., & Sankaranarayanan, J. (2016). Quality of communication about medicines in United States hospitals: A national retrospective study. *Research in Social and Administrative Pharmacy*. doi:10.1016/j.sapharm.2016.09.005

Mutale, W., Ayles, H., Bond, V., Chintu, N., Chilengi, R., Mwanamwenge, M. T., & Balabanova, D. (2017). Application of systems thinking: 12-month postintervention evaluation of a complex health system intervention in Zambia: the case of the BHOMA. *Journal of evaluation in clinical practice*, *23*(2), 439-452. doi:10.1111/jep.12354

Nadiri, H., & Tanova, C. (2016). What Factors Influence Employee Service Recovery Performance and What Are the Consequences in Health Care? *Quality Management in Health Care, 25*(3), 162–175. doi:10.1097/qmh.0000000000000104

Nakra, P., & Nakra, S. (2016). Not-for-profit hospitals and Affordable Care Act: Navigating the new health care landscape. *Journal of Healthcare Risk Management*, *36*(2), 36-44. doi:10.1002/jhrm.21240

Nesbitt, T. S., Connell, F. A., Hart, L. G., & Rosenblatt, R. A. (1990). Access to obstetric care in rural areas: effect on birth outcomes. *American Journal of Public Health, 80*(7), 814–818. doi:10.2105/ajph.80.7.814

Nichols, H. M., Swanberg, J. E., & Bright, C. L. (2016). How does supervisor support influence turnover intent among frontline hospital workers? The mediating role of affective commitment. *The Health Care Manager*, *35*(3), 266-279. doi:10.1097/HCM.0000000000000119

Northouse, P. G. (2015). *Leadership: Theory and practice*. New York, NY: Sage publications.

Nyhan, B., Kelleher, M., Cressey, P., & Poell, R. (2003). *Facing Up to the Learning Organization Challenge: Selected European Writings. Volume II. CEDEFOP Reference Series*. Bernan Associates, Lanham, MD

Palinkas, L., Horwitz, S., Green, C., Wisdom, J., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Springer Science and Business Media Journal, 42*, doi:10.1007/s10488-013-0528-y

Parahoo, K. Fleming, P., & Walls, P. (2010). The role and place of knowledge and literature in grounded theory, *The Nurse Researcher Journal, 17*, 8-17. doi:10.7748/nr2010.07.17.4.8.c7920

Parkin, P. (2009). *Managing change in healthcare: Using action research*. New York, NY: Sage publications.

Parston, G., McQueen, J., Patel, H., Keown, O. P., Fontana, G., Al Kuwari, H., & Darzi, A. (2015). The science and art of delivery: accelerating the diffusion of health care innovation. *Health Affairs*, *34*(12), 2160-2166. doi: 10.1377/hlthaff.2015.0406

Patton, M. Q. (2015). Qualitative research and evaluation methods (4th ed.). Thousand Oaks, CA: Sage Publications, Inc.

Peredaryenko, M. S., & Krauss, S. E. (2013). Calibrating the human instrument: Understanding the interviewing experience of novice qualitative researchers. *The Qualitative Report*, *18*, 1-17. Retrieved from http://www.nova.edu/ssss/QR

Peter, L. J., & Hull, R. (1969). *The peter principle.* London: Souvenir Press.

Pfeffer, J. (2015). *Leadership BS: Fixing workplaces and careers one truth at a time*. New York, NY: HarperCollins.

Phillips, J. M., Stalter, A. M., Dolansky, M. A., & Lopez, G. M. (2016). Fostering future leadership in quality and safety in health care through systems thinking. *Journal of Professional Nursing*, *32*(1), 15-24.

Plotnikov, V., & Vertakova, J. (2014). Evaluation the effectiveness of the information provision in management organization. *Annual International Conference on 122 Qualitative & Quantitative Economics Research, 4*, 94-96. doi:10.5176/2251- 2012_QQE14.30

Poutanen, P., Soliman, W., & Ståhle, P. (2016). The complexity of innovation: An assessment and review of the complexity perspective. *European Journal of Innovation Management*, *19*(2), 189-213. doi:10.1108/EJIM-03-2014-0036

Ramanathan, R., Ramanathan, U., & Karpuzcu, T. (2016). Impact of e-commerce in B2B physical distribution: diffusion of innovations perspective. *Encyclopedia of E-Commerce Development, Implementation, and Management 162*(1), 2256-2270. Nottingham, UK: IGI Global. doi:10.4018/978-1-4666-9787-4.ch162

Regmi, P. R., Aryal, N., Kurmi, O., Pant, P. R., Teijlingen, E., & Wasti, S. P. (2017). Informed Consent in Health Research: Challenges and Barriers in Low-and Middle-Income Countries with Specific Reference to Nepal. *Developing world bioethics*, *17*(2), 84-89. doi:10.1111/dewb.12123

Renedo, A., Marston, C. A., Spyridonidis, D., & Barlow, J. (2014). Patient and public involvement in healthcare quality improvement: how organizations can help patients and professionals to collaborate. *Public Management Review, 17*(1), 17–34. doi:10.1080/14719037.2014.881535

Resick, C. J., Hanges, P. J., Dickson, M. W., & Mitchelson, J. K. (2006). A cross-cultural examination of the endorsement of ethical leadership. *Journal of Business Ethics, 63*(4), 345–359. doi:10.1007/s10551-005-3242-1

Revans, R. W. (1980). *Action learning: New techniques for management.* London, UK: Blond and Briggs Ltd..

Reynolds, J. (2013). Hospital charitable lotteries: taking a gamble on systems thinking. *Journal of Evaluation in Clinical Practice, 19*(6), 1090–1094. doi:10.1111/jep.12066

Richmond, B., Peterson, S., & Soderquist, C. (2001). *STELLA: An introduction to systems thinking. high performance systems.* New York, NY: Hanover Square Press

Robert, G., & Donetto, S. (2015). Response to: "A 'work smarter, not harder' approach to improving healthcare quality" by Hayeset al. *BMJ Quality & Safety, 24*(6), 407–408. doi:10.1136/bmjqs-2015-004240

Rosenbach, M. L., & Dayhoff, D. A. (1995). Access to care in rural America: impact of hospital closures. *Health Care Financing Review*, *17*(1), 15. Retrieved from: https://www.ncbi.nlm.nih.gov/pubmed/10153469?dopt=Abstract

Rosenbaum, P., & Stewart, D. (2004, March). The world health organization international classification of functioning, disability, and health: a model to guide clinical thinking, practice and research in the field of cerebral palsy. In *Seminars in Pediatric Neurology* (Vol. 11, No. 1, pp. 5-10). WB Saunders. doi:10.1016/j.spen.2004.01.002

Sandelowski, M. (1995). Sample size in qualitative research. *Research in Nursing & Health, 18*(2), 179–183. doi:10.1002/nur.4770180211

Sarto, F., & Veronesi, G. (2016). Clinical leadership and hospital performance: assessing the evidence base. *BMC Health Services Research*, *16*(S2). doi:10.1186/s12913-016-1395-5

Scalise, D. (2004). Critical access hospitals. *Hospitals & health networks*, *78*(8), 51-53.

Senge, P. M., & Sterman, J. D. (1992). Systems thinking and organizational learning: Acting locally and thinking globally in the organization of the future. *European journal of operational research*, *59*(1), 137-150. doi:10.1016/0377-2217(92)90011-W

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. Education for Information, *22*(2), 63–75. doi:10.3233/efi-2004-22201

Silverman, D. (Ed.). (2016). *Qualitative research*. New York, NY: Sage Publications.

Simon, M. K., & Goes, J. (2011). *Dissertation and scholarly research: recipes for success.* College Grove, Ore. Dissertation Success, LLC.

Sites, B. D., & Dodds, T. (2015). Medicine is not a steak. Regional anesthesia and pain medicine, *American Society of Regional Anesthesia and Pain Medicine, 40*(5), 399–400. doi:10.1097/aap.0000000000000291

Song, Z., & Ferris, T. G. (2018). Baby Boomers and Beds: a Demographic Challenge for the Ages. *Journal of general internal medicine, 33*(3), 367-369. doi:10.1007/s11606-017-4257-x

Soni, A., Hendryx, M., & Simon, K. (2017). Medicaid expansion under the affordable care act and Insurance Coverage in Rural and Urban Areas. *The Journal of Rural Health*, *33*(2), 217-226. doi:10.1111/jrh.12234

Spehar, I., Sjøvik, H., Karevold, K. I., Rosvold, E. O., & Frich, J. C. (2017). General practitioners' views on leadership roles and challenges in primary health care: a qualitative study. *Scandinavian journal of primary health care*, *35*(1), 105-110. doi:10.1080/02813432.2017.1288819

Stake, R. E. (2013). *Multiple case study analysis*. New York, NY. Guilford Press.

Stalter, A. M., Phillips, J. M., Ruggiero, J. S., Scardaville, D. L., Merriam, D., Dolansky, M. A., Winegardner, S. (2016). A Concept Analysis of Systems Thinking. *Nursing Forum, 52*(4), 323–330. doi:10.1111/nuf.12196

Sterman, J. D. (2000). *Business dynamics: systems thinking and modeling for a complex world*. Boston, MA. Irwin/McGraw-Hill

Stone, K. P., Huang, L., Reid, J. R., & Deutsch, E. S. (2016). Systems integration, human factors, and simulation. *Comprehensive Healthcare Simulation*, 67–75. doi:10.1007/978-3-319-24187-6_6

Storkholm, M. H., Mazzocato, P., Savage, M., & Savage, C. (2017). Money's (not) on my mind: a qualitative study of how staff and managers understand health care's triple Aim. *BMC Health Services Research*, *17*(1), 98. doi:10.1186/s12913-017-2052-3

Stroth, C. (2010). Job embeddedness as a nurse retention strategy for rural hospitals. *Journal of Nursing Administration, 40*(1), 32 - 35. doi:10.1097/NNA.0b013e3181c47d30

Succi, M. J., Lee, S. Y., & Alexander, J. A. (1997). Effects of market position and competition on rural hospital closures. *Health Services Research*, *31*(6), 679–699. Retrieved from: www.hsr.org

Tanenbaum, S. J. (1995). Medicaid eligibility policy in the 1980s: Medical utilitarianism and the "Deserving" Poor. *Journal of health politics, policy and law*, *20*(4), 933-954. doi:10.1215/03616878-20-4-933

Termeer, C. J., Dewulf, A., & Biesbroek, G. R. (2017). Transformational change: governance interventions for climate change adaptation from a continuous change perspective. *Journal of Environmental Planning and Management*, *60*(4), 558-576. doi:10.1080/09640568.2016.1168288

Terp, S., Seabury, S. A., Arora, S., Eads, A., Lam, C. N., & Menchine, M. (2017). Enforcement of the Emergency Medical Treatment and Labor Act, 2005 to 2014. *Annals of emergency medicine*, *69*(2), 155-162. doi:10.1016/j.annemergmed.2016.05.021

Thomas, S. R., Holmes, G. M., & Pink, G. H. (2016). To what extent do community characteristics explain differences in closure among financially distressed rural hospitals?. *Journal of Health Care for the Poor and Underserved*, *27*(4), 194-203. doi:10.1353/hpu.2016.0176

Tsai, T, Joynt, K, Wild, R, Orav, E, & Jha, A. (2015). Medicare's bundled payment initiative: most hospitals are focused on a few high-volume conditions. *Health Affairs*, *34*(3), 371-380. doi:10.1377/hlthaff.2014.0900

Van Manen, M. (2015). *Researching lived experience: Human science for an action sensitive pedagogy (2nd ed.).* Walnut Creek, CA: Left Coast Press.

Von Bertalanffy, L. (1968). *General systems theory: Foundations, development, application (Revised ed.)*. New York, NY: George Braziller

Warden, D, Probst, J. (2017). The role of the nurse executive in rural hospital closure. *JONA: The Journal of Nursing Administration, 47*(1), 5–7. doi:10.1097/nna.0000000000000429

Watkins, K. E., & Marsick, V. J. (1993). *Sculpting the learning organization: Lessons in the art and science of systemic change*. Jossey-Bass Inc., 350 Sansome Street, San Francisco, CA 94104-1310.

Weigel, P., Ullrich, F., Finegan, C. & Ward, M. (2017), Rural Bypass for Elective Surgeries. *The Journal of Rural Health, 33*, 135–145. doi:10.1111/jrh.12163

Wellman, J., Jeffries, H., & Hagan, P. (2016). *Leading the lean healthcare journey: driving culture change to increase value*. Boca Raton, FL: CRC Press.

Wenger, E. (1998). *Communities of practice: Learning meaning, and identity.* Cambridge, MA: Cambridge University Press.

Whittington, J, Nolan, K, Lewis, N, & Torres, T. (2015). Pursuing the triple aim: the first 7 years. *The Milbank Quarterly*, *93*(2), 263-300. doi:10.1111/1468-0009.12122

Wihler, A., Meurs, J. A., Wiesmann, D., Troll, L., & Blickle, G. (2017). Extraversion and adaptive performance: Integrating trait activation and socioanalytic personality theories at work. *Personality and Individual Differences*, *116*, 133-138. doi:10.1016/j.paid.2017.04.034

Woodhead, E, Northrop, L, & Edelstein, B. (2014). Stress, social support, and burnout among long-term care nursing staff. *Journal of Applied Gerontology*, *35*(1), 1-22. doi:10.1177/0733464814542465

Woods, M., Paulus, T., Atkins, D. P., & Macklin, R. (2016). Advancing qualitative research using qualitative data analysis software (QDAS)? Reviewing potential versus practice in published studies using ATLAS. ti and NVivo, 1994–2013. *Social Science Computer Review*, *34*(5), 597-617. doi:10.1177/0894439315596311

Woolliscroft, J. O. (2016). Physician leaders: musings and maxims. *Gastroenterology, 150*(7), 1511-1514. doi:10.1053/j.gastro.2016.04.030

Yin, R. K. (1994). *Case study research: design and methods.* Thousand Oaks, CA. International Educational and Professional Publisher.

Zijm, H., & Klumpp, M. (2016). Future Logistics: What to Expect, How to Adapt. *Lecture Notes in Logistics*, 365–379. doi:10.1007/978-3-319-45117-6_32

Zainal, Z. (2007). Case study as a research method. *Journal Kemanusiaan,* (9), 1-6. Retrieved from http://eprints.utm.my/8221/4/48-case-study-as-aresearch-method.html_Itemid%3D1328

Appendix A: Interview Protocol

Location of Interview: _____

Date of Interview: _____

Start Time: _____

Finish Time: _____

Thank you in advance for agreeing to be a part of this study. The interview will take approximately 30 minutes. I will be asking you questions regarding your perspectives on financial problems and operational inefficiencies that may be impacting hospital leaders in the state of Texas. I will be taking notes as you respond to each question. I will also be tape recording the session for the accurate coding of the session. Do you have any questions or clarifications that you would like to ask before we begin? I will be emailing you a summary of the transcript of this session at a later time to verify for accuracy or if your response has changed. You have the right to stop the interview at any time based on the consent agreement that you signed earlier. Are you ready to start the interview?

Interview Questions

1. What do you view are the driving forces toward financial viability of hospitals in TX?
2. What are your perspectives toward how changing evidence-based measures or clinical guidelines are impacting your employees?
3. What are your perspectives on the reimbursement changes that are impacting the operations of your organization the most? Other hospitals?
4. What are your perspectives on the need for inpatient hospital beds in the future?

5. What are your perspectives on the move toward measuring quality and these incentives impacting upon your employees? Other hospitals?

Thank you again for your participation in this study.

Appendix B: Flyer Used to Solicit Potential Local Rural Leadership Participants

I am a doctoral student at Walden University inviting you to participate in my research study on the survivability of rural healthcare. The purpose of the study is to gain a common understanding of financial problems and operational inefficiencies that may be impacting rural hospital leaders in the state of Texas. I am looking for volunteers to interview to obtain the required information for the study. The individuals interested in participating should be involved in rural healthcare leadership in the state of Texas.

There will be no compensation for taking part in this study. The data gathered from this study may help to fill the gap in the literature regarding financial strategy and best practices in rural healthcare in the United States. This study may be useful for future research, healthcare organizations, and academia for understanding best practices for leadership style in healthcare. If you are interested in taking part in this study or would like to request further information, you may contact me by email at destin.cook@WaldenU.edu

Appendix C: Initial Interview Questions

1. What are the financial problems has your facility encountered over the last year?
    a. What are the main causes of these problems?
    b. What have you done to meet these challenges?
2. What are the general financial problems that all rural hospitals in the state of Texas are encountering?
    a. What are the main causes of these problems?
    b. What have you done to meet these problems?
    c. In what ways have these problems changed over the last ten years?
3. How has changes with Medicaid reimbursement affected your facility?
4. What challenges are your leaders experiencing with occupancy rates at your facility?
5. What are the operational inefficiencies that you have observed at your facility in your current role?
    a. What are the main causes of these problems?
    b. What have you done to meet these problems?
6. What are the primary operational inefficiencies that rural hospitals are encountering in the state of Texas?
    a. What are the main causes of these problems?
    b. What have you done to meet these problems?
    c. In what ways have these problems changed over the last ten years?

Appendix D: Expression of Interest Flyer to Potential Participants

Expression of Interest and signed consent form

Doctoral Research Study

My name is Destin Cook, and I Am a doctoral student at Walden University and an operational excellence team member at Baylor Scott & White. I am inviting you to participate in my research about the survivability of rural healthcare in the state of Texas. This study is in no way affiliated with my position at Baylor Scott & White.

What is the research about?

The purpose of this study is to gain a common understanding of financial problems and operational inefficiencies that may be impacting rural hospital leaders in the state of Texas. I believe that your insight into the current state of rural healthcare can be a great benefit to this study.

The data gathered from this study may be useful for future research, healthcare organizations, and academia for understanding financial strategy and best practices for leadership in rural healthcare. Lastly, this study has potential implications for improving the overall survivability of rural healthcare.

What does participation in this research study involve?

Participation in this study is limited to 15 individuals employed within the Baylor Scott & White System. Participation involves the participation in a semi-structured interview that will explore your perspectives on issues in rural healthcare. All interviews results will be kept confidential.

The interview process should take around 30 minutes to complete. All interviews will be recorded for accuracy. The transcribed interview will be sent via email to all participants to be reviewed for accuracy. This review should take around 10 minutes to read and hand correct. You are not required to participate in this study. Should you initially agree to participate, you also have the opportunity to withdraw at any time through the study.

Am I a good candidate for this study?

Candidates for this study include any leader (director or above) that has routine involvement with any aspect of rural health. Candidates will be asked for their feedback regarding the survivability of rural healthcare in the current healthcare environment.

Potential risks

There are minimal risks or discomforts in this study including sitting for up to 30 minutes and added stress of being tape recorded.

Guarantee of confidentiality

This study is entirely voluntary, and no compensation, gifts, or reimbursement will be given to any participant. Declining or discontinuing participation in this study will in no way negatively impact the participant's position in the company or relationship with the interviewer. All information obtained in this study will be kept completely confidential unless disclosure is required by law or situations in which the interviewer feels they have a professional or personal obligation to report (i.e., illegal behavior, suspicion of abuse). Individual participants will not be identified.

Confirmation of participation

By signing here "_____ is interested in participating in this research", you agree that you have read this information, you understand what you're being asked to do, and you understand the intent of this research study. Available is a copy of this consent information for your records.

I am happy to respond to any further questions you have about the study or your participation. My email address is Destin.Cook@WaldenU.edu

For any questions about your rights as a participant, you may contact a Walden representative at irb@mail.waldenu.edu