2021

The Relationship Between Organizational Culture and Hospital Performance in the Veterans Health Administration

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Walden University
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Abstract

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MA, Ashford University, 2016

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Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Healthcare Administration

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Abstract

High quality care consists of a culture that involves staff who are engaged and keep themselves accountable when providing care. In 2014, employees described their organizational culture at the Veteran Affairs (VA) as entrenched and intimidating. An audit also revealed that in 2014, patients were receiving substandard care. The present study was an analysis of the relationship between organizational culture and hospital performance in the Veterans Health Administration (VHA). This study provided key stakeholders such as the VA administration an understanding of work climate as an indicator of organizational culture and how it affected hospital performance with the VHA. The VHA is home to the United States' largest integrated health care system. The VHA has been compared to many other organizations, but few studies have been done within the VHA. Donabedian's structure, process, outcomes theory was the theoretical framework applicable to this study. This study used secondary data in a survey research design. It was a quantitative study using regression analysis to understand the relationship between organizational culture and hospital performance. The results indicated that there was a statistical significance between organizational culture and hospital performance. This study could provide positive social change to a healthcare community by sharing best practices in the VA system. This study will have the potential to influence policy changes that may improve outcomes for both staff and patients.

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Dedication

To my children Ethan and Alayna, “Don’t ever let someone tell you that you can’t do something. Not even me.” -Will Smith

To my husband Nathan, for the last 18 years, you have served not only to protect the ones you love, but you also serve to protect a country that allows us the freedom to become whatever we choose. Thank you for building a foundation that your family can thrive on.

To my mom and dad, you always saw in me what I didn’t see in myself. Thank you for always pushing me in the direction of greatness.

Acknowledgement

Dr. Donna Clews, you have not only mentored me, but you have cheered me on throughout this whole process. You have taught me the importance of being precise and clear. I keep a photograph I took of the Colosseum when my family and I traveled to Rome to remind me that Rome was not built in a day. As common as that quote may be, that quote has forever changed how I look approach my work. There were days I wanted to quit but you wouldn't allow it. I'll never forget when you confidently said, "I have no doubt in my mind that you will successfully complete this program." I cannot put into words how thankful I am for you.

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Section 1: Foundation of the Study and Literature Review

Introduction

The purpose of this study was to conduct an analysis that would determine if there is a relationship between organizational culture and hospital performance in the Veteran Health Administration (VHA). Conducting this study was important because in 2014, employees described the organizational culture at the Veteran Affairs (VA) as entrenched and intimidating (Westervelt, 2018). An audit also revealed that in 2014, patients were receiving substandard care (CNN Editorial Research, 2019). This study provides key stakeholders including the VA administration an understanding of organizational culture and how it affects hospital performance with the VHA.

In this section, I provide the problem statement, the purpose of study, the research questions and hypotheses, the theoretical foundation of the study, the nature of the study, the literature search strategy, the literature review related to key concepts, definitions, assumptions, scope and delimitations, significance, summary, and conclusions.

Problem Statement

When speaking to patients and providers, most will concur that high-quality care is an important factor when rating hospital performance (Saver et al., 2015). High quality care consists of a culture that involves staff who are engaged and keep themselves accountable when providing care (Becker's Hospital Review, 2016). Young (2017) stated that if hospital performance declines, it can affect health care at a national level. This was the case in 2014. The Veterans Health Administration is home to the United States' largest integrated health care system (U.S. Department of Veteran Affairs, 2018a). In

2014, a VA audit revealed that patients were receiving substandard care (Cohen, 2014). Shortly after the audit became public, employees were then given an opportunity to describe their organizational culture. Employees described management as entrenched and described their culture as one in which fear as well as intimidation were used to prevent potential whistleblowers from expressing their concerns to the public (Westervelt, 2018).

The VHA has been compared to many other organizations but few studies have been done within the VHA. After conducting the study comparing the VA health system to non-VA health systems, O'Hanlon et al. (2017) stated that additional studies should be conducted within the VA analyzing hospital performance. After conducting their study on the "Relationship of Hospital Organizational Culture to Patient Safety Climate in the Veteran's Health Administration," Hartmann et al. (2009) also stated that future studies should analyze the relationship between organizational culture and its outcomes at different levels of hospital organizations within the VHA. This study helps to fill the gap in research on the VHA by analyzing organizational culture and hospital performance within the Department of Veteran Affairs. There are six different Community Care Network (CCN) regions within the VHA. The CCN regions are spread across all 50 states. This study included four of the six regions because there is only one healthcare facility in Region 5 and one in Region 6. Studies that have been conducted in the past analyzing organizational culture and hospital performance in non-VA health systems were conducted by Jacobs et al. (2013) and Zhou et al. (2011).

Purpose of Study

The purpose of this quantitative study was to analyze the relationship between organizational culture and hospital performance in the VHA. Organizational culture is a complex and multifaceted concept. The three major components used by the VA to measure organizational culture are actions and behaviors, workplace climate, and outcomes and employee attitudes. For the purpose of this study, organizational culture was defined and measured by one of its major components, work climate. There are several quality indicators that are used when measuring hospital performance at the VHA. These indicators include acute care mortality, length of stay and utilization management, care transition, patient experience, avoidable adverse events, access, efficiency, and capacity. The purpose of this study was to examine these quality indicators and their relationship with work climate, which is an indicator of organizational culture, and determine if it is linked to hospital performance. According to Tilkemeier (2016), measuring hospital performance and organizational culture has the potential to significantly improve the quality and efficiency of patient care across the nation. Assessing performance also creates an organization that promotes the best clinical standards.

Research Questions and Hypotheses

RQ1: What is the relationship between organizational culture and hospital performance in the VHA system nationwide?

$H_0$1: There is no statistically significant relationship between organizational culture and hospital performance in VHA system nationwide.

H_a1: There is a statistically significant relationship between organizational culture and hospital performance within VA system nationwide.

RQ2: What is the relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system?

$H_0 2$: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system.

$H_a 2$: There is a statistically significant relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system.

RQ3: What is the relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system?

$H_0 3$: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system.

$H_a 3$: There is a statistically significant relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system.

RQ4: What is the relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system?

$H_0 4$: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system.

$H_a 4$: There a statistically significant relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system.

RQ5: What is the relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system?

$H_0$5: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system.

H_a5: There is a statistically significant relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system.

Theoretical Foundation for the Study

The theoretical framework used for this study was Donabedian's (1966) structure, process, outcomes theory. Donabedian (1966) contended that to assess the quality of care, the following needed to be in place:

> Before assessment can begin we must decide how quality is to be defined and that depends on whether one assesses only the performance of practitioners or also the contributions of patients and of the healthcare system; on how broadly health and responsibility for health are defined; on whether the maximally effective or optimally effective care is sought; and on whether individual or social preferences define the optimum. We also need detailed information about the causal linkages among the structural attributes of the settings in which care occurs, the processes of care, and the outcomes of care. Specifying the components or outcomes of care to be sampled, formulating the appropriate criteria and standards, and obtaining the necessary information are the steps that follow. (Donabedian, 1988)

Organizational culture represents the structure. Available resources, workload, and support are some of the measures that I used to assess organizational culture. Adjustments to add resources or improve workload to improve scores and ultimately improve outcome represents the process. Outcomes is represented by acute care

mortality, length of stay, care transition, patient experience, avoidable adverse events, and access.

Nature of Study

The nature of this study was quantitative research using multivariate regression analysis consistent with understanding the relationship between organizational culture and hospital performance. A regression analysis is a statistical technique that is used to examine the relationship between two or more variables of interest (Foley, 2018). For this study, work climate, an indicator of organizational culture (independent variable) was analyzed to determine if it influences hospital performance (dependent variable) in the VHA. Through the regression analysis, this study closed the current gap in literature regarding VHA organizational culture.

Literature Search Strategy

I systematically compiled a literature review through the use of scholarly websites via the National Center for Biotechnology Information and Walden University online library. Sourced articles used for the literature review were peer-reviewed and published between 2007 and 2018. The databases I accessed included PubMed, PubMed Central, and Sage. Search terms included *hospital performance, quality of care, organizational culture, workplace climate,* and *veteran's health administration*.

Literature Review Related to Key Variables and Concepts

Independent Variable

The concepts of organizational culture are important for understanding the behavior of individuals within an organization (Zachariadou et al. 2013). The

organizational culture of healthcare also affects all aspects of the service that patients receive. Beliefs of what organization culture is are also central to health quality improvement methods (Mannion & Davies, 2018). Mannion & Davies (2018) looked at how organizational culture impacts healthcare. Mannion & Davies (2018) stated that healthcare organizations comprise multiple subgroups that may drive forces for change. These subgroups include workplace climate, actions, behaviors, outcomes, and employee attitudes. In hospitals that experience substantial and positive organizational cultural shifts, changes were most prominent in specific domains mentioned in the subgroups. Hospitals that experienced these cultural shifts decreased in risk-standardized mortality rates (Mannion & Davies, 2018).

Zachariadou et al. (2013) analyzed general practitioners and nursing staff in Cyprus working at 42 primary healthcare organizations. In a 28 statement Organizational Culture Profile questionnaire, the authors studied the organizational values. Practitioners and nurses who participated were obligated to indicate the organization's characteristic cultural values orientation along a five-point Likert scale ranging from Very much = 1 to Not at all = 5. From a total of 306 healthcare professionals, 223 participated in the study. Performance orientation was the desired type of organizational culture among healthcare professionals. According to the Organizational Culture Profile instrument, a performance orientation organizational culture is shaped by the workplace climate, actions and behaviors, and positive employee attitudes and outcomes.

Warren et al. (2007) used the All Employee Census Survey (AES) to examine the relationship between workplace climate and healthcare system performance. The AES

used for their study was issued to employees in 2001 by the VA, which evaluated the employee's perception of the VA workplace climate. To conduct this evaluation, the authors cross-examined objective measures of healthcare system performance and the results taken from the AES. The results of their study showed that employee perceptions of workplace climate, which was the indicator used to measure organizational culture, were strongly related to the measures of system performance. There was a potential association of changes between 2%–35% in system performance outcomes overall correlated to change in employee perceptions of workplace climate by one standard deviation. The authors concluded that workplace climate as well as other factors related to organizational culture were strong drivers of system performance. Braithwaite et al. (2017) conducted a study analyzing the association between organizational culture, workplace cultures, and patient outcomes. In their study, Braithwaite et al. included a variety of healthcare facilities including military hospitals. Their strategy included 2,049 relevant articles in which 62 articles were included in the final analysis. What Braithwaite et al. found was that organizational culture and workplace cultures were correlated with patient incomes in over 90% of the studies. The gap in literature that the current study addressed that was not addressed in the studies conducted by Warren et al. (2007) and Braithwaite et. Al (2017) was to analyze organizational culture and hospital performance in the VA using the Strategic Analytics for Improvement and Learning (SAIL) created in 2015.

Dependent Variable

In 2014, issues of hospital performance within the VHA became public (Cohen, 2014). Reports stated that patients died waiting on appointments. In the past, hospital performance was measured using mortality rates. Many authors have defined mortality rates as easily measurable and important to everyone. According to Lilford & Pronovost (2010), studies in the past that have used variables such as hospital mortality to judge hospital performance have shown that it is a poor way to measure performance. To support this theory, Pitocco and Sexton (2018) used the risk adjusted mortality rate (RAMR) to assess hospital performance. Data was obtained from the New York State Department of Health. The authors looked for 10 inpatient quality indicators for the years 2009–2013. The authors chose this particular data because the State of New York was among the first states to use RAMR. What the RAMR attempts to do is to account for the differing risk profiles of its patients. The authors mentioned that looking at the RAMR is standard practice that uses a logistic regression model for a given procedure or illness for which it would provide an estimate on each patient's probability of death. There are several limitations when using the RAMR. The main limitation highlighted by the authors is that RAMR is a poor indicator of hospital performance. Therefore, Pitocco and Sexton used two alternative methods to measure hospital performance, which were the upper tail probability to screen for hospitals performing poorly and the lower tail probability to screen for hospitals performing well. The number of patients treated versus the number of patients who died were analyzed at over 196 hospitals in New York. The study closely analyzed Ellenville Regional Hospital. Two deaths were reported among 42

pneumonia patients. Using the binomial probability that equals to .214, the authors stated that there is a 21.4% chance that Ellenville Regional Hospital would have two or more deaths. Therefore, if the Ellenville Regional Hospital continued to treat the same number of patients, they would experience two or more deaths in 21.4% of the years. Therefore, the results of this study concluded that there is a strong agreement between the hospital performance and mortality rates. This study also discussed several biases. The RAMR is insensitive to sample size because in situations with fewer than 30 cases, the State of New York does not report the number of deaths. To many, the RAMR is unclear. Large portions of the healthcare organizational population that include physicians, healthcare professionals, and the public do not have a fundamental understanding of confidence intervals, which makes basic healthcare decision-making unclear.

Lilford & Pronovost (2010) added that there are other alternatives to consider when measuring hospital performance. When speaking to patients and providers, most agreed that high-quality care is an important factor when rating hospital performance (Shih & Schoenbaum, 2007). High quality care consists of a culture that involves staff who are engaged and keep themselves accountable when providing care (Becker's Hospital Review, 2016). When given a position, clinical and administrative staff all have specific roles. The roles given to clinical and administrative staff include certain tasks. These tasks are attached to quantifiable measurable goals. As employees meet these quantifiable goals, they have achieved the performance needed from the tasks they complete, and their performance contributes to the overall performance of the hospital. (Regis College, n.d.)

Independent and Dependent Variable

In 2013, Jacobs et al. examined the relationship between senior management team culture and organizational performance in acute hospitals. Culture and performance were measured using the Competing Values Framework questionnaire, which included a national longitudinal study of board level managers that included three cross-sectional surveys. The first survey conducted from 2001–2002 collected responses from 899 managers from 187 hospitals. The second survey conducted from 2006–2007 collected responses from 826 managers from 143 hospital. The third survey conducted from 2007–2008 collected responses from 739 managers from 140 hospitals. The authors used a multinomial analysis. In this questionnaire, respondents were given a series of descriptions of a hospital and the respondents were arranged in five groups. The culture that received the highest score from a respondent represented that individual's perception of the organization's dominant culture. The results for the descriptive analysis of culture type by star ratings showed that there was a slight positive gradient for developmental cultures with lower percentages found in zero stars and higher percentages in three stars. This study divided the cultures into dominant and developmental cultures. The authors found that their results supported their hypothesis that specific domains of performance valued within a dominant culture are those on which organizations perform best. Jacobs et al. argued that the cultural contexts within which senior managers work affect their motivation and behavior.

Research Outside the Veterans Administration

Zhou et al. conducted a study in 2011 that measured the relationship between organizational culture among employees of public hospitals and hospital performance. The data used consisted of hospital, employee, and patient surveys that were collected from 87 hospitals in 2009. The four types if hospital performance indicators used in this study were length of stay, outpatient visits per physician per day, bed days per physician, short-term profitability, patient satisfaction with medical care, and employee satisfaction. Using the Denison model and the Quinn and Rohrbaugh's competing values framework, the authors developed a tool to assess organizational culture. The three dimensions used to analyze organizational culture were consistency, adaptability, and involvement. Surveys were administered in each hospital using paper-based questionnaires. Participants to complete the surveys were chosen randomly. The survey used 80 different statements regarding organizational culture and were rated using the following options: fully disagree, essentially disagree, partially disagree, partially agree, essentially agree, and fully agree. 50 patients who were both treated in outpatient and were admitted were selected randomly and were asked to rate their overall care. Results were analyzed from a total of 3,437 hospital employees and from 8,276 patients. Employees concluded that the organizational culture was strong in most dimensions, but the study indicated that some dimensions of organizational culture are associated with hospital performance. Hospitals with organizational cultures that were customer focused had longer length of stays than those hospitals with organizational cultures that focused on social responsibility. Hospitals with the social responsibility focus responded to the demands of the

government or medical societies, which in turn resulted in shorter length of stay. Hospitals that prioritized cost control focused on gaining a financial return at the expense of patient satisfaction.

In another study conducted in 2018, Curry et al. conducted a mixed methods interventional study in 10 United States hospitals with the intention of improving hospital organizational culture that treated patients with acute myocardial infarction. The five domains of organizational culture that the authors focused on were learning environment, senior management support, psychological safety, commitment to the organization, and time for improvements. Organizational culture was quantified using a web-based survey and data from in-depth, in-person interviews at baseline then at 6 months and finally at 18 months. Staff selected for interviews were diverse in their roles. Standard frequency analysis to describe the samples of hospitals and survey respondents were used. The analysis consisted of a validated survey at the baseline and at 12 and 24 months. The average survey response rate was 88%. The RSMR data were collected from the Centers for Medicare and Medicaid Services. Significant changes were observed in organizational culture between the baseline and 24 months. The areas of organizational culture that showed the most significant changes were learning environment and senior management. Six of the 10 hospitals showed a significant improvement in organizational culture. The evidence-base strategies used in this study showed an increase of 2.4 at the baseline on average to 3.9 at 24 months. The hospitals that showed significant improvements in culture also experienced greater reductions in RSMR. The authors concluded that

strategies that assist in developing organizational culture that supports hospital performance can benefit hospitals who wish to improve clinical outcomes.

Research Comparing the Veterans Administration to Other Healthcare Systems

Moseley (2019) stated that organizational culture matters in the delivery of high performance in healthcare. Cohen et al. (2015) conducted a study analyzing the organizational culture of the VA. The authors stated that healthcare organizations that have an ethical organizational culture experience high levels of employee productivity, less staff turnover, better levels of patient safety, resource and cost savings, and higher levels patient satisfaction. In this study, the authors highlighted contributions that were comparative to the perceptions of eight specific characteristics to employees' overall ratings of the culture of their organization. Authors also evaluated whether employees ' overall ratings are influenced more by their positive perceptions, influenced more by their negative perceptions, or influenced equally by their positive and negative perceptions of the attributes. Data was taken from the Department of Veteran Affairs IntegratedEthics Staff Survey. Employees gave their perceptions of the organizational culture based of what they monitored. The average overall rating of the VA organization was 6.51 and the means for the attributes ranged from 3.06 to 3.32. There were several potential limitations to the study that may affect the generalizability of the results. Although 37,514 respondents were used in the analyses, the overall response rate to the survey was only 29.4%. Cohen (2014) stated that workers employed in the VA health system described their organizational culture as intimidating. They also feared repercussions from their

senior managers if they spoke publicly about their concerns of the organizational culture in the VA health system.

As a result of the long-standing concern of the VA healthcare system, the Veterans Access to Care through Choice, Accountability, and Transparency Act was passed in 2014. This act called for a widespread evaluation of the VA's ability to deliver high-quality health care to veterans. Since 2014, very few studies have been done to review the aspects of care analyzing organizational culture. Many studies have been done to compare the nation's largest integrated health care system to other non-VA health care organizations even when the quality of VA care has been a longstanding area of concern (O'Hanlon et al., 2016). The most recent study done in 2018 by Smith et al. used data from the AES collected in 2012 to look at 3,075 Veterans from 89 VA sites. This study investigated organizational culture as moderators of implementation strategy to reach veterans with serious mental illness (U.S. Department of Veterans Affairs, 2018b). Organizational culture ensures that the purpose of the organization matches the purpose of its members. If employees feel like their observations of organizational culture do not matter, the performance of that organization will reflect that. After conducting their study on the Relationship of Hospital Organizational Culture to Patient Safety Climate in the VHA, Hartmann et al. (2009) also stated that future studies should analyze the relationship between organizational culture and its outcomes at different levels of hospital organizations within the VHA.

Definitions

Organizational culture: Organizational culture is defined as the set of shared assumptions, values, and beliefs that govern how people behave in organizations. These assumptions, values, and beliefs are consistent observable patterns of behavior in organizations (Watkins, 2013). Employment functions provide a means to define what hospitals actually do; for example, diagnosing and providing treatment to patients. This is how organizational culture is formed. According to Bradley et al. (2017), organizational culture is essential to achieving high performance in a healthcare setting. The Office of Personnel Management requires the VA to question employees on organizational culture (AES, 2020). Organizational culture is measured using actions and behaviors, workplace climate, and outcomes and employee attitudes in the VA (U.S. Department of Veteran Affairs, 2018b). Because there are several different components of the AES and there is no ultimate composite score, this study will use the workplace culture subscale of the AES as a component measure of organizational culture. For the purpose of this study, organizational culture was measured using one of its components, workplace climate. According to Gershon et al. (2004), 66% of studies measuring organizational culture use workplace climate as an examining factor. The VA defines workplace climate as items that describe patterns of employees 'shared beliefs. Workplace climate is also viewed as the collection of unspoken rules or norms that employees develop about how to get the job done and how to treat one another. Organizational culture, is measured using one of its major components, workplace climate.

Hospital performance: Hospital performance is defined as the achievements of clinical and administrative staff in relation to goals set by stakeholders. (World Health Organization, 2003). The VHA's key stakeholders are military veterans and active-duty and reserve military personnel. When given a position, clinical and administrative staff all have specific roles. The roles given to clinical and administrative staff include certain tasks. These tasks are attached to quantifiable measurable goals. As employees meet these quantifiable goals, they have achieved the performance needed from the tasks they complete, and their performance contributes to the overall performance of the hospital. (Regis College, n.d.) The primary way to measure hospital performance is by conducting regulatory inspections, providing public satisfaction surveys, and evaluating third-party assessments. The inspections measure the safety of patients and personnel. The surveys evaluate patient experiences and their satisfaction. The third-party assessments include hospital performance measurements by peer reviewed studies or studies conducted by accreditation programs.

To measure patient satisfaction, SAIL uses care transition scores, which are extracted from the Hospital Consumer Assessment of Health Providers and Systems (HCAHPS) survey. This survey is used to measure patients' perception of care provided when transitioning them out of hospital setting. This survey consists of three questions:

- Question 1: During this hospital stay, staff took my preferences and those of my family or caregiver into account in deciding what my health care needs would be when I left.

- Question 2: When I left the hospital, I had a good understanding of the things I was responsible for in managing my health.
- Question 3: When I left the hospital, I clearly understood the purpose for taking each of my medications.

Hospital performance was measured in this study using acute care mortality, length of stay, care transition, patient experience, avoidable adverse events, and access to care.

Assumptions

In this study I assumed that the feedback employee provided on the AES is true. I assumed that employees described their organizational culture experience as measured by one of its major components, workplace climate. These assumptions were necessary because in order to determine if there is a relationship between organizational culture and hospital performance, the responses on the AES should accurately describe the organizational culture within the VHA.

Scope and Delimitations

The scope of the study was limited in regard to generalizability. Results may not be applicable to other organizations outside the VHA system. Other organizations may have a different composition of structures in terms of their staff and their overall table of organization. Threats to internal validity may include a low response rate and that could potentially bias the outcome. According to Nelson et al. 2014, several of the VHA domain scores rely on self-reports, which are subject to biases such as response bias and framing bias.

Significance, Summary, and Conclusions

The results of this study could provide insight for the veteran patient and employee community on the relationship between organizational culture and hospital performance. Veteran patients can better understand what organizational culture is, how organizational culture is measured, and why it influences hospital performance. Statistics show that there are 18.2 million veterans in the United States. Of those 18.2 million veterans, 9 million veterans are served each year by the Department of Veteran Affairs. VHA health care facilities consist of 1,062 outpatient sites and 172 VA medical centers (CNN Editorial Research, 2019). The VHA statistics also show that 25% of managers view employment surveys as standard procedure and 30% of employees complete employee surveys. The results of this study also give the VHA organization a better understanding of the relationship between hospital performance measures and organizational culture. The results of this study provide information that can affect administrative and human resource policies and procedures. According to Moseley (2019), organizational culture has a direct impact on performance. Moseley also stated that when performance becomes the only focus, it can have a negative effect on the organization. Manojlovich & Ketefian (2016) also added that the ability of employees to work in a professional manner may be influenced by the organization of their work environment.

Section 2: Research Design and Data Collection

Introduction

The purpose of this study was to conduct an analysis that will determine if there is a relationship between organizational culture and hospital performance in the VHA. Conducting this study was important because in 2014, employees described their organizational culture at the VA as entrenched and intimidating. An audit also revealed that in 2014, patients were receiving substandard care. Conducting this study provides key stakeholders including the VA administration an understanding of organizational culture and how it affects hospital performance with the VHA.

This section includes the research design and data collection. In this section, I discuss details of the research design and rationale, the methodology, and the threats to validity, and I provide a section summary.

Research Design and Rationale

The research design that I used in this study was regression analysis. This research design was fitting for this study because I examined the components of organizational culture and hospital performance. Through regression analysis, this study closes the current gap in literature regarding the VHA. This study provided tables of demographics that included age, gender, and area of United States where the VHA is located. This study also advances knowledge within the VHA.

Regression analysis research is nonexperimental with no outside influence from the researcher. For this quantitative study I used archival secondary data that was collected by the VA. No time or resource constraints were noted for the study.

Methodology

Study Population and Population

In this study I examined organizational culture, as measured by its component of workplace climate, and hospital performance, as measured by its 6 quality components, nationwide by region. This study will look at four of the six VA CCN regions which sum up to a total of 126 VA health facilities. The first CCN region has 41 VA health facilities. The second CCN region has 29 VA health facilities. The third CCN region has 26 VA health facilities. The fourth CCN region has 30 VA health facilities. Both region 5 and region 6 both have one healthcare facility. Therefore, those regions will not be included in study. (U.S. Department of Veteran Affairs, 2018c. To determine the sample size for this study, I performed a G* Power version 3.1. For this study, I entered a multivariate bivariate regression *t* test with standard deviation from one, an alpha level of .05, medium effect size of .15, and power of .90 into the calculator. Based on the calculations, the necessary sample size was 73.

Sampling Procedures for Participation and Data Collection

The SAIL value model first launched in July, 2012. The Department of Veteran Affairs developed the SAIL model to measure, evaluate, and benchmark quality and efficiency at medical centers. I measured hospital performance in this study using acute care mortality, length of stay, care transition, patient experience, avoidable adverse events, and access.

Since the SAIL, there have been several methodology instrument updates based on suggestions from VA senior leadership, VA program offices, and the field. Additional

changes were made to better match public reporting agencies, such as Centers for Medicare & Medicaid Services, Agency for Healthcare Research & Quality and HCAHPS, and to allow benchmarking with the public and private sectors. SAIL draws data from existing measures prepared by VA Program Offices and VA national databases for inpatient and outpatient encounters and facility characteristics. The assessment of the relative performance of facilities takes several steps. These steps include comparing facilities within their comparison group on individual quality measures and assigning a score based on their relative performance. Within each domain, the measure scores are multiplied by the assigned weight and then added together to become the domain score. The domain scores are then used to calculate the quality scores. The dataset is public and is available on the VA website.

The VA administration confirmed that all VA employees would be able to participate in the VA AES by using the survey link provided by the VA compliance committee. The sampling from the AES I looked at for this study was the employees ' functional group. This work group typically consists of clinical and clerical staff. The survey was available via web, paper, and phone. Patient survey metrics were prepared using rolling 12-month data ending May, 2018. The VA AES consists of a series of multi-item scales and individual metrics where each survey item represents a single concept. This study used the agreement scale, which is a 5 point bipolar Likert scale: 1= Strongly disagree, 2= Disagree, 3=Neutral, 4= Agree, and 5= Strongly agree. There is an additional point, which is 6 = do not know.

Instrumentation and Opalization of Constructs

To determine the initial validity and reliability of the AES, data was collected using in-depth, in-person interviews at baseline then at 6 months and finally at 18 months (U.S. Department of Veterans Affairs, 2018c). Once the validity and reliability of the AES was complete, the AES survey was then offered to VA employees via web, paper, or phone. The AES survey data used for this study was collected in 2018. Standard frequency analysis to describe the samples of hospitals and survey respondents were used. Action and behaviors, workplace climate, and outcomes and employee attitudes are measured in the AES as components of organizational culture. For this study I looked at one of those components, workplace climate. According to Gershon et al. (2004), 66% of studies measuring organizational culture use workplace climate as an examining factor.

To get the individual scores of all the employees to a number that becomes measurable at the hospital level, I determined a mean score by adding all the individual scores and obtaining the average score for each question. This provided a hospital level score for each question. To obtain the regional level score, I added the total hospital scores in each region for each question, calculated the mean score for all hospitals in one region, and converted it to regional level score.

For gender, 1 = male and 2 = female; for age, 1 = Under 40 and 2 = over 40; for years worked at the VA, 1 = less than 10 years, 2 = 10-20 years, and 3 = More than 20 years. To measure responses, the VA uses scales that consist of a satisfaction scale, agreement scale, and a feelings scale. Satisfaction scale response options are 1 = Very dissatisfied, 2 = Dissatisfied, 3 = Neutral, 4 = Satisfied, 5 = Very satisfied, and 6 = Not

applicable. Yes/No scale response options are 1 = Yes, 2 = No, and 3 = Do not know. The agreement scale response options are 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly agree, and 6 = Do not know. The feeling scale response options are 1 = Very poor, 2 = Poor, 3 = Fair, 4 = Good, 5 = Very good, and 6 = Do not know.

According to the AES, work climate represents the unspoken rules and norms in our workplace. For example, those unspoken rules are civility, servant leadership, and ethics. The two AES categories that I used to measure workplace climate as an indicator of organizational culture were workplace relationships and workplace characteristics. Within workplace climate, the subcategories that were measured were servant leadership and workplace performance. Servant leadership is a summary measure of the work environment being a place where organizational goals are achieved by empowering others. This includes focusing on collective goals, encouraging contribution from others, and then positively reinforcing others' contributions. Servant leadership occurs at all levels of the organization, where individuals (supervisors, staff) put others' needs before their own (U.S. Department of Veteran Affairs, 2018b). Servant leadership is an approach for optimizing the delivery of client-centered services by strengthening employees to be an engaged and empowered workforce. Servant leadership strives to meet both organizational objectives. The questions that I used to measure servant leadership are shown in Table 1:

Table 1

Servant Leadership Questions

Question	Scale: Agreement The agreement scale is a 5 point bipolar Likert scale: 1= Strongly Disagree 2= Disagree 3=Neutral 4= Agree 5= Strongly Agree
Supervisor listening: My supervisor listens to what I have to say	Agreement
Supervisor respect: My supervisor treats me with respect	Agreement
Supervisor trust: I have trust and confidence in my supervisor	Agreement

Workplace performance is a summary measure of the workplace environment investing in its human capital by having the right resources, training, goals, and innovation in place to support optimal performance (U.S. Department of Veterans Affairs, 2018c). Below are the questions that summarize workplace performance:

Table 2

Workplace Performance Questions

Question	Scale
Skill development: I am given a real opportunity to improve my skills in my organization	Agreement
Innovation: I feel encouraged to come up with new better ways of doing things	Agreement
Workgroup competency: My work unit has the job-relevant knowledge and skills necessary to accomplish organizational goals.	Agreement

Validity is determined by looking at the instrument or survey item and ensuring that it is justified in measuring the concept that it intends to measure. The majority of AES items have a "face validity" in being straightforward in what is asked (U.S. Department of Veteran Affairs, 2018c). AES items have been collected from a number of sources. Other items were developed upon reviewing civility and psychological safety research literature. Overtime, a multi-year survey administration has tested and determined the validity of the AES items (Benzer & Meterko, 2010). According to

Osatuke et.al (2012), the AES is a living document and validating the AES metrics is an ongoing process (Osatuke et al., 2012).

Dependent Variables - Hospital Performance

The operationalization of hospital performance of each VA health facility takes several steps. Facilities are first compared within their comparison group on individual quality measures and assigned a score based on their relative performance. With each domain, the measure scores are multiplied by the assigned weight and then added together to become the domain score. The domain scores are then used to calculate the Quality score. Using the 10th, 50th, and 90th percentile cut-offs of scores, each facility is designated a 1 to 5 star rating for overall quality. SAIL's 5 star rating system for VA health facilities is structured so that at any given time, there is always a bottom 10 percent of VA health facilities that will have 1 star ratings, a top 10 percent with 5 stars, and a middle 40 percent with 3 stars. The Quality scores are categorical.

Hospital performance will be measured in this study using acute care mortality, length of stay, care transition, patient experience, avoidable adverse events, and access. The acute care 30-day standardized mortality ratio (SMR) is measured using patients who died within 30 days of hospital admission and that is divided by the sum of the expected deaths of all acute care patients. The acute care 30-day SMR also known as SMR30 is the actual number of patients admitted to acute care and the in-hospital SMR is the actual number of deaths within 1 day of hospital discharge for patients who were admitted to acute care. The reference value of both SMR and SMR30 is 1.00. The length of stay and utilization management is calculated by measuring the sum of the actual length of stay

divided by the sum of the expected length of stay for the hospital. Patient Safety Index and avoidable adverse events were formed from a set of patient safety indicators developed by the Agency for Healthcare Research and Quality. These indicators are commonly used to reflect quality of care inside hospitals and geographic areas with the intention of focusing on potential avoidable complications and events. There are ten patient safety indicators used to develop an overall Index value. The 10 patient safety indicators included in the SAIL Values Model are Pressure ulcer, Death among surgical inpatients with serious, treatable complications, Iatrogenic pneumothorax, Central venous catheter-related blood stream infections, Perioperative hemorrhage or hematoma, Postoperative Acute Kidney Injury Requiring Dialysis, Postoperative respiratory failure, Perioperative pulmonary embolism or deep vein thrombosis, Postoperative sepsis, and Postoperative wound dehiscence. Based on the optimal cost, each facility is given an efficiency score. An efficiency score of 1.00 is most efficient, and values greater than 1.00 are associated with increasing inefficiency. Cost efficiency is measured by using stochastic frontier analysis (SFA). Capacity reported on SAIL is measured as the % Increase in Current Physician and Advanced Practice Provider (APP) Capacity, prepared basing on physician and APP productivity. It presents the percentage increase in the productivity measure from the current year baseline for the selected facility to grow to the MCG average productivity across all specialties.

The SAIL will be used to measure hospital performance within the VHA. SAIL first launched in July 2012. Hospital performance will be measured using measure unit and scale below:

Table 3

Strategic Analytics for Improvement and Learning Value Model Performance Measures, Measure Units, and Scale

Performance measure	Measure unit	Scale
Acute care mortality	Observed/expected ratio percentage	10th-50th-90th percentile
Length of stay and throughout	Days	10th-50th-90th percentile
Care transition	Percentage	10th-50th-90th percentile
Patient experience	HCAHPS score (0 - 100 %)	10th-50th-90th percentile
Avoidable adverse events	Observed/expected ratio percentage	10th-50th-90th percentile
Access	Observed/expected ratio percentage	10th-50th-90th percentile

Data Analysis Plan

The data set is a secondary data set collected in 2018 from all VA hospitals. The instrument that will be used is the AES and the scales used for this study will be the work climate scales. The National Center for Organizational Development (NCOD) conducts an extensive cleaning process on the raw AES data which these questions were obtained from to ensure only valid data are reported. This process is conducted in parallel by two data scientists using different software, and the data are only considered final when they

both independently reach the same result. Valid data is considered as plausible, sincere, and deliberate. Plausible responses and response patterns only contain possible values. Sincere responses do not indicate "stuffing the ballot box" positively or negatively. The data scrub includes examination of these areas as well. 1. Respondent reported an unlikely combination of demographics (e.g., 18-year-old physician) 2. Respondent took the survey so fast that they could not have actually read the questions 3. Respondent scored all questions low or high, or skipped most questions. Responses that raise too many flags in these areas are removed from the data and are not included in reports or scores. In 2018, approximately 2% of responses were removed. Hospital performance data was obtained by the VA in 2018. The SAIL uses 6 quality components as described in figure 2. The following questions will be addressed in the study. For each research question, the corresponding null and alternative hypothesis are presented.

RQ1: What is the relationship between organizational culture and hospital performance in the VHA system nationwide?

$H_0$1: There is no statistically significant relationship between organizational culture and hospital performance in VHA system nationwide.

H_a1: There is a statistically significant relationship between organizational culture and hospital performance within VA system nationwide.

RQ2: What is the relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system?

$H_0$2: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system.

H_a2: There is a statistically significant relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system.

RQ3: What is the relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system?

$H_0 3$: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system.

$H_a 3$: There is a statistically significant relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system.

RQ4: What is the relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system?

$H_0 4$: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system.

$H_a 4$: There a statistically significant relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system.

RQ5: What is the relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system?

$H_0 5$: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system.

$H_a 5$: There is a statistically significant relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system.

Multivariate Regression Analysis

Multivariate Regression Analysis is used to examine if more than one independent variable is linearly related to more than one dependent variable. This study will use regression estimates to explain if work climate, an indicator of organizational culture can predict the outcome of hospital performance. This study will determine the strength of organizational culture, forecast an effect that organizational culture has on hospital performance, and trend forecasting (Foley, 2018). Table 4 summarizes the statistical analyses for each research question and null hypothesis.

Table 4

Statistical Analyses Conducted per Research Question and Null Hypothesis

Research Question	Null hypothesis	Statistical procedure
What is the relationship between organizational culture and hospital performance in the VHA system nationwide?	There is no statistically significant relationship between organizational culture and hospital performance in VHA system nationwide.	Multivariate regression analysis
What is the relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system?	There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system.	Multivariate regression analysis
What is the relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system?	There is a statistically significant relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system	Multivariate regression analysis
What is the relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system?	There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system.	Regression analysis
What is the relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system?	There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system.	Regression analysis
What is the relationship between organizational culture and hospital performance in CCN Region 5 of the VHA system?	There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 5 of the VHA system.	Regression analysis
What is the relationship organizational culture and hospital performance in CCN Region 6 of the VHA system?	There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 6 of the VHA system.	Regression analysis

Threats to Validity

Threats to internal validity may include a low response rate and that could potentially bias the outcome. According to Nelson et al. 2014, several of the VHA domain scores rely on self-reports, which are subject to biases such as response bias and framing bias. The AES attained a 65.5% response rate (256,807 responses/391,956 potential respondents). The survey was available via web, paper, and phone. A clear majority of respondents complete the survey via web. Web: 234,324 responses (99.3%) Phone: 1,178 responses (0.5%) Paper: 382 responses (0.2%) Threats to validity that this study will have is instrumentation. To reduce instrumentation, this study will aim for consistency at each observation point of the AES and SAIL.

Ethical Procedures

The VHA directive outlines the procedures for implementing the Federal Policy for the Protection of Human Subjects that are used in VA research. The VA is guided by the ethical principles of The *Belmont Report*. The Belmont Report, written by the National Commission for the Protection of Human Subjects, developed the basic ethical principles that explain the conduct of behavioral and biomedical research that involve human subjects (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979). According to The Belmont Report, individuals who are the subjects of research must be treated as autonomous agents, and second, that persons with diminished autonomy are entitled to protection. The Belmont reports state that "the principle of respect for persons thus divides into two separate moral requirements: the requirement to acknowledge autonomy and the requirement to protect

those with diminished autonomy." Autonomy is protected under the Boundaries Between Practice & Research.

The Commission developed guidelines to assure that research is conducted in accordance with those principles. (National Commission for the Protection of Human Subjects of Biomedical and Behavioral Research, 1979) All individuals involved in conducting VA human subjects research must first complete ethical principles training. The IRB must review and approve all research conducted by VHA Program Office employees. Each IRB is required to have a minimum of five voting members with varying backgrounds to encourage complete and adequate review of research activities. All studies are also protected by the Certificate of Confidentiality. Since research conducted in the VA is federally funded, it is required to have a Certificate of Confidentiality if identifiable and sensitive information will be collected. To permit from patient information being disclosed, an investigator ensures that disclosure of identifiable information is prohibited unless subjects 'consent for disclosure. All researchers involved are also protected under the Certificate of Confidentiality as well.

The AES Administration ensured that the survey link has the VA 508 compliance conformance which ensures that all VA employees would be able to participate in the 2018 VA AES if they choose to do so. Identifiable information such as name, address, phone number, and email were not collected from participants. The AES survey was provided to employees via web, paper, or through phone. An AES help desk was provided to all VA employees and there were several ways to reach the AES administrators. VA employees were given a number to call or they could contact the AES

administrators via email. The AES attained a 62% response rate and the breakdown of responses by VA Agency was made available for researchers to access. When AES data is published, it accessible to all VA employees via AES Dashboard and via Interactive VISN Report which allows customizable data pulls for research and comparisons. Researchers can use SAIL data tables because data is was made public so therefore data can be downloaded.

To ensure the protection of security and confidentiality of archival data, all data has been de-identified and will be kept in password protected electronic spreadsheets on my personal computer. Data will only be used for research in this study. Also, data will be not be open if it is not being analyzed for study to minimize exposure to those not involved in study. Study will also not include any names of employees nor patients. Once research has been approved, I will delete raw data within 24 hours.

Summary

This chapter provides a comprehensive view of the research design and methodology to determine if a relationship exist between work climate which is an indicator of organizational culture and hospital performance. The methodology includes the sample population which consist of employees and patients who all work and receive care within the VHA. The AES survey instrument as well as the SAIL and AES operational definition was reviewed alongside the data analysis plan. Both variables will be operationalized to test the hypotheses. Ethical procedures and threats of validity were also discussed. Section 3 will display presentation of the results and study's findings.

Section 3: Presentation of the Results and Findings

Introduction

The purpose of this study was to examine the relationship between organizational culture and hospital performance in the VHA. The theoretical framework was Donabedian's (1966) theory, which addresses structure, process, and outcomes. Donabedian (1996) contended that to assess the quality of care, quality needs to be defined, and that depends on whether one assesses only the performance of practitioners or also the contributions of patients and of the healthcare system. Organizational culture represents the structure. Adjustments to add resources or improve workload to improve scores and ultimately improve outcome represents the process. Outcomes is represented by the acute care mortality, length of stay and utilization management, care transition, patient experience, avoidable adverse events, access, efficiency, capacity, and morbidity and mortality. Findings from this study could provide social change to a healthcare community by sharing best practices with the VA system. This study has the potential to influence policy changes that may improve outcomes for both staff and patients.

I used a regression analysis to examine if there were any statistically significant differences between the components of organizational culture and components of hospital performance in the VA health system. The multiple regression analysis consisted of three different tests, a model summary, ANOVA, and the coefficients table. The model summary table reports the strength of the relationship between the dependent variables and the independent variable and how much of the total variation in the dependent variable can be explained by the independent variable. I used the ANOVA table to

determine whether there was any statistically significant difference between the means of two or more independent groups. The table of coefficients shows tests for the estimates of the coefficients. The ANOVA specifically tested the null hypothesis. The table includes a measure of the error and a statistical test of the null hypothesis. The table also includes the *p*-value for the statistical test. In this study I examined organizational culture as measured by its component of workplace climate. I also examined hospital performance nationwide and by region as measured by its six quality components. I looked at four of the six VA CCN regions. Categories for hospital performance included acute care mortality, length of stay, care transition, patient experience, avoidable adverse events, and access. For this study, I used a multiple regression analysis.

Section 3 includes the research questions and hypotheses, a discussion of data collection of the secondary data set, which looks at time frame and discrepancies of the data set, and descriptive and demographic characteristics of samples for RQ1–RQ5, as well as a summary of Section 3.

Research Questions and Hypothesis

RQ1: What is the relationship between organizational culture and hospital performance in the VHA system nationwide?

$H_0$1: There is no statistically significant relationship between organizational culture and hospital performance in VHA system nationwide.

H_a1: There is a statistically significant relationship between organizational culture and hospital performance within VA system nationwide.

RQ2: What is the relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system?

$H_0$2: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system.

H_a2: There is a statistically significant relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system.

RQ3: What is the relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system?

$H_0$3: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system.

H_a3: There is a statistically significant relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system.

RQ4: What is the relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system?

$H_0$4: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system.

H_a4: There a statistically significant relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system.

RQ5: What is the relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system?

$H_0$5: There is no statistically significant relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system.

H_a5: There is a statistically significant relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system.

Data Collection of Secondary Data Set

Time Frame and Discrepancies of the Data Set

The data collection involved downloading the AES and SAIL from all VA hospitals in Regions 1 through 4 for the calendar year 2018. Using this dataset, I examined organizational culture using workplace climate. The variables for hospital performance were categorized as follows: acute care mortality, length of stay, care transition, patient experience, avoidable adverse events, and access. The data scrub included examination of these areas: (a) respondent reported an unlikely combination of demographics (e.g., 18-year-old physician), (b) respondent took the survey so fast that they could not have actually read the questions, and (c) respondent scored all questions low or high or skipped most questions. Responses that raised too many questions in these areas were removed from the data and were not included in reports or scores. In 2018, approximately 2% of responses were removed. The 2018 AES received 242,304 raw responses. One record was removed as a result of a request from a site for someone who used the incorrect workgroup code. Blank records were removed (6,311), and 108 records were removed for suspicious and/or impossible combinations of responses. The final response count postscrub was 235,884.

Descriptive and Demographic Characteristics of Sample

The data analysis process began after I received Institutional Review Board approval from Walden University; the approval number was 01-21-21-0666071. All data

files were extracted and downloaded into Excel software. Table 5 presents the descriptive statistics for the VHA employees within the AES.

Table 5

Descriptive Statistics of All Employee Census Survey Population

Gender		
	N	Percentage
Male	73,879	36.8
Female	126,635	63.2
Total	200,514	100.0

Age		
	N	Percentage
under 40	58986	29.5
over 40	141180	70.5
Total	200166	100.0

Years worked in the VHA		
	N	Percentage
Less than 10 years	133881	66.1
10 to 20 years	46663	23.0
More than 20 years	21917	10.8
Total	202461	100.0

I identified a total of 126 VA health facilities. The first CCN region has 41 VA health facilities. The second CCN region has 29 VA health facilities. The third CCN region has 26 VA health facilities. The fourth CCN region has 30 VA health facilities. Both Region 5 and Region 6 have one healthcare facility (U.S. Department of Veteran Affairs, 2020). Therefore, those regions were not included in study. To measure organizational culture, I used components of workplace climate. Those components included innovation, work group competency, supervisor listening, supervisor respect, supervisor trust, and skill development. Organizational culture was measured using the agreement scale, which is a 5 point bipolar Likert scale. 1 = Strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly agree. To measure hospital performance, I converted metric values to *z* scores, which were adjusted for complexity groupings. The higher the *z* score, the more favorable the overall performance. The *z* scores were then used to calculate the quality score using the domain score, which is used as the weighted sum of metric *z* scores. Using the 10th, 50th, and 90th percentile cut-offs of scores, which are listed in Table 6, each facility was designated a 1 to 5 star rating for overall quality.

Tables 6-15 present descriptive statics of organizational culture and for the performance measures of hospital performance in the VHA nationwide, as well as for Regions 1-4. The mean scores of the AES and for quality measures in the VHA are important because they represent how the VHA measures internally.

Table 6

Descriptive Statistics of Organizational Culture Nationwide

	N	Mean	Measure	
Innovation	126	3.72330892	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Workgroup competency	126	3.90906796	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Supervisor listening	126	4.03506119	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Supervisor respect	126	4.14644266	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Supervisor trust	126	3.91881494	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Skill development	126	3.79712569	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree

Table 7

Descriptive Statistics of Hospital Performance Nationwide

	N	Mean	Measure	10th-50th-90th percentile
Acute care mortality	111	.86968	O/E	0.480 - 0.890 - 1.238
Length of stay	111	4.37869	Days	3.660 - 4.407 - 5.015
Care transition	111	11.20668	Percentage	9.583 - 11.420 - 12.705
Inpatient patient experience	110	66.49089	HCAHPS score (0 - 100 %)	56.441 - 67.161 - 76.264
Outpatient patient experience	126	70.36457	HCAHPS score (0 - 100 %)	61.485 - 69.920 - 76.736
Avoidable adverse events	111	.89423	O/E	0.231-0.922-1.482
Primary care access	126	79.38277	Percentage	57.654-79.766-93.803
Specialty care access	126	77.55204	Percentage	69.652 - 76.347 - 84.982
Mental health access	126	92.74852	Percentage	87.296 - 93.641 - 97.373

Table 8

Descriptive Statistics of Organizational Culture for Region 1

	N	Mean	Measure	
Innovation	41	3.7136	Likert Scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree
Workgroup competency	41	3.7295	Likert Scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree
Supervisor listening	41	4.0543	Likert Scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree
Supervisor respect	41	4.1863	Likert Scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree
Supervisor trust	41	3.9620	Likert Scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree
Skill development	41	3.9790	Likert Scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree

Table 9

Descriptive Statistics of Hospital Performance for Region 1

	N	Mean	Measure	
Acute care mortality	35	.8811	O/E	10th-50th-90th percentile
Length of stay	35	4.4530	Days	0.480 - 0.890 - 1.238
Care transition	35	11.2909	Percentage	3.660 - 4.407 - 5.015
Inpatient patient experience	35	66.4517	HCAHPS score (0 - 100 %)	9.583 - 11.420 - 12.705
Outpatient patient experience	41	74.1396	HCAHPS score (0 - 100 %)	56.441 - 67.161 - 76.264
Avoidable adverse events	35	.9101	O/E	61.485 - 69.920 - 76.736
Primary care access	41	81.8387	Percentage	0.231-0.922-1.482
Specialty care access	41	77.4248	Percentage	57.654-79.766-93.803
Mental health access	41	91.243	Percentage	69.652 - 76.347 - 84.982

Table 10

Descriptive Statistics of Organizational Culture for Region 2

	N	Mean	Measure	
Innovation	29	3.8443	Likert scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree
Workgroup competency	29	4.0172	Likert scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree
Supervisor listening	29	4.0894	Likert scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree
Supervisor respect	29	4.0774	Likert scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree
Supervisor trust	29	3.8676	Likert scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree
Skill development	29	3.7333	Likert scale	1 Strongly disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly agree

Table 11

Descriptive Statistics of Hospital Performance for Region 2

	N	Mean	Measure	10th-50th-90th Percentile
Acute Care Mortality	27	.8095	O/E	0.480 - 0.890 - 1.238
Length of Stay	27	4.2346	Days	3.660 - 4.407 - 5.015
Care Transition	27	11.1084	Percentage	9.583 - 11.420 - 12.705
Inpatient Patient Experience	27	68.7463	HCAHPS score (0 - 100 %)	56.441 - 67.161 - 76.264
Outpatient Patient Experience	29	72.5262	HCAHPS score (0 - 100 %)	61.485 - 69.920 - 76.736
Avoidable Adverse Events	27	.7564	O/E	0.231-0.922-1.482
Primary Care Access	29	85.1858	Percentage	57.654-79.766-93.803
Specialty Care Access	29	79.4135	Percentage	69.652 - 76.347 - 84.982
Mental Health Access	29	94.2008	Percentage	87.296 - 93.641 - 97.373

Table 12

Descriptive Statistics of Organizational Culture for Region 3

	N	Mean	Measure	
Innovation	26	3.6392	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Workgroup Competency	26	3.9867	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Supervisor Listening	26	3.9936	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Supervisor Respect	26	4.1560	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Supervisor Trust	26	3.9024	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Skill Development	26	3.6725	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree

Table 13

Descriptive Statistics of Hospital Performance for Region 3

	N	Mean	Measure	10th-50th-90th Percentile
Acute Care Mortality	25	.9468	O/E	0.480 - 0.890 - 1.238
Length of Stay	25	4.4645	Days	3.660 - 4.407 - 5.015
Care Transition	25	11.1825	Percentage	9.583 - 11.420 - 12.705
Inpatient Patient Experience	24	64.4076	HCAHPS score (0 - 100 %)	56.441 - 67.161 - 76.264
Outpatient Patient Experience	26	66.8512	HCAHPS score (0 - 100 %)	61.485 - 69.920 - 76.736
Avoidable Adverse Events	25	1.0827	O/E	0.231-0.922-1.482
Primary Care Access	26	74.2520	Percentage	57.654-79.766-93.803
Specialty Care Access	26	75.3437	Percentage	69.652 - 76.347 - 84.982
Mental Health Access	26	90.7930	Percentage	87.296 - 93.641 - 97.373

Table 14

Descriptive Statistics of Organizational Culture for Region 4

	N	Mean	Measure	
Innovation	30	3.6925	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Workgroup Competency	30	3.9827	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Supervisor Listening	30	3.9921	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Supervisor Respect	30	4.1505	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Supervisor Trust	30	3.9236	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree
Skill Development	30	3.7183	Likert Scale	1 Strongly Disagree 2 Disagree 3 Neutral 4 Agree 5 Strongly Agree

Table 15

Descriptive Statistics of Hospital Performance for Region 4

	N	Mean	Measure	10th-50th-90th Percentile
Acute Care Mortality	24	.8405	O/E	0.480 - 0.890 - 1.238
Length of Stay	24	4.3431	Days	3.660 - 4.407 - 5.015
Care Transition	24	11.2195	Percentage	9.583 - 11.420 - 12.705
Inpatient Patient Experience	24	66.0939	HCAHPS score (0 - 100 %)	56.441 - 67.161 - 76.264
Outpatient Patient Experience	30	66.1607	HCAHPS score (0 - 100 %)	61.485 - 69.920 - 76.736
Avoidable Adverse Events	24	.8298	O/E	0.231-0.922-1.482
Primary Care Access	30	74.8634	Percentage	57.654-79.766-93.803
Specialty Care Access	30	77.8405	Percentage	69.652 - 76.347 - 84.982
Mental Health Access	30	92.0818	Percentage	87.296 - 93.641 - 97.373

Results

Statistical Assumption for RQ1: Organizational Culture and Hospital Performance

RQ1: What is the relationship between organizational culture and hospital performance in the VHA system nationwide?

Multiple Linear Regression

A multiple linear regression analysis was conducted to test for a statistical significance between organizational culture and hospital performance using a merged dataset that measured both variables at the hospital-level. For this analysis, the variables within the organizational culture were used as predictors to determine if there is a statistical significance.

In Table 16, *R* (.245) indicates that there is a low correlation between Organizational Culture (*N* = 126) and Acute Care Mortality (*N* = 111). According to the R2 value, 6% of the total variation in Acute Care Mortality can be explained by Organizational Culture within the VHA.

Table 16

Model Summary Organizational Culture and Acute Care Mortality

Model summary				
Model	*R*	*R* square	Adjusted *R* square	Std. error of the estimate
1	.245a	.060	.006	.308576

In Table 17, it shows that Organizational Culture did not have a statistically significant impact on Acute Care Mortality. Since P = .362, the null hypothesis is accepted.

Table 17

ANOVA Organizational Culture and Acute Care Mortality

ANOVAa						
Model		Sum of squares	*df*	Mean square	*F*	Sig.
1	Regression	.634	6	.106	1.110	.362b
	Residual	9.903	104	.095		
	Total	10.537	110			

Table 18 shows that there is no statistical significance between the organizational culture and acute care mortality.

Table 18

Coefficients Organizational Culture Acute Care Mortality

Coefficientsa						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.072	1.553		1.978	.051
	Innovation	-1.080	.658	-.550	-1.639	.104
	Workgroup competency	.800	.481	.428	1.664	.099
	Supervisor listening	.142	.667	.048	.212	.832
	Supervisor respect	-1.267	.890	-.463	-1.423	.158
	Supervisor trust	.153	.865	.056	.176	.860
	Skill development	.729	.519	.414	1.403	.163

In Table 19, *R* (.188) indicates that there is a low correlation between Organizational Culture (N = 126) and Length of Stay (N = 111). According to the R2 value, -2% of the total variation in Length of Stay can be explained by Organizational Culture within the VHA.

Table 19

Model Summary Organizational Culture and Length of Stay

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.188a	.035	-.020	.588668

In Table 20, it shows that Organizational Culture did not have a statistically significant impact on Length of Stay. Since P = .703, the null hypothesis is accepted.

Table 20

ANOVA Organizational Culture and Length of Stay

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	1.318	6	.220	.634	.703b
	Residual	36.039	104	.347		
	Total	37.357	110			

Table 21 shows that there is no statistical significance between the Organizational Culture and Length of Stay.

Table 21

Coefficients Organizational Culture and Length of Stay

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.101	2.962		1.047	.298
	Innovation	.289	1.256	.078	.230	.818
	Workgroup Competency	-.999	.918	-.283	-1.089	.279
	Supervisor Listening	.899	1.273	.161	.706	.482
	Supervisor Respect	-.216	1.698	-.042	-.127	.899
	Supervisor Trust	1.635	1.651	.319	.991	.324
	Skill Development	-1.324	.991	-.399	-1.337	.184

In Table 22, *R* (.277) indicates that there is a low correlation between Organizational Culture (*N* = 126) and Care Transition (*N* = 111). According to the R2 value, 2.4% of the total variation in Care Transition can be explained by Organizational Culture within the VHA.

Table 22

Model Summary Organizational Culture and Care Transition

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.277a	.077	.024	1.462904

In Table 23, it shows that Organizational Culture did not have a statistically significant impact on Care Transition. Since P = .205, the null hypothesis is accepted

Table 23

ANOVA Organizational Culture and Care Transition

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	18.544	6	3.091	1.444	.205b
	Residual	222.569	104	2.140		
	Total	241.114	110			

Table 24 shows that there is no statistical significance between the Organizational Culture and Care Transition.

Table 24

Coefficients Organizational Culture and Care Transition

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.520	7.362		1.022	.309
	Innovation	1.556	3.122	.166	.498	.619
	Workgroup Competency	-3.798	2.280	-.424	-1.666	.099
	Supervisor Listening	3.185	3.164	.224	1.007	.316
	Supervisor Respect	-3.074	4.220	-.235	-.728	.468
	Supervisor Trust	6.910	4.103	.530	1.684	.095
	Skill Development	-3.797	2.462	-.451	-1.542	.126

In Table 25, *R* (.392) indicates that there is a low correlation between Organizational Culture (*N* = 126) and Inpatient Patient Experience (*N* = 110). According to the R2 value, Organizational Culture within the VHA can explain 10.4% of the total variation in Inpatient Patient Experience.

Table 25

Model Summary Organizational Culture and Inpatient Patient Experience

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.392a	.154	.104	7.395495

In Table 26, it shows that Organizational Culture did not have a statistically significant impact on Inpatient Patient Experience. Since P = 0.080, the null hypothesis is accepted.

Table 26

ANOVA Organizational Culture and Inpatient Patient Experience

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	1022.648	6	170.441	3.116	.080b
	Residual	5633.414	103	54.693		
	Total	6656.063	109			

Table 27 shows that there is no statistical significance between the Organizational Culture and Inpatient Patient Experience.

Table 27

Coefficients Organizational Culture and Inpatient Patient Experience

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-68.330	37.290		-1.832	.070
	Innovation	-4.372	15.794	-.088	-.277	.783
	Workgroup Competency	5.864	11.534	.125	.508	.612
	Supervisor Listening	26.036	15.995	.347	1.628	.107
	Supervisor Respect	1.648	21.336	.024	.077	.939
	Supervisor Trust	-1.048	20.749	-.015	-.051	.960
	Skill Development	5.332	12.447	.120	.428	.669

In Table 28, *R* (.590) indicates that there is a low correlation between Organizational Culture (*N* = 126) and Outpatient Patient Experience (*N* = 126). According to the R2 value, 31.5% of the total variation in Outpatient Patient Experience can be explained by Organizational Culture within the VHA.

Table 28

Model Summary Organizational Culture and Outpatient Patient Experience

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.590a	.348	.315	4.865597

In Table 29, it shows that Organizational Culture did have statistically significant impact on Outpatient Patient Experience. Since P = 0.060, the null hypothesis is accepted.

Table 29

ANOVA Organizational Culture and Outpatient Patient Experience

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	1502.708	6	250.451	10.579	.060b
	Residual	2817.210	119	23.674		
	Total	4319.918	125			

Table 30 shows that there is a statistical significance between the Workplace Competency and Patient Experience nationwide. There is no statistical significance between Innovation, Supervisor Listening, Supervisor Respect, Supervisor Trust, Skill Development and Outpatient Experience.

Table 30

Coefficients Organizational Culture and Outpatient Patient Experience

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.478	22.059		.656	.513
	Innovation	6.215	8.840	.160	.703	.483
	Workgroup Competency	-12.839	5.418	-.354	-2.370	.019
	Supervisor Listening	17.513	9.427	.315	1.858	.066
	Supervisor Respect	-8.724	12.911	-.166	-.676	.501
	Supervisor Trust	8.461	11.040	.166	.766	.445
	Skill Development	4.025	5.687	.122	.708	.480

In Table 31, *R* (.217) indicates that there is a low degree of correlation between Organizational Culture (*N* = 126) and Avoidable Adverse Events (*N* = 111). According to the R2 value, -8% of the total variation in Avoidable Adverse Events can be explained by Organizational Culture within the VHA.

Table 31

Model Summary Organizational Culture and Avoidable Adverse Events

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.217a	.047	-.008	.707619

In Table 32, it shows that Organizational Culture did not have a statistically significant impact on Avoidable Adverse Events. Since P = .527, the null hypothesis is accepted.

Table 32

ANOVA Organizational Culture and Avoidable Adverse Events

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	2.585	6	.431	.860	.527b
	Residual	52.075	104	.501		
	Total	54.660	110			

Table 33 shows that there is no statistical significance between the organizational culture and avoidable adverse events.

Table 33

Coefficients Organizational Culture and Avoidable Adverse Events

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-3.087	3.561		-.867	.388
	Innovation	-2.859	1.510	-.639	-1.893	.061
	Workgroup Competency	1.285	1.103	.302	1.165	.247
	Supervisor Listening	2.537	1.530	.375	1.657	.100
	Supervisor Respect	-.948	2.041	-.152	-.465	.643
	Supervisor Trust	-.587	1.985	-.095	-.296	.768
	Skill Development	1.469	1.191	.366	1.234	.220

Table 34, *R* indicates that there is not a high degree of correlation between Organizational Culture (*N* = 126) and Primary Care Access (*N* = 126). The R value is .301which indicates a low degree of correlation. According to the R2 value, 5.4% of the total variation in Primary Care Access can be explained by Organizational Culture within the VHA.

Table 34

Model Summary Organizational Culture and Primary Care Access

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.301a	.090	.045	12.591488

In Table 35, it shows that Organizational Culture did not have a statistically significant impact on Primary Care Access. Since P = 0.075, the null hypothesis is accepted.

Table 35

ANOVA Organizational Culture and Primary Care Access

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	1875.191	6	312.532	1.971	.075b
	Residual	18866.924	119	158.546		
	Total	20742.115	125			

Table 36 shows that there is no statistical significance between the Organizational Culture and Primary Care Access.

Table 36

Coefficients Organizational Culture and Primary Care Access

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.846	57.085		-.015	.988
	Innovation	-5.335	22.877	-.063	-.233	.816
	Workgroup Competency	6.468	14.020	.081	.461	.645
	Supervisor Listening	19.560	24.396	.160	.802	.424
	Supervisor Respect	-33.303	33.412	-.289	-.997	.321
	Supervisor Trust	15.696	28.570	.140	.549	.584
	Skill Development	19.084	14.718	.263	1.297	.197

Table 37, *R* (.154) indicates that there is a low degree of correlation between Organizational Culture (*N* = 126) and Specialty Care Access (*N* = 126). According to the R2 value, -2.5% of the total variation in Specialty Care Access can be explained by Organizational Culture within the VHA.

Table 37

Model Summary Organizational Culture and Specialty Care Access

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.154a	.024	-.025	6.988062

Table 38, it shows that Organizational Culture did not have a statistically significant impact on Specialty Care Access. Since P = 0.082, the null hypothesis is accepted.

Table 38

ANOVA Organizational Culture and Specialty Care Access

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	141.652	6	23.609	.483	.820b
	Residual	5811.129	119	48.833		
	Total	5952.781	125			

Table 39 shows that there is no statistical significance between the Organizational Culture and Specialty Care Access.

Table 39

Coefficients Organizational Culture and Specialty Care Access

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	93.635	31.681		2.956	.004
	Innovation	3.835	12.696	.084	.302	.763
	Workgroup Competency	2.931	7.781	.069	.377	.707
	Supervisor Listening	-9.957	13.539	-.152	-.735	.464
	Supervisor Respect	-15.844	18.543	-.256	-.854	.395
	Supervisor Trust	12.229	15.856	.204	.771	.442
	Skill Development	4.248	8.168	.109	.520	.604

Table 40, *R* (.193) indicates that there is a low correlation between Organizational Culture (*N* = 126) and Mental Health Care Access (*N* = 126). According to the R2 value, -1.1 % of the total variation in Mental Health Care Access can be explained by Organizational Culture within the VHA.

Table 40

Model Summary Organizational Culture and Mental Health Care Access

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.193a	.037	-.011	4.445136

In Table 41, it shows that Organizational Culture did have a statistically significant impact on Mental Health Care Access. Since P = 0.596, the null hypothesis is accepted.

Table 41

ANOVA Organizational Culture and Mental Health Care Access

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	91.089	6	15.182	.768	.596b
	Residual	2351.349	119	19.759		
	Total	2442.438	125			

Table 42 shows that there is no statistical significance between the Organizational Culture and Mental Health Care Access.

Table 42

Coefficients Organizational Culture and Mental Care Access

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	79.449	20.152		3.942	.000
	Innovation	11.361	8.076	.390	1.407	.162
	Workgroup Competency	-4.162	4.949	-.152	-.841	.402
	Supervisor Listening	-5.075	8.612	-.121	-.589	.557
	Supervisor Respect	5.938	11.795	.150	.503	.616
	Supervisor Trust	-1.635	10.086	-.043	-.162	.872
	Skill Development	-2.756	5.196	-.111	-.530	.597

Statistical Assumption for RQ2: Organizational Culture and Hospital Performance in Community Care Network Region 1

RQ2: What is the relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system?

Multiple Linear Regression

A multiple linear regression analysis was conducted to test for a statistical significance between organizational culture and hospital performance in CCN Region 1 using a merged dataset that measured both variables at the hospital-level. For this analysis, the variables within the organizational culture were used as predictors to determine if there is a statistical significance.

In Table 43, *R* (.529) indicates that there is a low correlation between Organizational Culture (*N* = 41) and Acute Care Mortality (*N* = 35) in Region 1. According to the R2 value, 11.2% of the total variation in Acute Care Mortality can be explained by Organizational Culture within the VHA.

Table 43

Model Summary Organizational Culture and Acute Care Mortality Region 1

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.528a	.279	.112	.34723

In Table 44, it shows that Organizational Culture did not have a statistically significant impact on Acute Care Mortality in Region 1. Since P = .117, the null hypothesis is accepted.

Table 44

ANOVA Organizational Culture and Acute Care Mortality Region 1

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	1.295	6	.216	1.893	.117b
	Residual	3.191	28	.114		
	Total	4.486	34			

Table 45 shows that there is no statistical significance between the Organizational Culture and Acute Care Mortality.

Table 45

Coefficients Organizational Culture and Acute Care Mortality Region 1

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.982	3.257		1.837	.077
	Innovation	.370	1.281	.127	.289	.775
	Workgroup Competency	.531	.967	.210	.549	.587
	Supervisor Listening	-.583	2.275	-.150	-.256	.800
	Supervisor Respect	-3.731	2.535	-.981	-1.472	.152
	Supervisor Trust	3.163	2.012	.953	1.572	.127
	Skill Development	-.750	1.121	-.282	-.669	.509

In Table 46, *R* (.418) indicates that there is a low correlation between Organizational Culture (*N* = 41) and Length of Stay (*N* = 35) in Region 1. According to the R2 value, -1.6% of the total variation in Length of Stay can be explained by Organizational Culture within the VHA.

Table 46

Model Summary Organizational Culture and Length of Stay Region 1

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.418a	.175	-.016	.62057

Table 47, it shows that Organizational Culture does have a statistically significant impact on Length of Stay in Region 1. Since P = .022, the hypothesis is accepted.

Table 47

ANOVA Organizational Culture and Length of Stay Region 1

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	4.796	6	.799	2.992	.022b
	Residual	7.482	28	.267		
	Total	12.278	34			

Table 48 shows that there is a statistical significance between the Skill Development and Length of Stay in Region 1 and no statistical significance between Innovation, Workgroup Competency, Supervisor Listening, Supervisor Respect, and Supervisor Trust and Length of Stay in Region 1.

Table 48

Coefficients Organizational Culture and Length of Stay Region

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.383	4.987		.478	.637
	Innovation	2.310	1.961	.479	1.178	.249
	Workgroup Competency	.305	1.481	.073	.206	.838
	Supervisor Listening	-3.996	3.484	-.620	-1.147	.261
	Supervisor Respect	5.755	3.881	.915	1.483	.149
	Supervisor Trust	.940	3.081	.171	.305	.762
	Skill Development	-4.822	1.716	-1.096	-2.809	.009

In the Table 49, *R* (.341) indicates that there is a low correlation between Organizational Culture (*N* = 41) and Care Transition (*N* = 35) in Region1. According to the R2 value, -9.5% of the total variation in Care Transition can be explained by Organizational Culture within the VHA

Table 49

Model Summary Organizational Culture and Care Transition Region 1

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.341a	.117	-.095	1.45749

In Table 50, it shows that Organizational Culture did not have a statistically significant impact on Care Transition in Region 1. Since P = 0.237, the null hypothesis is accepted.

Table 50

ANOVA Organizational Culture and Care Transition Region 1

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	14.539	6	2.423	1.433	.237b
	Residual	47.350	28	1.691		
	Total	61.890	34			

Table 51 shows that there is no statistical significance between the Organizational Culture and Care Transition in Region 1.

Table 51

Coefficients Organizational Culture and Care Transition Region 1

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.323	12.546		.663	.513
	Innovation	3.257	4.933	.301	.660	.514
	Workgroup Competency	-5.623	3.725	-.599	-1.509	.142
	Supervisor Listening	-1.463	8.765	-.101	-.167	.869
	Supervisor Respect	3.480	9.763	.246	.356	.724
	Supervisor Trust	9.356	7.750	.759	1.207	.237

In Table 52, *R* (.539) indicates that there is a low correlation between Organizational Culture (*N* = 41) and Inpatient Patient Experience (*N* = 35) in Region 1. According to the R2 value, 12.6% of the total variation in Inpatient Patient Experience can be explained by Organizational Culture within the VHA.

Table 52

Model Summary Org. Culture and Inpatient Patient Experience Region 1

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.539a	.290	.126	6.89376

In Table 53, it shows that Organizational Culture did not have a statistically significant impact on Inpatient Patient Experience in Region 1. Since P = .006, the null hypothesis is accepted.

Table 53

ANOVA Org. Culture and Inpatient Patient Experience Region 1

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	968.888	6	161.481	4.373	.006b
	Residual	1033.886	28	36.924		
	Total	2002.773	34			

Table 54 determined that there is no statistical significance between the Organizational Culture and Inpatient Patient Experience in Region 1.

Table 54

Coefficients Org. Culture and Inpatient Patient Experience Region 1

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-81.220	58.623		-1.385	.177
	Innovation	2.823	23.052	.046	.122	.903
	Workgroup Competency	-.046	17.407	-.001	-.003	.998
	Supervisor Listening	32.158	40.956	.391	.785	.439
	Supervisor Respect	-73.230	45.620	-.911	-1.605	.120
	Supervisor Trust	45.253	36.214	.646	1.250	.222
	Skill Development	33.791	20.177	.601	1.675	.105

In Table 55, *R* (.440) indicates that there is a low correlation between Organizational Culture (*N* = 41) and Outpatient Patient Experience (*N* = 41) Region 1. According to the R2 value, 3.2% of the total variation in Outpatient Patient Experience can be explained by Organizational Culture within the VHA.

Table 55

Model Summary Org. Culture and Outpatient Patient Experience Region 1

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.440a	.193	.032	5.23340

In Table 56, it shows that Organizational Culture did not have a statistically significant impact on Outpatient Patient Experience in Region 1. Since P = .667, the null hypothesis is accepted.

Table 56

ANOVA Org. Culture and Outpatient Patient Experience Region 1

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	112.526	6	18.754	.667	.677b
	Residual	956.214	34	28.124		
	Total	1068.739	40			

Table 57 determined that there is no statistical significance between the Organizational Culture and Outpatient Patient Experience in Region 1.

Table 57

Coefficients Org. Culture and Outpatient Patient Experience Region 1

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	39.419	44.670		.882	.384
	Innovation	-.935	15.270	-.022	-.061	.952
	Workgroup Competency	4.626	11.684	.120	.396	.695
	Supervisor Listening	5.439	33.862	.096	.161	.873
	Supervisor Respect	-32.864	38.422	-.579	-.855	.398
	Supervisor Trust	25.168	21.695	.554	1.160	.254
	Skill Development	9.236	10.517	.270	.878	.386

Table 58, *R* (.227) indicates that there is a low correlation between Organizational Culture (*N* = 41) and Avoidable Adverse Events (*N* = 35) in Region 1. According to the R2 value, -16.7% of the total variation in Avoidable Adverse Events can be explained by Organizational Culture within the VHA.

Table 58

Model Summary Organizational Culture and Avoidable Adverse Events

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.227a	.052	-.167	.57335

In Table 59, it shows that Organizational Culture did not have a statistically significant impact on Avoidable Adverse Events in Region 1. Since P = .106, the null hypothesis is accepted.

Tale 59

ANOVA Organizational Culture and Avoidable Adverse Events Region 1

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	2.714	6	.452	1.956	.106b
	Residual	6.475	28	.231		
	Total	9.189	34			

Table 60 determined that there is no statistical significance between the Organizational Culture and Avoidable Adverse Events in Region 1.

Table 60

Coefficients Organizational Culture and Avoidable Adverse Events Region 1

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.913	4.639		-.628	.535
	Innovation	-1.961	1.824	-.470	-1.075	.292
	Workgroup Competency	1.121	1.378	.310	.814	.423
	Supervisor Listening	-5.402	3.241	-.970	-1.667	.107
	Supervisor Respect	6.420	3.610	1.179	1.778	.086
	Supervisor Trust	1.988	2.866	.419	.694	.494
	Skill Development	-1.486	1.597	-.390	-.930	.360

In Table 61, *R* (.274) indicates that there is a low correlation between Organizational Culture (*N* = 41) and Primary Care Access (*N* = 41) in Region 1. According to the R2 value, -8.8% of the total variation in Primary Care Access can be explained by Organizational Culture within the VHA.

Table 61

Model Summary Organizational Culture and Primary Care Access Region 1

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.274a	.075	-.088	14.89423

In Table 62, it shows that Organizational Culture did not have a statistically significant impact on Primary Care Access in Region 1. Since P = .832, the null hypothesis is accepted.

Table 62

ANOVA Organizational Culture and Primary Care Access Region 1

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	613.125	6	102.188	.461	.832b
	Residual	7542.495	34	221.838		
	Total	8155.621	40			

Table 63 determined that there is no statistical significance between the Organizational Culture and Primary Care Access in Region 1.

Table 63

Coefficients Organizational Culture and Primary Care Access Region 1

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	82.123	125.457		.655	.517
	Innovation	-56.200	42.886	-.486	-1.310	.199
	Workgroup Competency	10.606	32.814	.100	.323	.749
	Supervisor Listening	72.916	95.104	.464	.767	.449
	Supervisor Respect	-118.861	107.909	-.758	-1.101	.278
	Supervisor Trust	65.174	60.931	.519	1.070	.292
	Skill Development	28.300	29.538	.299	.958	.345

In Table 64, *R* (.297) indicates that there is a low correlation between Organizational Culture (*N* = 41) and Specialty Care Access (*N* = 41) in Region 1. According to the R2 value, -9.4% of the total variation in Specialty Care Access can be explained by Organizational Culture within the VHA.

Table 64

Model Summary Organizational Culture and Specialty Care Access

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.297a	.088	-.094	8.55261

In Table 65, it shows that Organizational Culture did not have a statistically significant impact on Specialty Care Access in Region 1. Since P = .960, the null hypothesis is accepted.

Table 65

ANOVA Organizational Culture and Specialty Care Access Region 1

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	99.958	6	16.660	.240	.960b
	Residual	2363.245	34	69.507		
	Total	2463.203	40			

Table 66 determined that there is no statistical significance between the Organizational Culture and Specialty Care Access in Region 1.

Table 66

Coefficients Organizational Culture and Specialty Care Access Region 1

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	92.546	70.225		1.318	.196
	Innovation	-14.075	24.006	-.221	-.586	.562
	Workgroup Competency	6.636	18.368	.114	.361	.720
	Supervisor Listening	-11.751	53.235	-.136	-.221	.827
	Supervisor Respect	-19.177	60.402	-.222	-.317	.753
	Supervisor Trust	34.108	34.107	.495	1.000	.324
	Skill Development	1.303	16.534	.025	.079	.938

In Table 67, *R* (.287) indicates that there is a low correlation between Organizational Culture ($N = 41$) and Mental Health Access ($N = 41$) in Region 1. According to the R2 value, -10.1% of the total variation in Mental Health Access can be explained by Organizational Culture within the VHA.

Table 67

Model Summary Organizational Culture Mental Health Access Region 1

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.287a	.082	-.101	4.60854

In Table 68, it shows that Organizational Culture did not have a statistically significant impact on Mental Health Access in Region 1. Since P = .540, the null hypothesis is accepted.

Table 68

ANOVA Organizational Culture Mental Health Access Region 1

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	101.951	6	16.992	.851	.540b
	Residual	679.242	34	19.978		
	Total	781.193	40			

Table 69 determined that there is no statistical significance between the Organizational Culture and Mental Health Access in Region 1.

Table 69

Coefficients Organizational Culture Mental Health Access Region 1

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	61.178	37.649		1.625	.113
	Innovation	8.781	12.870	.245	.682	.500
	Workgroup Competency	6.789	9.847	.207	.689	.495
	Supervisor Listening	-29.986	28.540	-.616	-1.051	.301
	Supervisor Respect	17.751	32.383	.366	.548	.587
	Supervisor Trust	11.498	18.285	.296	.629	.534
	Skill Development	-6.020	8.864	-.206	-.679	.502

Statistical Assumption for RQ3: Organizational Culture and Hospital Performance in Community Care Network Region 2

RQ3. What is the relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system?

Multiple Linear Regression

A multiple linear regression analysis was conducted to test for a statistical significance between organizational culture and hospital performance in CCN Region 2 using a merged dataset that measured both variables at the hospital-level. For this

analysis, the variables within the organizational culture were used as predictors to determine if there is a statistical significance.

In Table 70, *R* (.309) indicates that there is a low correlation between Organizational Culture (*N* = 29) and Acute Care Mortality (*N* = 27) in Region 2. According to the R2 value, -7.4% of the total variation in Acute Care Mortality can be explained by Organizational Culture within the VHA.

Table 70

Model Summary Organizational Culture and Acute Care Mortality Region 2

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.309a	.095	-.074	.29050

In Table 71, it shows that Organizational Culture did not have a statistically significant impact on Acute Care Mortality in Region 2. Since P = .584, the null hypothesis is accepted.

Table 71

ANOVA Organizational Culture and Acute Care Mortality Region 2

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.513	6	.085	.795	.584b
	Residual	2.148	20	.107		
	Total	2.661	26			

Table 72 determined that there is no statistical significance between the Organizational Culture and Acute Care Mortality in Region 2.

Table 72

Coefficient Organizational Culture and Acute Care Mortality Region 2

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.097	2.178		.044	.965
	Innovation	-2.037	1.381	-1.382	-1.474	.150
	Workgroup Competency	.435	.976	.277	.445	.659
	Supervisor Listening	2.305	1.474	.972	1.564	.128
	Supervisor Respect	-1.304	1.531	-.695	-.852	.401
	Supervisor Trust	.186	1.215	.086	.153	.879
	Skill Development	.523	.964	.325	.543	.591

In the Table 73, *R* (.487) indicates that there is a low correlation between Organizational Culture (*N* = 29) and Length of Stay (*N* = 27) in Region 2. According to the R2 value, 23.7% of the total variation in Length of Stay can be explained by Organizational Culture within the VHA.

Table 73

Model Summary Organizational Culture and Length of Stay Region 2

Model Summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.487a	.237	.047	.53432

In Table 74, it shows that Organizational Culture did not have a statistically significant impact on Length of Stay in Region 2. Since P = .135, the null hypothesis is accepted.

Table 74

ANOVA Organizational Culture and Length of Stay Region 2

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	2.545	6	.424	1.874	.135b
	Residual	4.527	20	.226		
	Total	7.072	26			

Table 75 determined that there is no statistical significance between the Organizational Culture and Length of Stay in Region 2.

Table 75

Coefficients Organizational Culture and Length of Stay Region 2

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.067	3.613		-.572	.571
	Innovation	.362	2.292	.136	.158	.875
	Workgroup Competency	-2.874	1.620	-1.011	-1.774	.086
	Supervisor Listening	3.317	2.445	.772	1.357	.184
	Supervisor Respect	-.594	2.540	-.175	-.234	.817
	Supervisor Trust	3.585	2.016	.919	1.778	.085
	Skill Development	-2.294	1.599	-.785	-1.435	.161

In Table 76, *R* (.270) indicates that there is a low correlation between Organizational Culture (*N* = 29) and Care Transition (*N* = 27) in Region 2. According to the R2 value, -15.9% of the total variation in Care Transition can be explained by Organizational Culture within the VHA.

Table 76

Model Summary Organizational Culture and Care Transition Region 2

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.270a	.073	-.159	2.05653

In Table 77, it shows that Organizational Culture did not have a statistically significant impact on Care Transition in Region 2. Since P = 0.136, the null hypothesis is accepted.

Table 77

ANOVA Organizational Culture and Care Transition Region 2

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	34.799	6	5.800	1.873	.136b
	Residual	61.928	20	3.096		
	Total	96.726	26			

Table 78 determined that there is a statistical significance between the Innovation, Workgroup Competency, Supervisor Respect, and Care Transition in Region 2. There is no statistical significance between Supervisor Listening, Supervisor Trust, Skill Development and Care Transition in Region 2.

Table 78

Coefficients Organizational Culture and Care Transition Region 2

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.982	11.535		.085	.933
	Innovation	22.207	7.317	2.539	3.035	.005
	Workgroup Competency	-12.967	5.172	-1.394	-2.507	.017
	Supervisor Listening	-10.476	7.806	-.745	-1.342	.189
	Supervisor Respect	18.510	8.108	1.663	2.283	.029
	Supervisor Trust	-4.698	6.436	-.368	-.730	.471
	Skill Development	-10.079	5.103	-1.054	-1.975	.057

In Table 79, *R* (.780) indicates that there is a correlation between Organizational Culture (*N* = 29) and Inpatient Patient Experience (*N* = 27) in Region 2. According to the R2 value, 53.4% of the total variation in Inpatient Patient Experience can be explained by Organizational Culture within the VHA.

Table 79

Model Summary Org. Culture and Inpatient Patient Experience Region 2

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.780a	.608	.534	5.69442

Table 80 shows that Organizational Culture did have a statistically significant impact on Inpatient Patient Experience in Region 2. Since P = 0.014, the hypothesis is accepted.

Table 80

ANOVA Organizational Culture and Inpatient Patient Experience Region 2

ANOVA						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	850.811	6	141.802	3.591	.014b
	Residual	789.750	20	39.487		
	Total	1640.560	26			

Table 81 determined that there is a statistical significance between the Innovation, Workgroup Competency, Supervisor Listening, Supervisor Respect, Skill Development and Inpatient Patient Experience in Region 2. There is no statistical significance between Supervisor Trust and Patient Experience in Region 2.

Table 81

Coefficients Organizational Culture and Inpatient Patient Experience Region 2

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-104.755	42.689		-2.454	.020
	Innovation	-91.925	27.079	-2.095	-3.395	.002
	Workgroup Competency	64.815	19.141	1.388	3.386	.002
	Supervisor Listening	76.667	28.890	1.086	2.654	.012
	Supervisor Respect	-95.414	30.009	-1.708	-3.180	.003
	Supervisor Trust	47.233	23.820	.737	1.983	.056
	Skill Development	42.626	18.888	.888	2.257	.031

In Table 82, *R* (.613) indicates that there is a low correlation between Organizational Culture (*N* = 29) and Outpatient Patient Experience (*N* =29) in Region 2. According to the R2 value, 26.6% of the total variation in Outpatient Patient Experience can be explained by Organizational Culture within the VHA.

Table 82

Model Summary Organizational Culture and Outpatient Patient Experience Region 2

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.613a	.376	.266	3.89471

In Table 83, it shows that Organizational Culture did not have a statistically significant impact on Outpatient Patient Experience in Region 2. Since P = .142, the null hypothesis is accepted.

Table 83

ANOVA Organizational Culture and Outpatient Patient Experience Region 2

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	131.964	6	21.994	1.819	.142b
	Residual	266.022	22	12.092		
	Total	397.986	28			

Table 84 determined that there is no statistical significance between the Organizational Culture and Outpatient Patient Experience in Region 2.

Table 84

Coefficients Organizational Culture and Outpatient Patient Experience Region 2

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	38.906	34.684		1.122	.274
	Innovation	6.020	18.740	.304	.321	.751
	Workgroup Competency	3.946	28.349	.084	.139	.891
	Supervisor Listening	-8.671	23.298	-.270	-.372	.713
	Supervisor Respect	-20.906	21.366	-.825	-.979	.338
	Supervisor Trust	27.586	16.167	.892	1.706	.102
	Skill Development	2.313	17.868	.068	.129	.898

In Table 85, *R* (.601) indicates that there is a low correlation between Organizational Culture (*N* = 29) and Avoidable Adverse (*N* = 27) Events in Region 2. According to the R2 value, 20.1% of the total variation in Avoidable Adverse Events can be explained by Organizational Culture within the VHA

Table 85

Model Summary Organizational Culture & Avoidable Adverse Events Region 2

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.601a	.361	.201	.35130

In Table 86, it shows that Organizational Culture did not have a statistically significant impact on Avoidable Adverse Events in Region 2. Since P= .747, the null hypothesis is accepted.

Table 86

ANOVA Organizational Culture and Avoidable Adverse Events Region 2

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.442	6	.074	.573	.747b
	Residual	2.573	20	.129		
	Total	3.016	26			

Table 87 determined that there is no statistical significance between the Organizational Culture and Avoidable Adverse Events.

Table 87

Coefficients Organizational Culture and Avoidable Adverse Events Region

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.086	3.592		-.581	.568
	Innovation	-.703	1.998	-.399	-.352	.729
	Workgroup Competency	-3.227	3.084	-.787	-1.046	.308
	Supervisor Listening	3.347	2.729	1.154	1.227	.234
	Supervisor Respect	-.309	2.229	-.139	-.139	.891
	Supervisor Trust	1.670	1.699	.620	.983	.337
	Skill Development	-.105	1.860	-.035	-.056	.956

In Table 88, *R* (.418) indicates that there is a low correlation between Organizational Culture (*N* = 29) and Primary Care Access (*N* = 29) in Region 2. According to the R2 value, -9% of the total variation in Primary Care Access can be explained by Organizational Culture within the VHA.

Table 88

Model Summary Organizational Culture and Primary Care Access Region 2

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.418a	.175	-.009	11.21847

In Table 89, it shows that Organizational Culture did not have a statistically significant impact on Primary Care Access in Region 2. Since P = .648, the null hypothesis is accepted.

Table 89

ANOVA Organizational Culture and Primary Care Access Region 2

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	554.169	6	92.361	.707	.648b
	Residual	2875.579	22	130.708		
	Total	3429.748	28			

Table 90 determined that there is no statistical significance between the Organizational Culture and Acute Care Mortality in Region 2.

Table 90

Coefficients Organizational Culture and Primary Care Access Region 2

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-107.009	102.564		-1.043	.304
	Innovation	25.081	64.305	.323	.390	.699
	Workgroup Competency	-7.120	46.203	-.086	-.154	.878
	Supervisor Listening	29.794	66.126	.241	.451	.655
	Supervisor Respect	28.405	71.499	.285	.397	.694
	Supervisor Trust	15.672	57.209	.137	.274	.786
	Skill Development	-46.693	45.474	-.556	-1.027	.312

In Table 91, *R* (.475) indicates that there is a low correlation between Organizational Culture (*N* = 29) and Specialty Care (*N* = 29) Access in Region 2. According to the R2 value, Organizational Culture within the VHA can explain 3.9% of the total variation in Specialty Care Access.

Table 91

Model Summary Organizational Culture and Specialty Care Access in Region 2

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.475a	.226	.047	6.50474

In Table 92, it shows that Organizational Culture did not have a statistically significant impact on Specialty Care Access in Region 2. Since P = .607, the null hypothesis is accepted.

Table 92

ANOVA Organizational Culture and Specialty Care Access in Region 2

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	214.240	6	35.707	.763	.607b
	Residual	1029.622	22	46.801		
	Total	1243.862	28			

Table 93 determined that there is no statistical significance between the Organizational Culture and Specialty Care Access in Region 2 because the p value is greater than 0.05.

Table 93

Coefficients Organizational Culture and Specialty Care Access in Region 2

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	128.327	68.235		1.881	.073
	Innovation	21.224	36.869	.606	.576	.571
	Workgroup Competency	-61.801	55.773	-.744	-1.108	.280
	Supervisor Listening	-10.139	45.835	-.178	-.221	.827
	Supervisor Respect	57.114	42.034	1.275	1.359	.188
	Supervisor Trust	-50.255	31.807	-.919	-1.580	.128
	Skill Development	32.335	35.153	.535	.920	.368

In Table 94, *R* (.245) indicates that there is a low correlation between Organizational Culture (*N* = 29) and Mental Health Access (*N* = 29) in Region 2. According to the R2 value, 7.7% of the total variation in Mental Health Access can be explained by Organizational Culture within the VHA.

Table 94

Model Summary Organizational Culture and Mental Health Access Region 2

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.495a	.245	.077	4.36511

In Table 95, it shows that Organizational Culture did not have a statistically significant impact on Mental Health Access in Region 2. Since P = .639, the null hypothesis is accepted.

Table 95

ANOVA Organizational Culture and Mental Health Access Region 2

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	46.996	6	7.833	.719	.639b
	Residual	239.815	22	10.901		
	Total	286.811	28			

Table 96 determined that there is no statistical significance between the Organizational Culture and Mental Health Access in Region 2.

Table 96

Coefficients Organizational Culture and Mental Health Access Region 2

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	115.560	32.931		3.509	.002
	Innovation	6.557	17.793	.390	.369	.716
	Workgroup Competency	-42.785	26.917	-1.072	-1.590	.126
	Supervisor Listening	13.856	22.120	.508	.626	.538
	Supervisor Respect	28.262	20.286	1.313	1.393	.177
	Supervisor Trust	-17.722	15.350	-.675	-1.155	.261
	Skill Development	5.881	16.965	.203	.347	.732

Statistical Assumption for RQ4: Org Culture and Hospital Performance in CCN Region 3

RQ4: What is the relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system?

Multiple Linear Regression

A multiple linear regression was conducted analysis to test for a statistical significance between organizational culture and hospital performance in CCN Region 3 using a merged dataset that measured both variables at the hospital-level. For this

analysis, the variables within the organizational culture were used as predictors to determine if there is a statistical significance.

In Table 97, *R* (.612) indicates that there is a low correlation between Organizational Culture (*N* = 26) and Acute Care Mortality (*N* = 25) in Region 3. According to the R2 value, 1.67% of the total variation in Acute Care Mortality can be explained by Organizational Culture within the VHA.

Table 97

Model Summary Organizational Culture and Acute Care Mortality Region 3

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.612a	.375	.167	.25097

In Table 98, it shows that Organizational Culture did not have a statistically significant impact on Acute Care Mortality in Region 3. Since P = .156, the null hypothesis is accepted.

Table 98

ANOVA Organizational Culture and Acute Care Mortality Region 3

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.680	6	.113	1.800	.156b
	Residual	1.134	18	.063		
	Total	1.814	24			

Table 99 determined that there is no statistical significance between the Organizational Culture and Acute Care Mortality in Region 3.

Table 99

Coefficients Organizational Culture and Acute Care Mortality Region 3

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.790	4.866		.779	.446
	Innovation	1.562	1.777	.655	.879	.391
	Workgroup Competency	2.708	2.043	.888	1.326	.202
	Supervisor Listening	.153	2.545	.051	.060	.953
	Supervisor Respect	-1.391	3.125	-.400	-.445	.661
	Supervisor Trust	-3.538	3.019	-1.358	-1.172	.257
	Skill Development	-.097	1.873	-.042	-.052	.959

In Table 100, *R* (.532) indicates that there is a low correlation between Organizational Culture ($N = 26$) and Length of Stay ($N = 25$) in Region 3. According to the R2 value, 4.4% of the total variation in Length of Stay can be explained by Organizational Culture within the VHA.

Table 100

Model Summary Organizational Culture and Length of Stay Region 3

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.532a	.283	.044	.48738

In Table 101, it shows that Organizational Culture did not have a statistically significant impact on Length of Stay in Region 3. Since P = .358, the null hypothesis is accepted.

Table 101

ANOVA Organizational Culture and Length of Stay Region 3

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	1.689	6	.282	1.185	.358b
	Residual	4.276	18	.238		
	Total	5.965	24			

Table 102 determined that there is no statistical significance between the Organizational Culture and Length of Stay in Region 3.

Table 102

Coefficients Organizational Culture and Length of Stay Region 3

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.065	11.018		.187	.853
	Innovation	.067	4.023	.014	.017	.987
	Workgroup Competency	-2.245	4.626	-.373	-.485	.633
	Supervisor Listening	8.920	5.762	1.504	1.548	.139
	Supervisor Respect	-2.730	7.076	-.398	-.386	.704
	Supervisor Trust	-1.063	6.837	-.207	-.155	.878
	Skill Development	-2.458	4.241	-.540	-.580	.569

In Table 103, *R* (.566) indicates that there is a low correlation between Organizational Culture (*N* = 26) and Care Transition (*N* = 25) in Region 3. According to the R2 value, 9.3% of the total variation in Care Transition can be explained by Organizational Culture within the VHA.

Table 103

Model Summary Organizational Culture and Care Transition

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.566a	.320	.093	1.20879

In Table 104 it shows that Organizational Culture did not have a statistically significant impact on Care Transition in Region 3. Since P = .264, the null hypothesis is accepted.

Table 104

ANOVA Organizational Culture and Care Transition in Region 3

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	12.374	6	2.062	1.411	.264b
	Residual	26.301	18	1.461		
	Total	38.675	24			

Table 105 determined that there is no statistical significance between the Organizational Culture and Care Transition in Region 3.

Table 105

Coefficients Organizational Culture and Care Transition in Region 3

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.216	31.083		-.071	.944
	Innovation	4.829	11.349	.382	.425	.676
	Workgroup Competency	4.760	13.050	.295	.365	.720
	Supervisor Listening	2.227	16.255	.140	.137	.893
	Supervisor Respect	-2.088	19.963	-.113	-.105	.918
	Supervisor Trust	3.825	19.287	.277	.198	.845
	Skill Development	-10.419	11.963	-.853	-.871	.395

In Table 106, *R* (.354) indicates that there is a low correlation between Organizational Culture (*N* = 26) and Inpatient Patient Experience (*N* = 24) in Region 3. According to the R2 value, -18.4% of the total variation in Inpatient Patient Experience can be explained by Organizational Culture within the VHA.

Table 106

Model Summary Organizational Culture and Inpatient Patient Experience in Region 3

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.354a	.125	-.184	9.93352

In Table 107, it shows that Organizational Culture did not have a statistically significant impact on Inpatient Patient Experience in Region 3. Since P = .865, the null hypothesis is accepted.

Table 107

ANOVA Organizational Culture and Inpatient Patient Experience in Region 3

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	F	Sig.
1	Regression	240.089	6	40.015	.406	.865b
	Residual	1677.472	17	98.675		
	Total	1917.560	23			

Table 108 determined that there is a statistical significance between the Supervisor Respect and Inpatient Patient Experience in Region 3. There is not statistical significance between Innovation, Workgroup Competency, Supervisor Listening, Supervisor Trust, Skill Development, and Inpatient Patient Experience.

Table 108

Coefficients Organizational Culture and Inpatient Patient Experience in Region 3

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-402.690	161.012		-2.501	.023
	Innovation	38.959	56.803	.508	.686	.502
	Workgroup Competency	116.374	67.115	1.171	1.734	.101
	Supervisor Listening	-98.376	80.902	-1.015	-1.216	.241
	Supervisor Respect	296.665	100.841	2.628	2.942	.009
	Supervisor Trust	-161.808	95.609	-1.920	-1.692	.109
	Skill Development	-94.473	60.853	-1.279	-1.552	.139

In Table 109, *R* (.388) indicates that there is a low correlation between Organizational Culture (*N* = 26) and Outpatient Patient Experience (*N* = 26) in Region 3. According to the R2 value, -9.2% of the total variation in Outpatient Patient Experience can be explained by Organizational Culture within the VHA.

Table 109

Model Summary Organizational Culture and Outpatient Patient Experience in Reg 3.

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.388a	.151	-.092	5.60056

In Table 110, it shows that Organizational Culture did not have a statistically significant impact on Outpatient Patient Experience in Region 3. Since P = .951, the null hypothesis is accepted.

Table 110

ANOVA Organizational Culture and Outpatient Patient Experience in Region 3

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	46.064	6	7.677	.256	.951b
	Residual	570.322	19	30.017		
	Total	616.386	25			

Table 111 determined that there is no statistical significance between the Organizational Culture and Outpatient Patient Experience in Region 3.

Table 111

Coefficients Organizational Culture and Outpatient Patient Experience in Region 3

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-11.652	95.854		-.122	.905
	Innovation	-.861	35.490	-.020	-.024	.981
	Workgroup Competency	22.245	44.005	.403	.506	.619
	Supervisor Listening	-9.681	53.875	-.177	-.180	.859
	Supervisor Respect	17.504	61.232	.285	.286	.778
	Supervisor Trust	-7.517	64.631	-.160	-.116	.909
	Skill Development	-3.212	37.447	-.076	-.086	.933

In Table 112, *R* (.445) indicates that there is a low correlation between Organizational Culture (*N* = 26) and Avoidable Adverse Events (*N* = 25) in Region 3. According to the R2 value, -7% of the total variation in Avoidable Adverse Events can be explained by Organizational Culture within the VHA.

Table 112

Model Summary Organizational Culture and Avoidable Adverse Events Region 3

Model **s**ummary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.445a	.198	-.070	.41383

In Table 113, it shows that Organizational Culture did not have a statistically significant impact on Avoidable Adverse Events in Region 3. Since P = .625, the null hypothesis is accepted.

Table 113

ANOVA Organizational Culture and Avoidable Adverse Events Region 3

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.760	6	.127	.740	.625b
	Residual	3.083	18	.171		
	Total	3.843	24			

Table 114 determined that there is a statistical significance between the Skill Development and Avoidable Adverse Events in Region 3. There is not statistical significance between Innovation, Workgroup Competency, Supervisor Listening, Supervisor Respect, Supervisor Trust and Avoidable Adverse Events.

Table 114

Coefficients Organizational Culture and Avoidable Adverse Events Region 3

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-11.978	20.766		-.577	.571
	Innovation	-13.012	7.582	-1.220	-1.716	.103
	Workgroup Competency	.993	8.719	.073	.114	.911
	Supervisor Listening	23.686	10.860	1.762	2.181	.043
	Supervisor Respect	-.483	13.337	-.031	-.036	.972
	Supervisor Trust	-25.254	12.885	-2.169	-1.960	.066
	Skill Development	16.979	7.992	1.647	2.124	.048

In Table 115, *R* (.726) indicates that there is a low correlation between Organizational Culture (*N* = 26) and Primary Care Access (*N* =26) in Region 3. According to the R2 value, 39.2% of the total variation in Primary Care Access can be explained by Organizational Culture within the VHA.

Table 115

Model Summary Organizational Culture and Primary Care Access in Region 3

Model **s**ummary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.726a	.527	.392	7.39021

In Table 116, it shows that Organizational Culture did not have a statistically significant impact on Primary Care Access in Region 3. Since P = .190, the null hypothesis is accepted.

Table 116

ANOVA Organizational Culture and Primary Care Access in Region 3

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	853.133	6	142.189	1.642	.190b
	Residual	1645.549	19	86.608		
	Total	2498.683	25			

Table 117 determined that there is no statistical significance between the Organizational Culture and Primary Care Access in Region 3.

Table 117

Coefficients Organizational Culture and Primary Care Access in Region 3

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-275.447	162.819		-1.692	.107
	Innovation	42.918	60.283	.496	.712	.485
	Workgroup Competency	35.713	74.747	.322	.478	.638
	Supervisor Listening	-22.711	91.513	-.206	-.248	.807
	Supervisor Respect	186.949	104.010	1.512	1.797	.088
	Supervisor Trust	-190.708	109.784	-2.019	-1.737	.099
	Skill Development	29.708	63.609	.349	.467	.646

In Table 118, *R* (.627) indicates that there is a low correlation between Organizational Culture (*N* = 26) and Specialty Care Access (*N* = 26) in Region 3. According to the R2 value, 21.9% of the total variation in Specialty Care Access can be explained by Organizational Culture within the VHA.

Table 118

Model Summary Organizational Culture and Specialty Care Access in Region 3

Model **s**ummary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.627a	.393	.219	5.76651

In Table 119, it shows that Organizational Culture did not have a statistically significant impact on Specialty Care Access in Region 3. Since P = .415, the null hypothesis is accepted.

Table 119

ANOVA Organizational Culture and Specialty Care Access in Region 3

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	218.545	6	36.424	1.068	.415b
	Residual	648.070	19	34.109		
	Total	866.615	25			

Table 120 determined that there is no statistical significance between the Organizational Culture and Specialty Care Access in Region 3.

Table 120

Coefficients Organizational Culture and Specialty Care Access in Region 3

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-25.336	102.179		-.248	.807
	Innovation	-14.761	37.831	-.289	-.390	.701
	Workgroup Competency	3.800	46.908	.058	.081	.936
	Supervisor Listening	-22.947	57.430	-.354	-.400	.694
	Supervisor Respect	25.910	65.273	.356	.397	.696
	Supervisor Trust	-9.980	68.896	-.179	-.145	.886
	Skill Development	44.154	39.918	.880	1.106	.282

In Table 121, *R* (.197) indicates that there is a low correlation between Organizational Culture (*N* = 26) and Mental Health Access (*N* = 26) in Region 3. According to the R2 value, -6.8% of the total variation in Mental Health Access can be explained by Organizational Culture within the VHA.

Table 121

Model Summary Organizational Care and Mental Health Access in Region 3

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.412a	.169	-.068	4.84887

In Table 122, it shows that Organizational Culture did not have a statistically significant impact on Mental Health Access in Region 3. Since P = .598, the null hypothesis is accepted.

Table 122

ANOVA Organizational Care and Mental Health Access in Region 3

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	132.982	6	22.164	.776	.598b
	Residual	542.559	19	28.556		
	Total	675.542	25			

Table 123 determined that there is no statistical significance between the Organizational Culture and Mental Health Access Region 3.

Table 123

Coefficients Organizational Care and Mental Health Access in Region 3

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	35.092	93.492		.375	.712
	Innovation	27.934	34.615	.620	.807	.430
	Workgroup Competency	67.330	42.920	1.166	1.569	.133
	Supervisor Listening	-44.938	52.547	-.785	-.855	.403
	Supervisor Respect	29.986	59.723	.467	.502	.621
	Supervisor Trust	-21.243	63.038	-.432	-.337	.740
	Skill Development	-48.096	36.525	-1.086	-1.317	.204

Statistical Assumption for RQ5: Organizational Culture and Hospital Performance in CCN Region 4

RQ5: What is the relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system?

Multiple Linear Regression

A multiple linear regression analysis was conducted to test for a statistical significance between organizational culture and hospital performance in CCN Region 4 using a merged dataset that measured both variables at the hospital-level. For this

analysis, the variables within the organizational culture were used as predictors to determine if there is a statistical significance.

In the Table 124, *R* (.570) indicates that there is a low correlation between Organizational Culture (*N* = 30) and Acute Care Mortality (*N* = 24) in Region 4. According to the R2 value, 3.6% of the total variation in Acute Care Mortality can be explained by Organizational Culture within the VHA.

Table 124

Model Summary Organizational Culture and Acute Care Mortality Region 4

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.570a	.325	.036	.23153

In Table 125, it shows that Organizational Culture did not have a statistically significant impact on Acute Care Mortality in Region 4. Since P = .443, the null hypothesis is accepted.

Table 125

ANOVA Organizational Culture and Acute Care Mortality Region 4

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	.346	6	.058	1.024	.443b
	Residual	.958	17	.056		
	Total	1.304	23			

Table 126 determined that there is no statistical significance between the Organizational Culture and Acute Care Mortality in Region 4.

Table 126

Coefficients Organizational Culture and Acute Care Mortality Region 4

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	9.462	3.813		2.482	.064
	Innovation	-1.345	1.868	-.555	-.720	.481
	Workgroup Competency	-1.058	1.159	-.320	-.913	.374
	Supervisor Listening	.622	2.947	.224	.211	.835
	Supervisor Respect	-4.251	2.609	-1.394	-1.629	.122
	Supervisor Trust	3.351	2.760	1.324	1.214	.241
	Skill Development	.702	1.695	.303	.414	.684

In Table 127, *R* (.623) indicates that there is a low correlation between Organizational Culture (*N* = 30) and Length of Stay (*N* = 24) in Region 4. According to the R2 value, 12.6% of the total variation in Length of Stay can be explained by Organizational Culture within the VHA.

Table 127

Model Summary Organizational Culture and Length of Stay Region 4

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.623a	.388	.126	.63390

In Table 128, it shows that Organizational Culture did not have a statistically significant impact on Length of Stay in Region 4. Since P = .125, the null hypothesis is accepted.

Table 128

ANOVA Organizational Culture and Length of Stay Region 4

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	4.109	6	.685	1.982	.125b
	Residual	5.873	17	.345		
	Total	9.983	23			

Table 129 determined that there is a statistical significance between the Workgroup Competency and Length of Stay in Region 4. There is not statistical significance between Innovation, Supervisor Listening, Supervisor Respect, Supervisor Trust, Skill Development and Length of Stay in Region 4.

Table 129

Coefficients Organizational Culture and Length of Stay Region 4

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20.409	9.440		2.162	.045
	Innovation	.086	4.626	.013	.019	.985
	Workgroup Competency	-7.859	2.870	-.859	-2.739	.014
	Supervisor Listening	-11.582	7.296	-1.506	-1.587	.131
	Supervisor Respect	6.085	6.460	.721	.942	.359
	Supervisor Trust	3.768	6.833	.538	.552	.588
	Skill Development	5.710	4.196	.893	1.361	.191

In Table 130, *R* (.568) indicates that there is a low correlation between Organizational Culture (*N* = 30) and Care Transition (*N* = 24) in Region 4. According to the R2 value, 3.2% of the total variation in Care Transition can be explained by Organizational Culture within the VHA.

Table 130

Model Summary Organizational Culture and Care Transition in Region 4

Model summary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.568a	.323	.032	1.16045

In the Table 131, it shows that Organizational Culture did a have a statistically significant impact on Care Transition in Region 4. Since P = .041, the hypothesis is accepted.

Table 131

ANOVA Organizational Culture and Care Transition in Region 4

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	21.274	6	3.546	6.087	.041b
	Residual	9.903	17	.583		
	Total	31.177	23			

Table 132 determined that there is a statistical significance between the Innovation, Supervisor Trust and Care Transition in Region 4. There is no statistical significance between Workgroup Competency, Supervisor Listening, Supervisor Respect, Skill Development, and Care Transition in Region 4.

Table 132

Coefficients Organizational Culture and Care Transition in Region 4

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.532	12.258		1.186	.252
	Innovation	-29.181	6.007	-2.460	-4.858	.000
	Workgroup Competency	2.343	3.727	.145	.629	.538
	Supervisor Listening	-13.002	9.474	-.957	-1.372	.188
	Supervisor Respect	-13.349	8.389	-.896	-1.591	.130
	Supervisor Trust	32.117	8.872	2.596	3.620	.002
	Skill Development	20.599	5.448	1.822	3.781	.001

In Table 133, *R* (.531) indicates that there is a low correlation between Organizational (*N* = 30) Culture and Inpatient Patient Experience (*N* = 24) in Region 4. According to the R2 value, -2.5% of the total variation in Inpatient Patient Experience can be explained by Organizational Culture within the VHA.

Table 133

Model Summary Organizational Culture and Inpatient Patient Experience in Region 4

Model **s**ummary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.531a	.282	-.025	5.37682

Table 134 shows that Organizational Culture did not have a statistically significant impact on Inpatient Patient Experience in Region 4. Since P = .663, the null hypothesis is accepted.

Table 134

ANOVA Organizational Culture and Inpatient Patient Experience in Region 4

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	178.610	6	29.768	.687	.663b
	Residual	737.085	17	43.358		
	Total	915.695	23			

Table 135 determined that there is no statistical significance between the Organizational Culture and Inpatient Patient Experience in Region 4.

Table 135

Coefficients Organizational Culture and Inpatient Patient Experience in Region 4

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-47.189	105.755		-.446	.661
	Innovation	26.860	51.825	.418	.518	.611
	Workgroup Competency	21.415	32.150	.244	.666	.514
	Supervisor Listening	129.192	81.736	1.754	1.581	.132
	Supervisor Respect	-25.898	72.370	-.321	-.358	.725
	Supervisor Trust	-79.544	76.543	-1.186	-1.039	.313
	Skill Development	-45.316	47.005	-.740	-.964	.349

In Table 136, *R* (.430) indicates that there is a low correlation between Organizational Culture (*N* = 30) and Outpatient Patient Experience (*N* = 30) in Region 4. According to the R2 value, -7.3% of the total variation in Outpatient Patient Experience can be explained by Organizational Culture within the VHA.

Table 136

Model Summary Organizational Culture and Outpatient Patient Experience in Region 4

Model **s**ummary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.430a	.185	-.073	4.57359

In Table 137, it shows that Organizational Culture did have a statistically significant impact on Outpatient Patient Experience in Region 4. Since P = .019, the hypothesis is accepted.

Table 137

ANOVA Organizational Culture and Outpatient Patient Experience in Region 4

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	303.869	6	50.645	3.218	.019b
	Residual	362.011	23	15.740		
	Total	665.880	29			

Table 138 determined that there is a statistical significance between the Workgroup Competency and Outpatient Patient Experience in Region 4. There is no statistical significance between Innovation, Supervisor Listening, Supervisor Respect, Supervisor Trust, Skill Development, and Outpatient Patient Experience in Region 4.

Table 138

Coefficients Organizational Culture and Outpatient Patient Experience in Region 4

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.913	42.603		.092	.928
	Innovation	11.904	22.602	.244	.527	.603
	Workgroup Competency	-33.707	15.417	-.568	-2.186	.039
	Supervisor Listening	62.298	35.645	1.259	1.748	.094
	Supervisor Respect	3.702	35.956	.070	.103	.919
	Supervisor Trust	-41.137	32.894	-.850	-1.251	.224
	Skill Development	13.412	22.830	.273	.587	.563

In Table 139, *R* (.442) indicates that there is a low correlation between Organizational Culture (*N* = 30) and Avoidable Adverse (*N* = 24) Events in Region 4. According to the R2 value, -14.9% of the total variation in Avoidable Adverse Events can be explained by Organizational Culture within the VHA.

Table 138

Model Summary Organizational Culture and Avoidable Adverse Events Region 4

Model **s**ummary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.442a	.196	-.149	.50706

In Table 140, it shows that Organizational Culture did not have a statistically significant impact on Avoidable Adverse Events in Region 4. Since P= .465, the null hypothesis is accepted.

Table 140

ANOVA Organizational Culture and Avoidable Adverse Events in Region 4

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	1.215	6	.203	.986	.465b
	Residual	3.490	17	.205		
	Total	4.705	23			

Table 141 determined that there is no statistical significance between the Organizational Culture and Avoidable Adverse Events.

Table 141

Coefficients Organizational Culture and Avoidable Adverse Events Region 4

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.871	7.277		-.257	.800
	Innovation	-6.350	3.566	-1.378	-1.781	.093
	Workgroup Competency	-.996	2.212	-.159	-.450	.658
	Supervisor Listening	-8.541	5.625	-1.618	-1.519	.147
	Supervisor Respect	5.534	4.980	.956	1.111	.282
	Supervisor Trust	4.397	5.267	.915	.835	.415
	Skill Development	6.466	3.235	1.472	1.999	.062

In Table 142, *R* (.538) indicates that there is a low correlation between Organizational Culture ($N = 30$) and Primary Care Access ($N = 30$) in Region 4. According to the R2 value, 6.5% of the total variation in Primary Care Access can be explained by Organizational Culture within the VHA.

Table 142

Model Summary Organizational Culture and Primary Care Access in Region 4

Model **s**ummary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.538a	.290	.065	12.26671

In the Table 143, it shows that Organizational Culture did not have a statistically significant impact on Primary Care Access in Region 4. Since P = .288, the null hypothesis is accepted.

Table 143

ANOVA Organizational Culture and Primary Care Access in Region 4

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	1059.372	6	176.562	1.320	.288b
	Residual	3077.609	23	133.809		
	Total	4136.981	29			

Table 144 determined that there is no statistical significance between the Organizational Culture and Primary Care Access in Region 4.

Table 144

Coefficients Organizational Culture and Primary Care Access Region 4

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-10.056	124.217		-.081	.936
	Innovation	-45.535	65.901	-.374	-.691	.497
	Workgroup Competency	62.927	44.952	.425	1.400	.175
	Supervisor Listening	6.624	103.931	.054	.064	.950
	Supervisor Respect	-121.385	104.839	-.918	-1.158	.259
	Supervisor Trust	59.380	95.909	.492	.619	.542
	Skill Development	66.382	66.565	.543	.997	.329

In Table 145, *R* (.518) indicates that there is a low correlation between Organizational Culture (*N* = 30) and Specialty Care Access (*N* = 30) in Region 4. According to the R2 value, 3.8% of the total variation in Specialty Care Access can be explained by Organizational Culture within the VHA.

Table 145

Model Summary Org Culture and Specialty Care Access in Region 4

Model **s**ummary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.518a	.269	.038	6.07037

Table 146, it shows that Organizational Culture did not have a statistically significant impact on Specialty Care Access in Region 4. Since P = .105, the null hypothesis is accepted.

Table 146

ANOVA Organizational Culture and Specialty Care Access in Region 4

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	395.272	6	65.879	2.011	.105b
	Residual	753.387	23	32.756		
	Total	1148.660	29			

Table 147 determined that there is no statistical significance between the Organizational Culture and Specialty Care Access in Region 4.

Table 147

Coefficients Organizational Culture and Specialty Care Access in Region 4

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	190.850	61.459		3.105	.005
	Innovation	-50.924	32.606	-.794	-1.562	.132
	Workgroup Competency	-7.458	22.241	-.096	-.335	.740
	Supervisor Listening	-79.051	51.422	-1.216	-1.537	.138
	Supervisor Respect	3.313	51.871	.048	.064	.950
	Supervisor Trust	47.629	47.453	.749	1.004	.326
	Skill Development	59.084	32.934	.917	1.794	.086

In the Table 148, *R* (.519) indicates that there is a low correlation between Organizational Culture (*N* = 30) and Mental Health Access (*N* = 30) in Region 4. According to the R2 value, 3.9% of the total variation in Mental Health Access can be explained by Organizational Culture within the VHA.

Table 148

Model Summary Organizational Culture and Mental Health Access in Region 4

Model **s**ummary				
Model	*R*	*R* Square	Adjusted *R* Square	Std. Error of the Estimate
1	.519a	.269	.039	4.27772

In Table 149, it shows that Organizational Culture did not have a statically significant impact on Mental Health Access in Region 4. Since P = .423, the null hypothesis is accepted.

Table 149

ANOVA Organizational Culture and Mental Health Access in Region 4

ANOVAa						
Model		Sum of Squares	*df*	Mean Square	*F*	Sig.
1	Regression	108.113	6	18.019	1.045	.423b
	Residual	396.720	23	17.249		
	Total	504.833	29			

Table 150 determined that there is a statistical significance between the Workgroup Competency and Mental Health Access. There is no statistical significance Innovation, Supervisor Listening, Supervisor Respect, Supervisor Trust, Skill Development, and Mental Health in Region 4.

Table 150

Organizational Culture and Mental Health Access in Region 4

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	49.441	44.598		1.109	.279
	Innovation	22.140	23.661	.521	.936	.359
	Workgroup Competency	35.813	16.139	.693	2.219	.037
	Supervisor Listening	-20.579	37.315	-.478	-.552	.587
	Supervisor Respect	2.517	37.641	.055	.067	.947
	Supervisor Trust	-5.818	34.435	-.138	-.169	.867
	Skill Development	-23.454	23.899	-.549	-.981	.337

Results for Research Question 1

RQ1 concerned whether there was a relationship between the organizational culture and hospital in the VHA system nationwide. There was a statistically significant difference between Workplace Competency and Patient Experience nationwide.

Hypothesis Acceptance for RQ1

As a result of the analysis using the multivariate regression analysis, the hypothesis is accepted which stated that there is a statistically significant relationship between organizational culture and hospital performance in VHA system nationwide.

Results for Research Question 2

RQ2 concerned whether there was a relationship between the organizational culture and hospital performance in CCN Region 1 of the VHA system. There is a statistical significance between Skill Development and Length of Stay in Region 1.

Hypothesis Acceptance for RQ2

As a result of the analysis using the multivariate regression analysis, the hypothesis is accepted, which stated that there is a statistically significant relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system.

Results for Research Question 3

RQ3 concerned whether there was a relationship between the organizational culture variables and hospital performance in CCN Region 2 of the VHA system. There was a statistically significant difference between Innovation, Workgroup Competency, Supervisor Respect, and Care Transition in CCN Region 2 of the VHA system. There was also a statistically significance difference between Innovation, Workgroup Competency, Supervisor Listening, Supervisor Respect, Skill Development, and Inpatient Patient Experience in CCN Region 2.

Hypothesis Acceptance for RQ3

As a result of the analysis using the multivariate regression analysis, the hypothesis is accepted, which stated that there is a statistically significant relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system.

Results for Research Question 4

RQ4 concerned whether there was a relationship between the organizational culture and hospital performance in CCN Region 3 of the VHA system. There was a statistically significant difference between Skill Development and Avoidable Adverse Events in CCN Region 3 of the VHA system.

Hypothesis Acceptance for RQ4

As a result of the analysis using the multivariate regression analysis, the hypothesis is accepted, which stated that there is a statistically significant relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system.

Results for Research Question 5

RQ5 concerned whether there was a relationship between the organizational culture and hospital performance in CCN Region 4 of the VHA system. There was a statistically significant difference between Workgroup Competency and Length of Stay, Workgroup Competency and Outpatient Experience, as well as Workgroup Competency and Mental Health in CCN region 4 of the VHA system.

Hypothesis Acceptance for RQ5

As a result of the analysis using the multivariate regression analysis, the hypothesis is accepted, which stated that there is a statistically significant relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system.

Summary

The purpose of this study was to examine the relationship between organizational culture and hospital performance. In Section 3, the secondary data from the Veterans Health Administration for calendar year 2018 were analyzed using the multiple linear regression analysis which tested each measure of hospital performance from the SAIL using the independent variables as predictors to determine if there is a statistical significance. Based on the AES, the results of the multiple regression analysis indicated no statistical different between organizational culture and hospital performance.

In Section 4, the interpretation of findings and limitations of the study will be further examined. Donabedian's (1966) Structure, Process, Outcomes theory is the framework for this research. The results of this study will be addressed cultivation of workplace climate that values hospital performance. This section will discuss the recommendations for future research and the implication of professional practice and social change as specified by the purpose of this study.

Section 4: Application to Professional Practice and Implications for Social Change

Introduction

The purpose of this study was to examine the relationship between organizational culture and hospital performance in the VHA system nationwide. I obtained secondary data for this study from the U.S. Department of Veteran Affairs for calendar year 2018. I performed statistical analysis using a multiple regression analysis. The findings of the multiple regression analysis indicated no significant differences between organizational culture and hospital performance in the VHA.

In addition to the multiple regression analysis, I conducted a descriptive analysis of the population for each variable. I used SPSS software for data analyses. Donabedian's (1966) structure, process, outcomes theory, which was the framework of this study, posits that to assess the quality of care, a decision is made on how quality is to be defined. These decisions are a fundamental factor to ensure that quality standards are constantly revisited to provide the best care to patients in the VHA. Section 4 includes an interpretation of the findings, discussion of limitations of the study, recommendations for further research, and consideration of the study's implications for professional practice and social change.

Interpretation of the Findings

RQ1: What is the relationship between organizational culture and hospital performance in the VHA system nationwide?

I conducted a multiple regression analysis to determine if there is a statistical significance between organizational culture and hospital performance. The results indicated that there is a statistically significant difference between organizational culture and hospital performance in the VHA. The test results for workplace competency and patient experience nationwide; skill development and length of stay in Region 1; innovation, workgroup competency, supervisor respect, and care transition in Region 2; innovation, workgroup competency, supervisor listening, supervisor respect, skill development and inpatient experience in Region 2; skill development and avoidable adverse events in Region 3; the variables workgroup competency and length of stay, workgroup competency and outpatient experience, as well as workgroup competency and mental health access in Region 4 did not exceed the *p*-value of 5%. Therefore the alternative hypothesis, which stated that there is a statistically significant relationship between organizational culture and hospital performance in VHA system nationwide, was accepted.

Hospital performance quality measures were not at the 90th percentile based on the data obtained from the SAIL, and organizational culture responses measured neutral, which resulted in a statistically significant difference. With *p*-values less than 0.05, stakeholders can use this study when determining if organizational culture affects hospital performance in the VHA. This study confirms Braithwaite et al.'s (2017) findings, which were that over 90% of studies analyzing organizational culture and hospital performance were correlated. Braithwaite et al. went on to state that workplace culture is believed to be related to patient outcomes such as reduced mortality and length

of stay. This study also confirmed findings from Warren et al. (2007), which illustrated that indicators of organizational culture were strongly related to hospital performance measures. This study also confirmed Warren et al.'s conclusions that showed that working conditions in health care institutions appear to be strong drivers of system performance.

RQ2: What is the relationship between organizational culture and hospital performance in CCN Region 1 of the VHA system?

I conducted a multiple regression analysis to determine if there is a statistical significance between organizational culture and hospital performance. The results indicated that there is a statistically significant difference between skill development and length of stay in Region 1 in the VHA. The test results for both variables did not exceed the *p*-value of 5%; therefore, the alternative hypothesis, which stated that there is a statistically significant relationship between organizational culture and hospital performance in VHA system in Region 1, was accepted.

RQ3: What is the relationship between organizational culture and hospital performance in CCN Region 2 of the VHA system?

I conducted a multiple regression analysis to determine if there is a statistical significance between organizational culture and hospital performance. The results indicated that there is a statistically significant difference between innovation, workgroup competency, supervisor respect, and care transition in Region 2 as well as innovation, workgroup competency, supervisor listening, supervisor respect, skill development, and inpatient experience in the VHA. The test results for the variables did not exceed the *p*-

value of 5%; therefore, the alternative hypothesis, which stated that there is a statistically significant relationship between organizational culture and hospital performance in VHA system in Region 2, was accepted.

RQ4: What is the relationship between organizational culture and hospital performance in CCN Region 3 of the VHA system?

I conducted a multiple regression analysis to determine if there is a statistical significance between organizational culture and hospital performance. The results indicated that there is a statistically significant difference between skill development and avoidable adverse events in the VHA. The test results for the variables did not exceed the *p*-value of 5%; therefore, the alternative hypothesis, which stated that there is a statistically significant relationship between organizational culture and hospital performance in VHA system in Region 3, was accepted.

RQ5: What is the relationship between organizational culture and hospital performance in CCN Region 4 of the VHA system?

I conducted a multiple regression analysis to determine if there is a statistical significance between organizational culture and hospital performance. The results indicated that there is a statistically significant difference between workgroup competency and length of stay, workgroup competency and outpatient experience, and workgroup competency and mental health access in the VHA. The test results did not exceed the *p*-value of 5%; therefore, the alternative hypothesis, which stated that there is a statistically significant relationship between organizational culture and hospital performance in VHA system in Region 4, was accepted.

General Discussion

As stated earlier in this study, the VHA is the largest integrated health care system in the United States ((U.S. Department of Veteran Affairs, 2020). Conducting this study was significant for several reasons. In 2014, employees described the organizational culture at the VA as entrenched and intimidating (Westervelt, 2018). An audit also revealed that in 2014, patients were receiving substandard care (CNN Editorial Research, 2019). Tilkemeier (2016) posited that measuring hospital performance and organizational culture has the potential to significantly improve the quality and efficiency of patient care across the nation. Assessing performance also creates an organization that promotes the best clinical standards. This study contributes to current research by cross examining the relationship between organizational culture and hospital performance.

Findings in Relation to Theoretical Framework

In his theoretical study, Donabedian (1966) believed that specifying the components or outcomes of care to be sampled, formulating the appropriate criteria and standards, and obtaining the necessary information are the steps needed to evaluate quality of care. Using this study, workplace performance and servant leadership were the measures used to assess organizational culture. Hospital performance was represented by the acute care mortality, length of stay, care transition, patient experience, avoidable adverse events, and access. In developing this theoretical framework, Donabedian (1966) wanted the framework to be flexible enough for application in diverse healthcare settings and among various levels in a delivery system.

Donabedian's (1966) framework related to this study because at its most basic level, the framework can be used to modify structures and processes in a healthcare organization. High quality care consists of a culture that involves staff who are engaged and keep themselves accountable when providing care (Becker's Hospital Review, 2016). To ensure that the organizational culture is one that employees can thrive in, processes must be measured in a healthcare organization. As Tilkemeier (2016) stated, hospital performance and organizational culture have the potential to significantly improve the quality and efficiency of patient care across the nation.

Limitations of the Study

The study methodology provided the strength for this study; a multivariate regression analysis using each quality measure of hospital performance had predictor variables to determine if there is a statistical significance between organizational culture and hospital performance. In this study, I identified several limitations. Firstly, the hospital performance scores did not have composite scores. Composite scores provide the ability to conduct a reliability analysis. Secondly, of the 37,514 respondents that were used in the analyses, the overall response rate to the AES survey was only 29.4%.

Recommendations

The multivariate regression analysis was conducted to test for the relationship between organizational culture and hospital performance. The VHA has been compared to many other organizations but few studies have been done within the VHA. In 2014, employees described their organizational culture at the VA as entrenched and intimidating (Westervelt, 2018). An audit also revealed that in 2014, patients were

receiving substandard care (CNN Editorial Research, 2019). Further research is needed to expand on the relationship between more components of organizational culture and hospital performance within the VHA. For this study, I used workplace climate a component of organizational culture. There are other components in the AEs that can be used to expand research within the VHA. More studies could include more components of the AES to measure organizational culture and determine if there is a relationship between those components and hospital performance.

Implications for Professional Practice and Positive Social Change

As part of the Veteran Access to Care Act, the Department of Veteran Affairs remains committed to continually improve healthcare quality by providing data to the public. Moseley (2019) states that organizational culture matters in the delivery of high performance in healthcare. In a recent study, VA defines quality care as (i) the right type of care for your health condition, (ii) care that results in the best possible outcome for you, (iii) care delivered with attention to your concerns, needs, and life goal, and (iv) care that keeps you safe from hazards and harm. The next two paragraphs expand on the implications for professional practice and positive social change.

Professional Practice

According to the VHA (2015), quality goals and measured performance of VA health care are released publically to ensure accountability and to spur constant improvements in health care delivery pertaining performance management. In their VA Strategic Plan, the VA intends to accomplish mission goals, priorities, and outcomes. The

strategic plan also provides direction for all programmatic and management functions such as informing VA leaders about the need for new major acquisitions.

Positive Social Change

When speaking to patients and providers, the majority of them will concur that high-quality care plays an important factor when rating hospital performance (Saver et al., 2015). Young (2017) stated that if hospital performance declines, it can affect health care at a national level. This was the case in 2014. The Veterans Health Administration is home to the United States largest integrated health care system (U.S. Department of Veteran Affairs, 2018a). This study supports the purpose of this research concerning the need to ensure that the organizational culture This research will add positive social change to a healthcare community by sharing best practices within the VA system. This study will have the potential to influence policy changes that may improve outcomes for both staff and patients.

Conclusion

A VA audit revealed that patients were receiving substandard care in 2014 (Cohen, 2014). Shortly after, employees then described their organizational culture as intimidating and entrenched. I conducted a multivariate regression analysis to examine the relationship between organizational culture and hospital performance. The results of the multivariate regression analysis indicated that there was a statistically significant different between organizational culture and hospital performance within the VHA. I also conducted a multivariate regression analysis to examine the relationship between organizational culture and hospital performance for CCN regions 1-4 within the VHA.

The results of the analysis indicated that there was a statistical significant difference between organizational culture and hospital performance for CCN regions 1-4 within the VHA. Knowing that there is a disproportion in the SAIL performance metrics and more components to the AES, further research is required to better understand the AES and SAIL within the VHA.

This study addressed the gap in literature regarding the relationship between organizational culture and hospital performance within the VHA. Knowing that there is a statistical significant difference between organizational culture and hospital performance within the VHA, the VHA can focus on methods to continue to improve organizational culture and hospital performance within the VHA. This research will add positive social change to a healthcare community by sharing best practices within the VHA system.

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