Pepperdine University

Graduate School of Education and Psychology

THE RELATIONSHIP BETWEEN PERSONAL STRENGTHS OF CHIEF EXECUTIVE OFFICERS AND THEIR CONTROL OF LABOR IN NON-PROFIT HOSPITALS

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Organizational Leadership

by

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ABSTRACT

The hospital sector reflects a microcosm of the healthcare crisis in the United States; as hospital care costs increase, so does the financial failure rate of hospitals. This dissertation examines the relationship between hospital CEO personal strengths and their success, which for this study was defined as controlling the use of labor.

This study covered 2 hospital systems with 14 hospital CEOs participating and providing access to their Solucient database. This study used Clifton StrengthsFinder 2.0 as a survey instrument with those CEOs who participated in the study. The results of the 177 paired question survey gave each CEO his or her top 5 strengths.

Using the Solucient database, the researcher used full-time equivalents per adjusted patient discharge for the fiscal year 2008. Each hospital was benchmarked against similar hospitals based on size and case—adjusted to determine if they are in the top quartile (Quartile 1 & 2) using the least amount of labor or bottom quartile (Quartiles 3 & 4) using the most amount of labor for this measurement. Subjects' personnel strengths are compared to their ranking in use of labor.

Based on the statistical analyses, CEOs who included "Achiever" as one of their top 5 themes showed significantly higher quartile scores on the measure FTEs per Adjusted Patient Discharge (Lowest use of labor). That is, differences between CEOs' strengths in the upper and lower quartiles were found. Of the 8 CEOs in the top 2 quartiles, 6 express strengths of learner (statistically significant at 0.03) and achiever (statistically significant at 0.01). Thus, the 2 strengths of learner and achiever could identify a CEO with the ability to control hospital labor.

By determining this relationship between CEO personal strengths and hospitals' use of labor, the research identified 2 personal strengths can affect labor control in the hospitals. Hospital boards and systems could use the information to recruit the best administrators. Controlling labor usage is not always a priority for hospitals; sometimes CEO's are retained to increase market share or recruit physicians. However, the focus in this project was limited to the use of labor.

Chapter One: The Problem

This research is based on more than four decades of study by this researcher into the strengths of Chief Executive Officers in not-for-profit hospitals in North America, Europe, and Asia. Having observed, as a line officer and consultant to various industry CEOs, the success or failure of the institutions they led prompted an interest to research their strengths and discover if there exists a relationship between those strengths and the success or failure of their hospitals. For the purpose of this study, this researcher has, based on his experience, refined and narrowed the working definition of a successful healthcare CEO to be his ability to control the single-largest cost center in hospitals: the cost of labor. Thus, in this research project, this researcher seeks to answer these questions:

1. Do CEOs have particular strengths that correlate to the success, defined here as controlling the use of labor of the not-for-profit hospitals they run?
2. Do they share these attributes with other successful CEOs of not-for-profit hospitals that control labor cost?

Background of the Problem

The much-publicized crisis of the American healthcare industry is continuing to worsen, unabated. In 2006, 45.7 million Americans (15.3% of the population) did not have basic health insurance (U.S. Census Bureau, 2007). In 2003, the United States spent $1.7 trillion on healthcare, translating to an average of $5,952 per person (based on the population at that time). From 2003 to 2006, the already-staggering spending increased by 21.5%, the equivalent of $373 billion, while the per capita spending on healthcare rose to $7,026 (Centers for Medicare & Medicaid Services, 2008). In fact, experts state that

health spending growth is expected to outpace economic growth by an average of 1.9 percentage points annually (Keehan et al., 2008).

In analyzing the issues of the U.S. healthcare system, it has been found that there are four factors converging to create a metaphorical fiscal perfect storm comparable to Hurricane Katrina's short- and long-term devastation. The disaster warnings for this escalating crisis are: (a) the climbing number of uninsured and underinsured, (b) the inefficient use of the healthcare system, (c) the aging population of the United States, and (d) the continuing inflation of healthcare costs. All four factors put increased pressure on hospital CEOs, making it even harder for them to control labor costs in their hospitals.

The rapid inflation in the cost of health insurance premiums leaves most individuals who do not qualify for free healthcare (through Medicare or its equivalent, or those who do not receive healthcare coverage through their jobs) unable to pay for basic coverage, and premium costs continue to rise. According to the Kaiser Family Foundation and Health Research and Educational Trust (2002), for example, "The cost of job-based health insurance rose by 12.7% from spring 2001 to spring 2002, up from 11% in 2001, 8.3% in 2000, and 4.8% in 1999 and the largest increase since 1990" (p. 12). Until recently, Americans expected employers to provide employees with highly valued health insurance. Yet, few employers are willing to pay the total cost of health insurance. Companies that previously paid all health insurance premiums for their employees are increasingly shifting the burden to their employees (Enthoven & Fuchs, 2006).

The inadequate provision of health insurance to the country's general population (including illegal and legal immigrants who, regardless of their legal status, also depend on the U.S. healthcare system in the event of illness or injury) forces many people to

postpone seeking medical treatment until their conditions or illnesses have progressed to a stage requiring acute hospital intervention. Hospitals admit more and more cases of people in the later stages of illness, which often require more costly medical interventions than would have been necessary were people insured in the first place and had sought appropriate and timely treatment. In most cases, hospitals do not receive payment for such services rendered to uninsured patients because those patients simply cannot pay. Nonpayment, in turn, creates increased fiscal pressure on the hospitals, and thus partially explains why many hospitals fail to manage operational costs, particularly labor.

Escalating costs have also led to a secondary crisis of accessibility, which increases in severity as public funds decrease for subsidized medical care. The American Hospital Association (2007) details the converging pressures facing hospitals, pointing to the inflation of insurance premiums and the huge numbers of underinsured and uninsured people. Add to the mix surging pharmaceutical spending, decreases in funding given to Medicaid programs, continuing critical shortages of skilled medical technicians (including pharmacists and nurses), and increasing liability insurance rates for hospitals and professional of 50% to 100% (American Hospital Association, 2007).

Further drains on hospital budgets include the cost of upgrading computer systems to meet the requirements of the Health Insurance Portability and Accountability Act of 1996, as well as costly patient safety initiatives, and the burgeoning healthcare requirements of the aging generation of baby-boomers (American Hospital Association, 2007). These many factors are creating fiscal ripple effects that formerly were beyond any CEO's imagination.

In the detailed discussion about the causes of the current of budgetary crises, one problem the American Hospital Association does not mention is the mismanagement of hospitals. Between 1998 and 1999 alone, 131 hospitals in the U.S. closed their doors (Kralovec & Reczynski, 2001). A Robert Wood Johnson Foundation (2005a) study shows that more than 27% of hospitals open in 1980 had closed by 1997, resulting in a nationwide reduction of 66,000 beds. The researchers pointedly assert that it was not the hospitals' efficiency that predicted whether they would remain open, but rather, their financial soundness. Hospitals with greater financial resources remain open, resulting in what the Robert Wood Johnson Foundation (2005b) study calls "survival of the fattest versus survival of the fittest" (p. 22).

The History of Healthcare Reform

The United States is currently gripped by two issues that weigh heavily on both the people and the government: economic instability and the need for healthcare reform. The economy is vulnerable and, at the same time, the increasing cost of healthcare and shrinking coverage demonstrate the urgent need for strong leadership to implement practical measures (American Hospital Association, 2009). A stable health infrastructure and coverage for all is the number one goal of healthcare reform—the hospital industry, particularly its leaders and CEOs, must share this responsibility.

Efforts to provide healthcare coverage in the United States began with Theodore Roosevelt, who had the support of progressive healthcare reformers in the 1912 election, but was defeated (Igel, 2008). Healthcare first became a major social and political issue in the mid-1940s. As World War II came to a close and the American public began to concentrate on domestic issues, one growing concern was that citizens in the middle-

income bracket were struggling to access adequate healthcare. In order to raise the issue to priority status, President Harry S Truman recommended a national healthcare program during a special address to the United States Congress on November 19, 1945.

The Medicare program—the social insurance program administered by the United States government, providing health insurance coverage to people who are either age 65 and older or who meet other special criteria—was established by legislation and signed into law on July 30, 1965, by President Lyndon B. Johnson (Blendon & Benson, 2001).

In more recent times, healthcare reform was also a major concern of the William Jefferson Clinton administration, but the 1993 Clinton healthcare plan was not enacted into law (McInturff & Weigel, 2008). However, the Health Insurance Portability and Accountability Act of 1996 made it easier for workers to keep health insurance coverage when they changed jobs or lost a job, and also provided national standards for protecting personal health information.

During the 2004 presidential election, both the George W. Bush and John Kerry campaigns offered healthcare proposals (Toner, 2004). As president, Bush signed into law the Medicare Prescription Drug, Improvement, and Modernization Act, which included a prescription drug plan for elderly and disabled Americans (McInturff & Weigel, 2008).

President Barack Obama called for universal healthcare—his plan involved the creation of a National Health Insurance Exchange that would include both private insurance plans and a Medicare-like government run option (Leys, 2008). Coverage would be guaranteed regardless of health status, and premiums would not vary based on

health status. It would require parents to cover their children, but did not require adults to buy insurance.

John McCain's proposals focused on tax credits: $2,500 for individuals and $5,000 for families who did not subscribe to or did not have access to healthcare through their employer (Moffit & Owcharenko, 2008). To help those who have been denied coverage by insurance companies because of preexisting conditions, McCain proposed working with states to create a guaranteed access plan for these people (Leys, 2008).

The two plans had different philosophical focuses—McCain's plan would make insurance more affordable while the Obama plan was for more people to have health insurance (Burling, 2008). A poll found that voters supporting Obama listed healthcare as their second priority, while voters supporting McCain listed it as fourth (Blendon, Altman, Benson, Brodie, & Buhr, 2008). Affordability was the primary healthcare priority among both sets of voters, and Obama voters were more likely than McCain voters to believe the government could do something to improve healthcare costs.

The current state of healthcare reform. The main problems of the United States healthcare system—coverage, cost, and quality—are well understood and documented. The United States government must create fundamental reforms in its healthcare system to provide all citizens access to an affordable, standard healthcare package, while simultaneously building the capabilities, infrastructure, and incentives to ensure that high-quality care is available to all.

Jonathan Oberlander, associate professor of Health Policy and Management at the University of North Carolina, states that finding a way to pay for universal coverage is a primary barrier to comprehensive reform (Oberlander, 2008). A study found that

covering all of the uninsured in the U.S. would increase national spending on healthcare by $122.6 billion, which would represent a 5% increase in healthcare spending. It is clear that maintaining the status quo in healthcare represents a significant threat to government finances, the economy, as well as the population's standard of living.

While most discussions about healthcare reform primarily focus on how to finance expanded coverage, sustainable reform can only result from substantially changing both the financing of care and the current systems for organizing and delivering care (Leys, 2008). Without fixing the delivery system, it is impossible to solve the cost and quality problems in a practical manner. Disorganized and haphazard changes will not be able to solve the fundamental problems of the healthcare system. Escalating costs will continue to undermine patient access, and poor service quality will add costs and affect the overall value of healthcare coverage (Burling, 2008).

Getting quality information into the hands of doctors and patients, while protecting patient privacy, is necessary if the hospitals are to control spiraling costs while improving standards of care (Oberlander, 2008). Information technology systems used to track the delivery of a package or make an airline reservation are frequently far more sophisticated than those used to help manage healthcare for patients. It is estimated that by 2010, medical images will account for an estimated 30% of the data stored on the world's computers (Fox, 2008). The United States has medical schools and research labs that are among the best in the world, yet the majority of hospitals do not use advanced methods or software to harness all that medical knowledge and apply it as effectively as possible in patient care (Marmor & White, 2009).

As a result, patients and doctors frequently have to make decisions without access to the most up-to-date research or guidelines of best practices that can lead to the most successful outcomes. More than 20% of medical tests such as X-rays, CAT scans, and MRIs are repeated at unnecessary cost because patient records are not available for evaluation (Leys, 2008). Better information also helps avoid deadly mistakes. Prescription errors alone cause 7,000 deaths each year in the U.S. (Woolhandler & Campbell, 2003).

Reform requires a systematic, goal-directed process; new programs and policies must offer a coordinated and coherent approach, and they must reinforce each other (Marmor & White, 2009). If hospitals don't take advantage of smarter technology, healthcare may be able to inch toward reform, but it will not succeed in making the structural changes necessary to meet the government's long-term goals for affordable, accessible, and effective care for all citizens. While technology alone is not the solution to the complex problems plaguing the healthcare system, it is an important tool for helping to foster cooperation and exchange of information among teams, enabling them to reach improved standards of patient care (Marchibroda, 2009).

At the heart of clinical excellence is collaborative and team-based care, and already many doctors and hospitals, including Geisinger Health System, Kaiser Permanente, the Mayo Clinic, and the University of Pittsburgh Medical Center, are integrating information systems and harnessing data to deliver better patient care (Marchibroda, 2009). They are using more advanced and connected systems that enable them to share information and insight and empower patients to make the treatment choices that are best for them.

Hospital Governance

Governance can be defined as the structure and process used to direct and manage the business and professional affairs of the organization to assure the achievement of its mission (Hackman, 1987). Governance structures exist to ensure that entities behave in a manner that is responsible to stakeholders (Scharf, Marty & Barnsley, 1994). Hospitals in the United States vary widely in terms of governance structure: profit versus nonprofit, private versus public ownership, as well as their type of external financial interest (such as shareholders, voters, and donors). However, the formal governance structure of most hospitals is fundamentally similar.

All hospitals have some ultimate governing body (frequently referred to as the board of trustees, board of directors, or board of governors) which oversees the hospital's management (Scharf et al., 1994). Essentially, the board represents the hospital's owners and is accountable to the community as well as other stakeholders. The board is ultimately responsible for all activities of the hospital, and board members are appointed, elected, or selected in accordance with the hospital corporation bylaws (Greene, 1995). Its members have a responsibility to multiple constituencies, including the patients, the community, the owners, as well as the employees and other contractors (Hackman, 1987).

Board members are provided with orientation sessions and continuing education concerning their responsibilities. Typical duties of board members include setting strategic direction and goals of the hospital, selecting the CEO and evaluating his or her performance, setting significant policies by which the hospital operates, ensuring that the hospital has adequate resources, monitoring the financial performance of the hospital and the achievement of goals and objectives, ensuring that effective management information

systems are in place, developing a communication plan for stakeholders, and delegating responsibilities to managers and committees (Molinari, Morlock, Alexander, & Lyles, 1992).

Hospital boards usually delegate the responsibility for day-to-day management to the CEO. This individual further delegates decision-making authority to line managers and professional committees for policies and procedures regarding medical care (Scharf et al., 1994). The governance of the organizational structure in hospitals is overseen by and subject to the recommendations of the Joint Commission on Accreditation of Healthcare Organizations (Molinari et al., 1992).

Why Focus on Hospital CEO's Strengths?

CEOs in the healthcare system have been faced with crises for some time. Arrow et al. (2009) state that the crises currently facing the healthcare system exist on these three fronts:

- Crisis of vision: Where do we want the system to go and how will we get there?
- Crisis of quality: What are the standards and indices for quality healthcare?
- Crisis of resources: What is the appropriate amount we should spend to maintain healthcare standards?

Warner and Luce (1982) argue that crises are excellent promoters of change management. Crises can spawn new leaders and champions, those unafraid of challenge, those willing to question the status quo. Competent CEOs are required to take inventory of the skills, attributes, and competencies needed not only to survive, but thrive amidst the wave of change occurring in the healthcare industry (Lancaster et al., 2009).

CEOs are successful when they make decisions while engaging and exciting people in the organization around a common or shared vision of the future. They select from amidst competing interests those options that best satisfy a set of values common to the greatest number of stakeholders (Lancaster et al., 2009). They give meaning to personal contributions and celebrate accomplishments. They empower, teach, and give permission to challenge the status quo. In short, they create an environment conducive to change.

Successful CEOs encourage involvement in action and participation (Arrow et al., 2009). A successful CEO is someone who takes a group of people to a destination that they would not have imagined possible, and once there, they cannot imagine ever returning to where they were before (Molinari et al., 1992).

Being a CEO involves a knowledge base, a process skill, and a personal style. It is not an intellectual exercise, but is assisted by knowledge and experience. CEOs can potentially benefit from immersion in environments where they are encouraged to learn from mentors (Greene, 1995). Often, CEOs can demonstrate leadership as a result of opportunity. Hence, finding the winning combination of conditions for CEOs to demonstrate leadership is the first challenge that healthcare organizations and government agencies should tackle, and the basis for this exploratory research.

Focused Research on Efficient, Secure Healthcare

Focused Research on Efficient, Secure Healthcare is a 36-month project that began in June 2006. It comprises an illustrious advisory committee of 13 distinguished individuals, chaired by Nobel Prize winner Kenneth Arrow. As a think tank for healthcare reform policy, this committee's purpose is to convene a collaborative,

multidisciplinary group of scholars who will comprehensively study the specific, detailed challenges to healthcare reform (Focused Research on Efficient, Secure Healthcare, 2006).

Their goal is to develop critical analyses of all comprehensive healthcare reform proposals. These will be systematically evaluated based on operations of the healthcare system, financing healthcare reform, legal and regulatory issues, as well as transition and implementation. The analysis will include delineating the policy options, specifying the advantages and disadvantages of each, and offering thoroughly evaluated recommendations.

Each reform proposal will also be the subject of an invitation-only workshop of experts, including health economists, physicians, health services researchers, health plan executives, consultants, and government officials. The project findings will be presented for review at a major policy conference for policy makers, politicians, health economists, and the media in Washington, DC.

The Hospital Leadership and Quality Assessment Tool

In 1996, the Institute of Medicine (2009) launched Crossing the Quality Chasm, a concerted, ongoing effort focused on assessing and improving the nation's quality of care. The first phase of this quality initiative documented the serious and pervasive nature of the nation's overall quality problem.

However, more than 10 years after the Institute of Medicine's Crossing the Quality Chasm initiative, hospitals still have not shown adequate improvement in the basic measures of quality (Lancaster et al., 2009). Improvement pace is modest and variable, and much remains to be done. More important, engagement of governing board

executives and leaders in improving and maintaining quality standards still needs significant attention.

In recognition of the need to reform fundamentally healthcare processes and systems to deliver consistent high-quality care, and in order to facilitate greater hospital leadership engagement in quality improvement, individuals from the Health Services Advisory Group, the Centers for Medicare & Medicaid Services, the Department of Health Management and Policy at the University of Iowa College of Public Health, and the Oklahoma Foundation for Medical Quality have established a strong collaborative relationship to develop a standardized self-administered organizational assessment tool titled the Hospital Leadership and Quality Assessment Tool (Oklahoma Foundation for Medical Quality, 2009).

The Hospital Leadership and Quality Assessment Tool is designed to help hospital boards and executives determine where a hospital stands in respect to leadership efforts that help foster changes for improved quality of care. In developing the Hospital Leadership and Quality Assessment Tool, researchers examine structures, processes, and leadership activities demonstrated to be associated with high performance in clinical quality and improving organizational culture.

The goal of the Hospital Leadership and Quality Assessment Tool is to identify and adopt leadership structures and systems that can help hospitals facilitate operational and cultural change and ultimately improve healthcare quality in a measurable way (Oklahoma Foundation for Medical Quality, 2009). A hospital can use the Hospital Leadership and Quality Assessment Tool to identify leadership strengths as well as any gaps that may serve to inhibit change or success.

The Hospital Leadership and Quality Assessment Tool is scheduled to be completed by 2010 (Commonwealth Fund, 2008). This tool will require minimal resources to implement and can be used by all hospitals, thus providing the healthcare industry with benchmarking data that can be used to measure milestone progress. With baseline information on hospital leadership performance, agencies such as Medicare Quality Improvement Organizations will develop and implement a technical assistance protocol for improving leadership at low-performing hospitals. An evaluation will determine whether hospitals implementing the protocol improved their performance on the leadership assessment as well as on quality-of-care measures.

Hospitals are constantly seeking new strategies for improving clinical quality. The active involvement and collaborative participation of top-level leaders is essential to quality improvement. Leadership from hospital CEOs, executives, board members, doctors, and nursing leaders is necessary to drive reform in hospitals, where strong, interpersonal relationships can improve operations and quality of care.

All healthcare organizations have both formal and informal leadership roles, and there are many opportunities for leadership to be developed, such as within nursing teams and specific healthcare task forces and projects. This has resulted in opportunities for leadership development at all levels within organizations and the system as a whole (Woolhandler & Campbell, 2003).

President Obama is correct: Better information leads to better healthcare decisions (Burling, 2008). The healthcare industry has complexities that make it very different from any other industry, and there must be stringent standards to ensure patient privacy. This has placed unprecedented demands upon hospitals. There is no question that the United

States needs to reform its current system to create networks of connected information that can lead to better care with fewer mistakes, predict and prevent diseases, and help consumers navigate the increasingly complicated healthcare system (Marchibroda, 2009).

Healthcare system reform will not occur overnight, but it must start somewhere. Everyone should share the burden of healthcare reform, especially hospitals and their CEOs. Hospitals have proved to be flexible in the past, adapting to changing management priorities such as outpatient service and the need to reduce costs (Lancaster et al., 2009). In the future, hospitals will need to collaborate with other sectors of the healthcare industry and learn to manage prudently healthcare resources. If hospital leaders take a proactive role, they will be able to ensure their goals of quality healthcare delivery.

The Hospital Leadership and Quality Assessment Tool will expand upon current research by establishing the critical characteristics of effective leadership as the foundation for performance improvement. This will provide participating hospitals with a road map for creating a culture of quality and patient safety that supports achieving and sustaining performance excellence (Oklahoma Foundation for Medical Quality, 2009).

As President Obama and Congress tackle the pressing problem of reforming healthcare, the success of the reforms will not be measured just by dollars saved. It will be gauged by the achievement and sustainability of the new reform initiatives—both what is done and how well it is accomplished. It will be judged by the efficiencies gained as well as the improvements to the quality of patient care. Now is the time to target development of effective leadership—because leadership is about change, and reform in the healthcare industry centers on leadership.

CEOs and the Crisis

Can the hospital CEOs avert the financial failure of their hospitals? Are there particular personal strengths that enable CEOs to control the labor costs of the institutions they lead?

Increases in hospital spending from 1998 to 2003 resulted from increased wages and salaries; 52% of the increase in hospital expenditures was for the purchase of goods and services, which include wages. In fact, of this 52%, three quarters came from wages alone (American Hospital Association, 2007).

For the purpose of this paper, controlling the cost of labor is defined as the number of people who are either on the payroll or hired under exclusive contract to provide services within the hospital setting. Labor is used to mean full-time equivalents (FTEs) or the number of full-time workers being paid to deliver goods and services within the hospital. These definitions are in accordance with Thomson's Solucient Action O-I Departmental Manual, Version 5.0 Q2 (Thomson Corporation, 2007).

Statement of the Problem

From 1980 to 2005, the total national health expenditures grew from $200 billion to $2.2 trillion. Adjusted for inflation, that is an increase to $800 billion based on the value of 1980 dollars. This represents a 300% increase. The percentage change in total national health expenditures for the last three reported years are 8.1% in 2003, 7.2% in 2004, and 6.9% in 2005 (American Hospital Association, 2008).

As a percentage of Gross Domestic Product, America's national health expenditures grew from 9.1% percent in 1980 to 16.0% in 2005. In 2005, the latest reported year, $6,000 was spent for every man, women, and child in the United States. It

is projected that by 2016, national health expenditures will be $4.5 trillion, with hospital costs remaining the largest component of this cost, at 32.9% (American Hospital Association, 2008).

Therefore, controlling the cost of labor becomes crucial to CEOs' success, as labor accounts for one of the largest costs that CEOs can manage directly. Labor is unlike the cost of pharmaceuticals or many other supplies, which are determined by the marketplace. A CEO is the ultimate person who decides who to hire and how many people to hire. Through the process of budgeting and then delegating to their vice presidents and managers the labor component of their budgets, CEOs set the tone for labor consumption. Further, through monthly reviews of budgeted to actual costs, and through reports to boards of trustees, CEOs are constantly monitoring and adjusting the use of labor to meet volumes of patient care provided by the institution.

The cost of labor is exacerbating the spiraling fiscal crises in American hospitals. CEOs need to find out how best to use their dwindling resources. Clearly, some CEOs do a better job of this than others. The question is why? Is there any relationship among their personal attributes, their management styles, and the fiscal health of their hospitals?

Purpose of the Study

This study explores the relationship between certain personal strengths (i.e., personality attributes) of hospital CEOs and those administrators' ability to control the labor costs of the hospitals they run. Fifteen CEOs were asked to answer an electronic questionnaire developed by the Gallup organization, which allowed the researcher to gain insight into the personal strengths of hospital CEOs. Two major hospital systems were included in this study: One is a Catholic system, and the other is a Protestant system.

Each system used Thomson's Solucient Action O-I database to report its use of labor. Solucient is a leading healthcare information content company, which provides information, analysis, and related products for hospitals, integrated healthcare delivery systems, managed care organizations, and pharmaceutical manufactures. This industry standard of labor usage was then benchmarked against other similar hospitals.

Theoretical Framework

Mintzberg et al. (1998) looked at the role of the CEO, focusing particularly on the approaches used by senior executives. Throughout 12 months, they interviewed 160 chief executives around the world, most of whom were running major corporations in industries as diverse as gold mining, computers, and soft drinks. The researchers' original hypothesis was that there were as many executive styles as there were CEOs. However, their yearlong project and the data it produced did not demonstrate their idea to be true. These researchers instead saw and identified five distinct approaches to leadership: (a) the strategy approach, (b) the human-assets approach, (c) the expertise approach, (d) the box approach, and (e) the change approach.

Because these researchers looked only at executives of major corporations, based on market share and revenues within their respective fields, there is a limit to the applicability of their descriptive categorization of executives and their styles. The limitation of their study was that they did not start with definitions of styles that they would study. Rather, they created their five styles based on open-ended interviews at the conclusion of their study.

Several studies at the doctoral level (Carlson, 2003; Gabbert, 2005; Hartman, 2004; Majsud, 2006; Sawan & Blaihed, 1982) attempted with some success to show a

correlation between certain leadership styles and strengths and the financial outcomes of the organizations. Carlson (2003) looked at the relationship between hospital performance and CEO commitment. His study of the top-performing 100 hospitals in the United States, as reported by the Medicare cost reports and compiled by the Solucient Leadership Institute, did not find any relationship between organizational commitment and benchmarked organizational performance. Gabbert (2005) explored whether there was a relationship between the CEOs' transformational leadership style and hospital performance. Again, using the top 100 U.S. hospitals, Gabbert demonstrated a significant correlation between transformational leadership styles and high performing hospitals. Hartman (2004) presented three performance determinants essential for financial success in a firm's performance; efficiency and innovation partially mediates the relationship between quality of human resources and the company's performance. Sawan and Blaihed (1982) analyzed the relationship between leadership behavior of the CEO and the overall performance of hospitals in the Los Angeles area. They found a positive correlation among Stogdill's (1963) Leader Behavior Description Questionnaire, Form XII subscale scores of role assumption, tolerance of freedom, initiation structure, and tolerance of uncertainty to hospital efficiency. Hartman (2004) looked at the relationships among CEOs' traits, empowering leadership behavior, and objective and subjective measures of performance. CEOs who rated themselves as having empowering leadership behavior had a positive correlation with return on investments in the companies they ran. Majsud (2006) examined strategic leadership and determinants of firm performance.

In *First, Break All the Rules: What the World's Greatest Managers Do Differently* (Buckingham & Coffman, 1999), the authors suggested that individual managers must

build on their strengths, not overcome their weaknesses. Buckingham and Coffman (1999) interviewed the great managers of companies and found that most corporations have their human resource function of reviewing peoples' weaknesses and then trying to improve them through various levels of instruction, conferences, and mentoring. Despite the ground-breaking notions of the Gallup research, it does not definitively analyze the significance of leadership and management (as general concepts) or the significance of leadership and management styles specifically in relationship to the financial success of a given business. They do not correlate the given strengths of individual leaders with having a positive bottom-line impact.

The most-used method for assessing leadership and management styles is to undertake a questionnaire-based review of a sample population, as demonstrated in *Clifton StrengthsFinder 2.0* (Rath, 2007). The Gallup Organization questionnaire was used in the study and this researcher focused on specific questions about the strengths of CEOs in the healthcare system.

Research Questions

These research questions guide this paper:

1. What are the individual personal strengths among hospital CEOs, as measured by the Gallup Organization instrument known as StrengthsFinder?
2. Do relationships exist between a CEO's particular strengths and his or her ability to control a hospital's use of labor?
3. Are the top-performing hospitals (as benchmarked in the top two quartiles of Solucient data in terms of lowest use of labor) led by CEOs who share at least one particular personal strength?

4. Are the lowest-performing hospitals (as benchmarked in the bottom two quartiles of Solucient data in terms of using the most labor) led by CEOs who share at least one particular strength?
5. Are there any strengths shared between the CEOs in the top-performing hospitals and the lowest-performing hospitals?

Significance of the Study

With little known about the personality and management strengths of hospital CEOs and how those strengths relate to their ability to control labor costs, this study's results can provide a baseline for continued research on hospital CEOs' strengths. The results of the study may begin to build a method of examining hospital CEOs' strengths and determining how, if at all, those strengths can control labor costs in these times of fiscal uncertainty.

If particular personal strengths do relate to a CEO's ability to control labor costs, hospitals and hospital systems[1] may be able to use such information to recruit and promote individuals with those characteristics; it is perhaps one strategy to run healthcare institutions more cost-effectively.

This may lead to aiding boards of hospitals and CEOs of health systems to plan better for succession of their CEOs to bring in those who can help control costs. It could also help in the recruitment of a new CEO if a hospital is in financial jeopardy. If a relationship exists, this study could create further studies into relationships among CEOs strengths and their ability to build market share, control supply cost, and improve quality of care delivery. The possibilities could be endless.

[1] Note that the terms hospitals and hospital systems are used interchangeably here.

Another spin-off could be the ability to use this research to coach CEOs and their teams to use their strengths to improve their organization's performance. It may be that the strengths of others on the team have as much to do as the CEO in controlling labor costs. Thus, further research could be undertaken to look at the entire executive teams' strengths and the performance of the hospital overall and their divisions in particular.

Besides boards and system executives, this study could help recruiters zero in on the right candidate if the hospital is facing financial jeopardy. It could also aid them in understanding how to round out the team, if they were recruiting other than the CEO.

This research could aid CEOs, once they understand their own strengths, to recruit and retain on their executive team complementary strengths to create high-performance hospitals. They could unleash unknown talent that was once unrecognized because of human resource systems that had executive teams trying to correct their weaknesses.

Limitations of the Study

Different hospitals and hospital systems maintain different values and aim to fulfill different missions. Missions, other than control of costs, could include:

- Expanding market share;
- Serving the poor and underserved;
- Educating medical students and other professionals;
- Medical research; and
- Clinical trials.

As such, the values and missions of a single hospital may have no effect on CEO attempts to control costs, or the values and missions may adversely or positively affect any CEO's attempts to control costs. To the extent that hospitals' missions fit the criteria

examined here, the results will be applicable; however, if a mission is not, then the results cannot be applied as readily.

Another limitation is that the sample size is small, and thus, this will be demonstration research to understand if any correlation exists that would lead to further research. This research is limited to the individual CEOs in two United States healthcare systems. The findings may not apply to CEOs in hospitals different than those described.

Definition of Terms

These operational definitions clarify the terms used in this study:

1. Adjusted Discharge: The total discharges in the acute care hospital x Adjustment factor (Calculation of Hospital Performance Measures, 2009).
2. Adjustment Factor: The gross patient revenue/gross inpatient acute care revenue to create an adjustment factor to patient days, discharges, and other utilization data (Calculation of Hospital Performance Measures, 2009).
3. Better Performer: Using the formula for labor FTEs, each hospital is compared to other hospitals of like size and complexity. They are then divided into quartiles. The 1st quartile is considered the best ranking, which would mean that the hospital is using less labor to provide its services to its patients than the hospitals in the 2nd, 3rd, and 4th quartiles (Thomson Corporation, 2007).
4. Case Mix Adjustment: The hospital performance measure/Medicare case mix index (Calculation of Hospital Performance Measures, 2009).
5. Chief Executive Officer: "The highest ranking executive in a company or organization, responsible for carrying out the policies of the Board of Directors on a day-to-day basis" (American Heritage Dictionary, 2006, p. 322).

6. Expenses per Adjusted Discharge, Case Mix and Waged-Adjusted: This helps determined how efficiently a hospital cares for its patients. It is calculated by adjusting the operating expenses, by the number of adjusted discharges, case mix, and wage adjusted (Thomson Corporation, 2007).
7. Full-Time Equivalent (FTE): "An FTE is the equivalent of one person working full time: (8 hrs./day X 5 days/week X 52 weeks/year = 2,080 hours/year). By using this formula, one accounts for part-time and contract people hired to provide service" (Thomson Corporation, 2007, p. 500). An example of this would be if 10 people worked 10,400 hours, those hours would be divided by 2,080 to create for the Solucient database equations five FTES.
8. Full-Time Equivalent Personnel per 100 Adjusted Discharges, Case Mix-Adjusted: This is the [(number of Full-Time Equivalent Personnel/adjusted discharges) x 100)/Medicare case mix index] (Calculation of Hospital Performance Measures, 2009).
9. General Hospital: "The primary function of the institution is to provide patient services, diagnostic and therapeutic, for a variety of medical conditions" (American Hospital Association, 2007, p. A3).
10. Labor Expense: "The total of all expenses of the hospital for labor resources including staff paid through the payroll system and staff paid outside the payroll system, such as registry and contract staff" (Thomson Corporation, 2007, p. 500).
11. Multi-hospital System: "A multi-hospital system is two or more hospitals owned, leased, sponsored or contract managed by a central organization" (American Hospital Association, 2007, p. B1).

Organization of the Study

Chapter One provides an overview of the rationale of the dissertation and the research questions. Chapter Two presents the literature review. Chapter Three describes the methodology used, while Chapter Four presents the results and data analysis. Finally, Chapter Five discusses the results and makes recommendations for future research.

Chapter Two: Review of Relevant Literature

From recent headlines to historical data about business, the number of business failures and unprofitable bottom lines suggest that some people who become executives are neither successful, nor competent. It basically then follows that there are varying levels of leadership competence (Bass, 1990). Many leadership styles have been studied within the healthcare industry. This chapter will explore how some of these styles have been studied, and the outcomes of those studies.

History of Personal Trait Research

Since the beginning of the written word, observers have discussed leaders—from Plato's observations of what the philosopher king needed to lead; to the Prophets of the Bible's Old Testament. During the Renaissance, Cesare Borgia provided a model for Machiavelli's *The Prince*: "He used all means at his disposal, including murder, to achieve and hold his political position" (as cited in Bass, 1990, p. 134).

The word leader has a long history in the English language, first having been mentioned in the 1300s, but the word leadership did not appear in English until the beginning of the 19th century when it was used in the context of political influence and the control of British Parliament (Soanes & Stevenson, 2008).

Early work on leadership was more descriptive than investigative. Theorists attempted to identify types of leadership styles and those styles as they related to society in general and to subsets of society. Empirical research in the social sciences became more accepted after World War II, thus allowing researchers to use more complex descriptions when they gathered empirical data (Bass, 1990).

Bernard Bass (1990) cites more than 7,500 leadership research documents in his book *Bass & Stogdill's Handbook of Leadership*. Much of the research looks at identifying leadership traits, attributes, and characteristics. In the 19th and early 20th centuries, theories asserted that people's leadership qualities were inherited, especially for those fortunate enough to be born into the upper classes. Specifically, leaders were natural born, not trained. Over time, the great man theories evolved into trait theories (Bass, 1990; Kirkpatrick & Locke, 1991), which did not make assumptions about whether leadership traits were inherited or learned; trait theories simply asserted that leaders had different characteristics than non-leaders (Kirkpatrick & Locke, 1991). Traits broadly describe people's general characteristics, including capacities, motives, or patterns of behavior (Bass, 1990; Kirkpatrick & Locke, 1991).

Core traits. The major impact of trait research on leadership and goal achievement is its conclusion that traits endow people with only potential for leadership (Bass, 1990; Kirkpatrick & Locke, 1991), not for leadership. Somehow, traits must be applied in situations to achieve goals. To implement core traits, such as adaptability, control of moods, cooperation, dominance, competence, emotional control, initiative, intelligence, persistence, ambition, honesty, insight, goal setting, etc., additional factors are necessary. Two core traits appear correlated with leadership competence and goal attainment: those of intelligence and honesty (Bass, 1990).

Leaders are generally characterized as being intelligent (but not necessarily brilliant) and as being conceptually skilled. An intelligent mind, strong analytical ability, good judgment, and the capacity to think strategically are necessary for effective

leadership. In short, leadership requires above-average intelligence not necessarily genius (Bass, 1990; Kirkpatrick & Locke, 1991; Kotter, 1982; Lord, DeVader, & Alliger, 1986).

Honesty appears essential to leadership competence. Honesty refers to keeping one's word, to being truthful and nondeceitful (Kirkpatrick & Locke, 1991). Honesty forms the foundation of trusting relationships between leaders and their followers. Effective leaders are credible, with excellent reputations, and high levels of integrity (Bass, 1990). Honest leaders may be able to overcome their lack of expertise in some areas (Kirkpatrick & Locke, 1991). Bass, Avolio, and Goodheim (1987) conclude that managers who did not fulfill their agreements were viewed as less effective by their subordinates.

Findings reported by Lord et al. (1986) indicate that intelligence, masculinity-femininity, and dominance were significantly related to leadership perceptions; Bass (1985) discovered that high self-confidence, self-determination, and inner direction are positively associated with leaders who were evaluated as transformational by their followers. House (1977) found that high levels of self-confidence, dominance, need for influence, and a strong conviction in the moral righteousness of their beliefs, characterize charismatic leaders. Leaders with confidence in their ability to influence the direction of organizational events posses an internal orientation; they are more likely to exhibit transformational leadership behaviors than leaders who believe that events are caused by luck, fate, or chance, which is deemed an external orientation.

Key leader traits include drive (a broad term that includes achievement, motivation, ambition, energy, tenacity, and initiative), leadership motivation (the desire to lead but not to seek power as an end in itself), honesty and integrity, self-confidence

(which is associated with emotional stability), cognitive ability, and knowledge of the business (Bass, 1990; Kirkpatrick & Locke, 1991). There is less clear evidence that traits such as charisma, creativity, and flexibility are related to leadership ability.

Business leaders. Some theories indicate that certain core traits significantly contribute to a business leader's success. Leaders differ from non-leaders in their drive, their desire to lead, their honesty/integrity, their self-confidence, their cognitive ability, and their knowledge of the business (Bass, 1990; Bennis & Nanus, 1985; Bowers & Seashore, 1966; Gordon, 1980; Kirkpatrick & Locke, 1991; Lord et al., 1986; Miner, 1978).

Leaders' self-confidence plays an important role in decision making and in gaining others' trust. If leaders are unsure in their decision making, or express a high degree of doubt, then followers are less likely to trust them and commit to the leaders' vision (Kirkpatrick & Locke, 1991). Consequently, others' perception of a leader's self-confidence is important for getting followers to follow. Leaders project the impression of confidence, which, in turn, arouses followers' confidence.

Emotional stability is essential in resolving interpersonal conflicts or representing an organization. Top executives who act impulsively will not foster the same level of trust and teamwork as executives who retain emotional control. Leaders who lack emotional stability and composure are more likely to derail (Bass, 1990; Kirkpatrick & Locke, 1991).

Charisma, creativity, originality, and flexibility are traits with less clear-cut evidence of a relationship to leadership (Bass, 1990; Howard & Bray, 1988; Kirkpatrick

& Locke, 1991). Effective leaders may, or may not, have charisma; however, this trait may be more important for political leaders than others.

The association between the age of executives and organizational characteristics shows younger managers are more associated with corporate growth than older ones (Child, 1974; Hart & Mellons, 1970). Yet volatility of sales and earnings are also associated with managerial youth (Hambrick & Mason, 1984).

Leaders will demonstrate high achievement needs (Donnelly & Winter, 1970; McClelland, 1965; Miner, 1978; Wainer & Rubin, 1969). Inversely, need for achievement has little correlation with company profitability and sales growth.

Transactional and Transformational Leadership

Because of the intensive and people-oriented nature of the healthcare industry, the industry needs effective leadership skills at all levels—from the nurses who provide patient care to decision makers in high management positions. The industry requires competent leaders to influence healthcare policy and legislation, as well as promote clinical skills.

Within a hospital, any person who is regarded as an authority or has the responsibility of assisting others can be considered to be a leader (Mahoney, 2001). Leadership should not be static or passive—it involves consistent performance with a view to long-term benefits both to patients and employees.

As restructuring continues in many hospitals, strong leadership capable of promoting a high level of patient care has become increasingly important. Effective leadership is not just a set of tasks to be completed or skills to be learned; instead, it involves behavior and attitudes (Cook, 2001). We should strive to implement a style of

leadership that encourages superior performance in varied situations, with minimal disruptions (Moiden, 2002).

In his Pulitzer Prize–winning study on leadership, James Burns (1978) contrasted leadership with power. Leadership, like power, is based on a relationship between the leader and follower; however, in stark contrast to power, leadership identifies and responds to needs and goals that represent values, motivations, wants, and expectations of both leaders and followers. The key to leadership lies in the manner in which leaders can act on and satisfy their followers' values and motivations, as well as their own. Burns divided the concept of leadership styles into two distinct types: transactional leadership and transformational leadership. He also identified the essential characteristics that elevate transformational leadership above transactional leadership.

Transactional leadership. Transactional leaders are focused on the maintenance and management of ongoing and routine work (Bass & Avolio, 1990). They are primarily focused on day-to-day operations. Transactional leadership calls for meticulous control, planning, and organization of all tasks without exception, putting great emphasis on maintaining predictability and order (Faugier & Woolnough, 2002).

Burns (1978) described transactional leadership as a bargain or contract for mutual benefits. Leaders survey their employees' needs and set goals based on what can be expected from them. Initial changes can usually be handled satisfactorily in this manner; however, the use of transactional leadership in promoting significant organizational improvements is effective only to a limited degree. In nursing, this can be likened to the exchange of a salary for the services of the nurse.

Transformational leadership. Transformational leadership actively involves both leaders and followers in reaching higher levels of motivation and ethical decision making (Burns, 1978). Transformational leadership encourages organizational improvements through communication and empowerment, challenging existing methods, and finding ways to improve current processes (Faugier & Woolnough, 2002). It focuses on how a team functions in an integrated way, and how innovation and creativity in problem solving can be developed (Outhwaite, 2003).

Transformational leaders influence change by providing a clear sense of direction and motivating employees to improve themselves in their areas of specialization (Cook, 2001). They use charisma, personalized interest, and intellectual stimulation to catalyze positive changes in their followers (Bass & Avolio, 1990). This, in turn, encourages subordinates to align their own goals with the best interests of their team and broader organizational objectives (Rosner, 1990).

Successful transformational leaders are interactive and dynamic persons who endeavor to enhance their staff's sense of self-worth by delegating responsibilities. This has a positive impact on employees, and McDaniel and Wolf (1992) noted that staff members who worked with transformational leaders exhibited similar leadership qualities, greater work satisfaction, and higher productivity.

Leadership in Healthcare Environments

Currently, transactional leadership is practiced in many hospitals. Nurses are adequately trained to operate complex medical equipment, but throughout their careers, they get the chance to develop only basic leadership skills. New nurses are rarely allowed to develop their leadership potential at an early stage. Horton-Deutsch and Mohr (2001)

noted that an absence of nursing leadership directly contributed to nursing students having an unfavorable opinion of their own profession.

Transformational leadership unites managers and employees to pursue a greater good and encourages others to exercise leadership (Sullivan & Decker, 2001). Leaders grant individual team members permission to oversee different sections of a project according to their specialization, as opposed to transactional leadership, where control and decision making lie solely with the manager.

Transformational leaders are able to articulate and convey a shared purpose or vision (Faugier & Woolnough, 2002). They are also actively involved in problem solving—they handle difficulties and conflicts as these occur, and then interactively involve their team in finding solutions to these problems (Outhwaite, 2003). Leaders are able to achieve this resilience by working closely with their teammates, sharing in duties, and remaining a part of the work process at all levels. Only then are they truly able to appreciate practical problems and issues from the employee's perspective.

Transformational leadership is especially appropriate in today's dynamic hospital environment where the ability to adapt and react to situations is extremely important. The introduction of advanced technology in hospitals has changed the existing hierarchy of leadership, and the evolving healthcare industry also calls for new leadership characteristics and roles. Traditionally, employees rise through the ranks as they gain more knowledge and skills. However, as technology advances and hospital employees enter the profession with expanding skills, the association between leadership and knowledge has shifted dramatically (Porter-O'Grady, 1997).

Staff at all levels work at the front lines of the healthcare industry and are at patients' bedsides 24 hours a day, seven days a week. They operate complex medical equipment and have distinct power over the welfare of patients. They are, in fact, at the first level of decision making. Sofarelli and Brown (1998) agree that the transformational leadership style is particularly empowering to hospital staff members, putting them in a unique position of evaluating old policies and contributing toward development of new procedures.

In 2003, De Geest, Claessens, Longerich, and Schubert studied transformational leadership in magnet hospitals. Magnet status is given by the American Nurses' Credentialing Center, an affiliate of the American Nurses Association, to hospitals that satisfy a set of criteria designed to measure the strength and quality of their nursing (Center for Nursing Advocacy, 2008). The authors found that transformational leadership in these hospitals resulted in improved employee satisfaction and better quality of patient care (De Geest et al., 2003).

Transformational Leadership in Hospitals

Transformational leadership is achieved by specific actions of leaders. Leaders must take the initiative in establishing a connection with, and making a commitment to, their employees. This includes the creation of formal mechanisms that promote two-way communication and the exchange of information and ideas (Burns, 1978). Leaders must play the major role in maintaining and nurturing the relationship with their followers, not the other way around.

In hospitals, individuals in potential transformational leadership roles include board-level chairmen and directors, chief executive officers, medical officers, unit

managers, and staff nurses. Leadership by those in senior management roles is particularly essential in driving and accomplishing the breadth of organizational change needed to achieve higher levels of patient service. This includes changes in management practices, work design and flow, and even the fundamental culture of the organization.

How can staff nurses and hospital administrators become transformational leaders within their respective roles? A first step is to develop a positive frame of mind and be receptive to change. Bennis and Nanus (1985) described four ways to promote transformational leadership: (a) creating a vision, (b) building a social architecture that provides meaning for employees, (c) sustaining organizational trust, and (d) recognizing the importance of building self-esteem.

Creating a vision. Improvement of patient care and the hospital's efficiency are some realistic and practical visions toward which leaders can work. Staff likely already know what processes in the hospital can be improved. The true challenge lies in creating a vision and putting the necessary changes in motion (Bennis & Nanus, 1985).

Building a social architecture that provides meaning for employees. This suggests that transformational leaders should have the ability to influence the social and personal environment of their employees. This can be achieved through the leaders' charisma and their positive influence on the people with whom they work. For example, a CEO who is a capable and skillful communicator can encourage the development and improvement of clinical skills and motivate staff at all levels of a hospital (Bennis & Nanus, 1985).

Sustaining organizational trust. This presents a formidable challenge in the current healthcare industry. In recent years, many hospitals have restructured their

organizational hierarchy, which in some instances has resulted in low morale and resentment among staff. In such situations, a leader may face the challenge of creating organizational trust among employees. Realistically, one leader does not have the power to spearhead a quantum shift in morale throughout the whole organization. Nonetheless, using his or her appropriate networks, each hospital CEO can strengthen working relationships and employee trust within his or her immediate sphere of influence (Bennis & Nanus, 1985).

Recognizing the importance of building self-esteem. This often comes naturally to transformational leaders. They are sensitive to the strengths of each employee and are able to build strong relationships with their staffs. Positive feedback is a critical element to building self-esteem, and for this function to be effective, the feedback must be sincere and meaningful (Bennis & Nanus, 1985).

The importance of transformational leadership. Government regulations in many countries dictate that hospital staff needs to keep abreast of medical developments by attending continuing education courses. If this is extended to a proactive approach toward implementation of transformational leadership styles, the hospital executive can be sure that employees at every level within the hospital environment can be helped to become competent and efficient leaders.

Transformational leadership highlights the interpersonal relationship between leaders and their staffs and involves empowerment of the employee (Hyett, 2003). Using a cascading form of transformational leadership, everyone, from the CEO to managers, can encourage hospital personnel to offer feedback on how well specific procedures are being carried out and implemented. The interaction between leader and follower are

dynamic—both parties need to work together to ensure success. The leader provides direction while allowing for maximum participation by the employee (Laurent, 2000).

Transformational leadership provides hospital employees with the ability to take an active role within their respective spheres of jurisdiction; this leadership style promotes faith and respect between managers and their staffs, innovation in problem solving, transmission of values and ethical principles, and setting of challenging goals while communicating a vision for the future (De Geest et al., 2003).

Practicing transformational leadership in hospitals allows staff some autonomy in their decision making, training them to evaluate their decisions, which in turns enhances their leadership skills. CEOs can encourage managers to value their staffs, encourage open communication, and reward them for advancing in practice. The staff members feel comfortable in their roles and simultaneously develop their own skills through interaction with established leaders, gaining more confidence in their own ability to create change. These results can translate to excellent patient service, a high level of job satisfaction, and a low staff turnover (Faugier & Woolnough, 2002).

However, the leader should balance this delegation of power by clearly setting boundaries, goals, and accountability for team members. While transformational leadership should be seen as empowering, it is essential that staff continue to respect and trust their leader. To avoid any accusations of partiality, the leader must delegate power in a democratic fashion to avoid appearing partial toward one employee over another (Welford, 2002).

Transformational leadership far exceeds transactional leadership in the dynamic healthcare industry. Using transformational leadership methods to implement and sustain

change, results in better outcomes both for hospital staff and patients (De Geest et al., 2003). Leadership is not just the responsibility of managers and hospital chiefs; every employee should be involved.

Many hospital staff members have the ability to become transformational leaders; however, this potential must be nurtured and allowed to thrive (Mahoney, 2001). Managers and executives in healthcare facilities have a responsibility to encourage and support this growth, thus promoting an environment in which transformational leaders strive to create new visions for enhancing patient care and nursing practice.

The Use of Myers-Briggs Type Indicator in Management Evaluations and Hospitals

The Myers-Briggs Type Indicator (MBTI) is a psychometric instrument that measures preferences for certain personality traits. The MBTI is based on the behavioral work of Carl Jung (1961), who believed that there are two general orientations, called attitudes, within which an individual relates to the world. One of these attitudes is inward, toward the subjective world of the individual (introversion), and the other is outward, toward the external environment (extroversion).

Jung (1961) also believed that there are different processes, called functions of thought, which affect how an individual perceives the world and deals with information and experiences. Jung described four functions of thought: thinking, feeling, sensing, and intuiting. Thinking and feeling are considered polar opposites, as are sensing and intuiting. Jung combined the two attitudes and the four functions of thought into eight different psychological types.

Myers and McCaulley (1985) extended Jung's work and developed the MBTI to measure four bipolar scales of personality traits that are used in various combinations to

describe an individual's psychological type profile: Extrovert (E) vs. Introvert (I), Sensing (S) vs. Intuition (N), Thinking (T) vs. Feeling (F), and Judging (J) vs. Perceiving (P).

When responses to the MBTI are scored, a dominant preference for each of the bipolar scales is obtained for each individual. The preferences are combined into a four-letter acronym that corresponds to a psychological type profile (Myers & McCaulley, 1985). There are 16 different psychological type profiles that can be generated by results from the MBTI (e.g., ESTP or INFJ).

The Extrovert vs. Introvert scale measures how a person is energized. An extrovert draws his energy from his surroundings, whereas an introvert draws his energy from within himself (Lawrence, 1984).

The Sensing vs. Intuition scale measures how an individual receives information. Sensing individuals tend to be good at collecting detailed information, whereas intuitive persons are good at seeing relationships between pieces of information (Jensen, 1987).

The Thinking vs. Feeling scale refers to how a person makes a decision. A thinking individual will make decisions using logic and will study alternatives in an analytical and objective manner (Schurr & Ruble, 1986). A person using feeling will make decisions with other people in mind and tends to be more value oriented.

The fourth scale, Judging vs. Perceiving, refers to an individual's lifestyle or orientation to the world. A judging individual prefers to live in a more planned or organized lifestyle, whereas perceiving individuals are more spontaneous and flexible (Jensen, 1987). Judging individuals are more decisive, whereas perceiving individuals are more process oriented.

Certain personality types are traditionally more common in hospital environments. Clack (2002) studied a cohort of doctors graduating between 1985 and 1990, and he found that the predominant preferences among hospital doctors were INTJ—Introversion, Intuition, Thinking, and Judging.

These preferences fit in well with what potential doctors are expected to display in their applications for medical school, as academic achievement is positively related to introversion, intuition, and judging (Tharp, 1992). These preferences are also closely aligned with what healthcare personnel have traditionally been expected to display in their working lives, namely the ability to work independently (I), to assimilate and make deductions from complex information (N), to be detached and logical (T), and to be organized and decisive (J).

With the exception of introversion, the traditional management frameworks in place within most hospitals and healthcare facilities seem to reflect these preferences (Huckabay, 1980). Historically, hospital management tends to favor employees who demonstrate:

- Extroversion (E), because it values those who are able to handle multiple activities that involve working with others.
- Intuition (N), because it values new developments, management, and research, which all favor changes with a view to long-term benefits in the future.
- Thinking (T), because there is an emphasis on objectivity.
- Judging (J), because the criteria for rewards still tend to be based on results.

It is important to remember that each MBTI preference has a flipside, so it is not surprising that the prevalence of certain kinds of behaviors in hospitals has meant the

underdevelopment of other behaviors. For example, a willingness and ability to work independently may lead to reluctance to work with others and resistance to the idea of set standards and protocols for clinical care (Vittoe & Hooker, 1983). An over reliance on science and logic in hospital situations may well entail the neglect of personal aspects important to patients. People who have a strong preference for organization and schedules may have to work on developing adaptability and flexibility.

Gilligan, Watts, Welsh, and Treasure (1999) showed that in a group of surgical senior house officers, 85% were Thinking types and this proportion was higher at consultant grade. Feeling types are likely to be deterred from entering surgical specialties, not because they wouldn't enjoy or excel in the work, but because they find the culture unfavorable. Given that 60% of women are Feeling types, as opposed to 40% of men, it is no wonder that hospitals in the U.S. are suffering a vast shortage of qualified nurses (Harasym, Leong, Juschka, Lucier, & Lorscheider, 1995). This discrepancy has serious implications for the healthcare industry, and major recruitment problems will continue to mount if something is not done to make the culture more welcoming to Feeling types.

The current management system tends to reward hospital employees who participate in non-clinical activities, such as service development, research, teaching, committee work, or other high-profile endeavors. The less-favored group tends to be composed of those who are Introvert types (who prefer to focus on a small number of activities and dislike committees), Sensing types (who tend to like practical work with tangible results), Feeling types (who tend to like seeing patients), and more Perceiving types (management roles tend to favor Judging types; Houghton, 2005).

The problem with these present criteria is that it lacks any substantial reference to how a doctor or nurse relates to patients, gets along with his or her colleagues, or how happy his or her teams are—all of which are hard to measure, but arguably contribute to clinical excellence (Houghton, 2005).

The scene of the healthcare industry today is dynamically changing, and the hospital culture is under enormous pressure to move in tandem with this transition. In the past, doctors and healthcare workers were expected to make urgent decisions autonomously in the dead of night when no one else was around (Partridge, 1983). Now, doctors and nurses are encouraged to work in teams and to relinquish autonomy in favor of adherence to high clinical standards. The focus has also shifted toward paying more attention to patients' individual needs and spearheading continuous process improvements within the hospital environment.

What potential problems can this cause? Suddenly people who prefer introversion and are good at working alone may be considered bad team players, thinkers labeled as insensitive, and judgers seen as inflexible (Harasym et al., 1995). This can cause confusion and anxiety for those who are used to being valued for their strengths, and it can lead to feelings of under-appreciation and alienation.

Therefore, using the MBTI to help employees identify their preferences is an effective way to address the weaknesses of the traditional hospital culture in the face of restructuring and process changes. With knowledge of their team members' MBTI types, hospital leaders are able to help them develop positive aspects of their less-preferred behaviors, while simultaneously recognizing their strengths and allowing them to use their talents to the fullest potential in their areas of responsibility (Houghton, 2005).

This is not to say that people are unable to adapt, just that if one preference comes naturally it is unlikely that the opposite behavior will come as easily. Additionally, people are likely to pay a personal price from having to suppress or override their preferences, and as a whole, the healthcare industry is likely to pay an intangible price for failing to encourage individual and unique talents. Just as damaging as forcing one preference over another is the expectation that individuals can excel in all the preferences (Houghton, 2005).

Equipped with awareness of MBTI profiles, hospital leaders can strive for the best balance in current circumstances. They can welcome the use of clinical protocols as a way of ensuring widespread good practice while valuing innovation (Intuition) and avoiding a culture that clings to tried-and-tested methods (Sensing). Similarly, all hospital employees need to develop skills of empathy (Feeling) toward patients and each other, but this should not be at the cost of the logical analysis (Thinking) that is essential for high quality clinical decision making (Harasym et al., 1995). A failure to reward explicitly people or give recognition continues to be a leading cause for dissatisfaction among staff members, and developing a genuine interest in the needs and goals of their team members will put hospital leaders and managers in a better position to catalyze a change for the better (Houghton, 2005).

The ideal culture is one in which there is a good understanding of personal preferences at all levels of the organization, in which all types are valued for what they do best, and in which different kinds of people can work together in ways that are complementary. A diverse culture will attract a wide range of MBTI types, capitalize on all their talents, and provide a more productive working environment that involves

continuing research and development, promoting training and skills improvement among employees, and of course, delivering and managing better care for patients (Houghton, 2005).

Vocational Psychology

Transactional, transformation, and MBTI are methodologies that gain acceptance within the positive psychology movement. Traits became central to understanding better how people did things because of their competencies (Seligman & Csikszentmihalyi, 2000). This moved researchers into the study of traits and their long-term effects on leaders. Psychologists start to employ practical uses for their research. One outgrowth of traits research was to use these findings to help people build their lifelong careers. This movement has been labeled vocational psychology, which has built on trait research to develop numerous approaches to help peoples' careers during the past 40 years (Clifton & Harter, 2003).

The earliest theories posited that congruence among an individual's aptitudes, interests, needs, values, and the environment in which he or she worked would be predictive of occupational performance and satisfaction (Tyler, 2006). Known as trait-factor theory, the model proved to be widely utilized by vocational counselors in their practices and is foundational to Holland's person-environment typology (Holland, 1973, 1985; Weinrach & Srebalus, 1990). The central premise of Holland's theory postulates that vocational satisfaction, stability, and achievement are largely determined by the congruence between one's personality and the environment in which one works. There are six such types of personalities and work environments: realistic, investigative, artistic, social, enterprising, and conventional.

Stogdill (1974) reviewed research conducted between 1904 and 1970, identifying certain personality characteristics or traits considered important. The traits included strong drive for task completion, persistence in pursuit of goals, originality in problem solving, drive to exercise initiative in social situations, self-confidence, willingness to accept consequences of decisions and actions, readiness to absorb interpersonal stress, willingness to tolerate frustration and delay, ability to influence others' behaviors, and the capacity to structure social interaction situations. Stogdill concluded that these characteristics or traits were not practical measures or predictors of leadership effectiveness.

House (1977) further differentiated personality characteristics of leaders; he looked at charismatic and non-charismatic leaders. He described charismatic leaders as having characteristics such as high levels of self-confidence, dominance, and a strong conviction in the moral righteousness of his or her beliefs.

Early Behavioral Research

Bales (1958) indicated that there were two types of leadership behavior: task-oriented and relationship-oriented. Results suggested leadership behavior consisted of high levels of both these types of behavior. This finding was based on the fact that individuals who consistently demonstrated high levels of both types of behavior (in small group discussions) were typically reported as leaders by their peers.

During the 1940s and 1950s researchers at Ohio State University conducted studies that provided a clear distinction between task behaviors and interactive behaviors; two dimensions were identified: initiating structure and consideration. Initiating structure refers to the leader's efforts to clarify roles, establish goals, and accomplish tasks. On the

other hand, consideration refers to the leader's supportive relationship with subordinates (Sashkin & Burke, 1989).

Likert (1961) conducted research on the patterns of management or leadership, distinguishing between highly productive managers and low-level producing managers. The results of his work indicated that managers achieved high performance when both relationship and task were present. Likert found that groups with managers who (a) display a high degree of supportive relationships, (b) use group decision making and supervision of that group, and (c) set high performance goals, achieved higher performance than those groups with managers who focus on authority and/or are exploitive of subordinates.

Likert's (1961) work is significant because it recognizes the importance of leadership competence in elements other than direct leader-subordinate relationships, such as goal setting, establishing control processes, and reviewing performance. Likert also addressed organizational formality, performance, and quality control and inspection.

As a result of Likert's research, Blake and Mouton (1964) developed the managerial grid using the two dimensions identified in the studies: concern for people and concern for production. They identified five different types of leadership based on the intersection points on the two-dimensional grid. They are: 1,1 Improvised Management; 9,1 Authority-Obedience; 5,5 Organization Man Management; 1,9 Country Club Management; and 9,9 Team Management.

Situational Leadership

Hersey and Blanchard (1982) thought that maturity was a situational moderating variable, shown in their four-quadrant model. The quadrants represent: (a) high task/low

relationship—leaders provide specific instructions and closely supervised performance; (b) high task/high relationship—leaders explain decisions and provide opportunity to clarify; (c) high relationship/low task—leaders share ideas and facilitate in making decisions; and (d) low relationship/low task—leaders turn over responsibility for decisions and implementation.

Noted author Warren Bennis (1984) conducted research on transformational leadership. He interviewed 90 leaders (CEOs) from a variety of organizations and their subordinates. His goal was to learn what constitutes leaders as opposed to effective managers. After five years of research, Bennis identified four competencies common to all 90 leaders: management of attention, management of meaning, management of trust, and management of self. Working with a research partner, Bennis further delineated and described five behaviors of outstanding leaders: management of attention, management of communication, management of trust, management of respect, and management of risk (Bennis & Nanus, 1985). A significant component of these studies was that they bridged studying leadership to executive leadership, which prior research had neglected (Sashkin & Burke, 1989). However, when one studies most of the leadership research, it is not much of a jump to substitute the word executive or CEO for leadership.

Sternberg (1997) suggests that managerial performance requires a broader perspective of intelligence than the academic aptitude or so-called general intelligence measured by IQ tests. He proposes a three-part theory of intelligence: analytical, practical, and creative. Analytic intelligence is the ability to plan, monitor, and evaluate one's problem solving. Practical intelligence involves the ability to adapt to environments, but also to shape and select them. It is instrumental to attaining goals.

People value practical intelligence, which has been found to be uniquely important to competent performance (Sternberg, Wagner, Williams, & Horvath, 1995). Creative intelligence is the ability to see problems in new ways and to escape the bounds of conventional thinking. Sternberg (1997) believes that this type of intelligence has become more important because of the rate at which the world is changing.

To account for the phenomenon that people with high IQ's flounder and those with more modest IQ's can do surprisingly well, Goleman (1995) posits yet another type of intelligence. He suggests emotional intelligence is critical to success. Largely independent of one's general intelligence, it is composed of self-awareness, self-discipline, and empathy.

Executive Leadership and Organizational Effectiveness

The issue of how top executive leadership relates to organization effectiveness has been a neglected research topic. Hogan, Curphy, and Hogan (1994) argue that effectiveness ultimately is how leaders should be judged, further they say, ignoring effectiveness is a major deficit in leadership research. In particular, the majority of published research on leadership ignores macro-level outcomes (Meindl & Ehrlich, 1978; Sashkin & Fulmer, 1988). Since there is limited research in this, the nexus between effectiveness and leadership of the chief executive and his or her relationship to overall hospital effectiveness needs be addressed. For the purpose of this research, hospital CEOs are the focus (see Chapter One for specifics).

Further supporting the need to study executive leadership at the macro level, Hambrick and Mason (1984) suggest that the organization is a reflection of its top managers. They argue, "Organizational outcomes, both strategies and effectiveness, are

viewed as reflections of the values and cognitive bases of powerful actors in the organization" (p. 193). Sashkin and Burke (1989) make a distinction between operational and executive leadership and indicate that executive leaders create effective cultures through the Parsonian action framework. The Parsonian action framework is adaptation to the external environment, defining the goals of system and managing resources to achieve the goals, integration of actions necessary for goal attainment and maintaining a sense of stability, and pattern maintenance, which refers to the culture building that directs action (Parsons, 1951; Rocher, 1975). Sashkin and Burke give an example of high-performing organizations being sustained by values that support high performance. This may indicate a link between executive leaders and their performance as they influence the culture and all aspects of the organizational action framework.

CEOs and Leadership

Studies by Glenn (1985), Margerison (1984), and Margerison and Kakabadse (1985) centered on personal characteristics that were considered key qualities of CEOs. These included a need to achieve results, strong interpersonal skills, a willingness to take risks, and a reliance on their own judgment when making decisions.

Benton (1996) surveyed more than 100 CEOs to establish 22 vital traits needed to succeed. Many CEOs included in the survey were entrepreneurs or inheritors of family businesses. Differences between these types of CEOs and those who progressed through the corporate hierarchy were noted. In the chapter, "How Chiefs Become Chiefs," factors such as the CEO's upbringing, education, the value of mentors, and networking were discussed regarding how they contributed to the traits that made them successful (Benton,

1966). Included was a list of previous job titles that had been held by some of the CEOs as they progressed through the corporate hierarchy.

Bruce (1986) interviewed the CEOs of 11 large corporations. In his studies, he found that CEOs, almost by second nature, set the tone and direction for their firms. Although he noted that the CEOs were supported by staff, consultants, and a senior management team, they alone made the strategic decisions as to where their firms were heading in the future.

He further found that attaining the office of CEO was not in and of itself enough to assure success. CEOs had to gain acceptance and build trust and confidence among all their employees. Bruce (1986) believed that organizations led by successful CEOs take on the personality of their individual CEOs as their company culture.

Levinson (1980) created criteria for choosing a chief executive officer: they had to demonstrate competencies of intelligence, good judgment, vigorous problem solving, articulate speech, and adaptability. His study of CEOs and leadership suggested a natural transition between the use of the term leadership and CEOs within a corporate culture. Much of the traits and styles of leadership research took place in group settings or within universities because of ease of access to the subjects. This later research clearly linked earlier leadership studies with applications for CEOs' roles within their corporate culture.

Executives and Outcomes

The consensus of opinion in the literature focusing on CEOs traits is that executives are major determinants of the organizations' goal achievement, especially when it comes to CEOs who are responsible for the firms' entire operations. If operations are mishandled and poor performance results, the CEO must shoulder the responsibility.

Outcomes, stated within an organization's strategy, can be viewed as reflections of the values of the most powerful actors in the organization (Hambrick & Mason, 1984). Leadership flexibility appears to be closely related to profitability, as well as sales-growth performance. It has a positive correlation in both large and small companies (Miller & Toulouse, 1986).

Hospital Leadership Studies

Results of research in hospitals obviously are somewhat different than those in the for-profit business sector. Hospitals are unique places where patients put themselves into the hands of professionals, expecting the best care from professionals who will not be thinking about profitability. However, there is a need for hospital leaders to be alert to the hospital employee's interests as well as the patient's (Maslow, 1965).

Studying nurses and their supervisors, Nealey and Blood (1968) found a relationship between consideration scores and the job satisfaction of their subordinates at both the first- and second-line supervisory level. However, this satisfaction did not translate into better performance of subordinates or lower turnover. It did lower the subordinates' feeling of job tension, which in turn, directly affected a positive association with job performance of subordinates and turnover rate, although slight. Sheridan and Vredenburgh (1979) interviewed 372 nurses, practical nurses, and aides and saw a positive effect from head nurses' initiation of structure on their subordinates' group relationship.

In a hospital study, Jensen and Morris (1960) found that supervisors gave more value to leadership and executive ability when they did not have these traits. However, if they did posses such traits, they attached less value to them.

In 1964, Oaklander and Fleishman studied hospital administrators and found that stress was lower on their units if they endorsed both high consideration and high initiation of structure, as scored on the Leadership Opinion Questionnaire. The Leadership Opinion Questionnaire has 40 items for which the respondent indicates how frequently he thinks he should do what is described. The answers range from (a) a great deal to (e) not at all. Six of the 40 items provide an index of intra-unit stress for their study.

Sashkin and Burke (1989) used the Leadership Profile to measure transactional and transformational leadership style; they found a positive correlation between high levels of transformational leadership and hospital effectiveness. For operational effectiveness, they used measures from the Joint Commission on Accreditation of Healthcare Organizations Standards Decision Grid Summary Scores. Secondary measures of hospital effectiveness were patient satisfaction survey outcome data and operating margins. Noting that modern hospital leadership must cope with sweeping change in payment systems, cost containment, managed care, technology, delivery systems, professional relationships, and society's expectations, Sashkin and Burke foretold the pressures of the coming decade.

Day and Lord (1986) believed that the correct interpretation of success studies indicates that executive-level leaders have direct and significant effects on their organizations' performance. Because organizations are open systems and must interact with the environment, it follows that leaders can affect organizational performance. Means by which such influence would take place include influencing external forces such as healthcare regulatory agencies and competitors, acquiring necessary resources,

maintaining boundaries, and increasing quality of care. Regardless of when researchers study healthcare and regardless of who conducts the studies, it seems evident that multiple factors are at work determining the profitability of an institution.

Sawan and Blaihed in 1982 studied the relationship between leadership behavior of CEOs and the hospitals' performances. The study surveyed all general, community, and medium-sized hospitals in Los Angeles County. They utilized the revised Leadership Behavior Description Questionnaire-XII, which is a shorter version of the original Leader Behavior Description Questionnaire, which consisted of 40 statements to measure the two factors of consideration and initiation. "The revised Leader Behavior Description Questionnaire-XII has 10 items that measure the initiation of structure in terms of the actions of leaders that clearly define their own role and lets followers know what is expected of them" (Bass, 1990, p. 510).

In a more recent study of the relationship between hospital performance and CEO traits, in this case commitment, Carlson (2003) saw no relationship among or between CEO organizational commitment, organizational identification, and benchmark organizational performance. She did determine a positive relationship between CEOs tenure at the facilities and their organizational commitment.

Hartman (2004) explored the relationships among CEOs' traits, their empowering behavior, and objective and subjective measures of hospital performance. Hartman specifically used return on investment as a performance measure. In addition, she examined the relationships among CEOs' efficacies in leadership style, optimism, and leadership effectiveness. Her findings demonstrated relationships among CEOs self-ratings of empowerment and leadership efficacy, optimism, and return on investment.

Additionally it was found that direct-report ratings of CEOs empowerment were related to their ratings of CEOs' leadership effectiveness. CEOs who were classified as over-estimators were rated less effective (by their subordinates), while under-estimators were rated the most effective.

These studies suggest that there is a relationship between CEOs' traits or styles, which affects the performance of hospitals, as measured by both economic factors and quality care factors. The study presented in this paper will investigate CEOs' particular traits as related to labor usage control.

Positive Psychology

Psychology approaches were modified when some psychologists moved from the medical model of sickness only to building on peoples' best qualities of their environment (Seligman, 1998). A disproportionate emphasis had been placed by scientific psychology on repairing of an unacceptable pathology (Aspinwall & Staudinger, 2002). Focusing on these weaknesses perpetuated an assessment and treatment process that was out of balance with modern-day realities of society. There was a need, they argued, to evaluate the whole person, examining strengths as well as weakness. Positive psychologists believed that individuals are socially and morally motivated (Lopez & Snyder, 2003).

One area of growing interest in both the business world and the psychology of leadership is identifying and defining positive personality strengths. There are two schools of thought related to strengths: viewing them as talents or virtues. One school, led by Buckingham and Clifton (2001), believes that personal strengths are extensions of people's talents, something that manifests itself as naturally recurring patterns of

thoughts, feelings, or behaviors. Here a strength stems from a talent and is a near-perfect performance of an activity each and every time a person performs it. An example of a talent was in a Gallup Organization study of how the best nurses administered a needle to 100 patients. They took the excellent nurses and the less-productive nurses and had them administer the same shot to 100 different patients. The recipients of the shots experienced less pain with the excellent nurses. They found it was not the techniques of giving the shots; rather it is what the nurses said before administering the shots. The less-productive nurses stated their name and then said, "Oh, don't worry, this won't hurt a bit"; while the excellent nurses said, "This is going to hurt a little. But don't worry I'll be as gentle as I can" (Buckingham & Coffman, 1999, p. 93-94).

Although there is a lexicon of terms used by psychologists and business executives to describe weaknesses (e.g., psychosis, depression, schizophrenia), no such lexicon exist for strengths. More general terms such as 'people person' or 'team player' are used to convey significant talents among leaders. However, such terms may have entirely different meanings among business people and psychologists in describing the same person's interactions. The development of a nomenclature, or common meanings, would aid in understanding strengths.

Donald Clifton, in general, is believed to be the grandfather of positive psychology—a pioneer in the area of strengths research (Lopez, Hodges, & Harter, 2005). Clifton believes that talents can be operationalized and investigated. He led the Gallup Organization to conduct a systematic study that focused on discovering the strengths of professionals. The study used a semistructured interview to ascertain the strengths of those individuals who were the best in their respective fields to gain

information regarding what they were doing on the job (Buckingham & Clifton, 2001). From interview data, Gallup researchers created a list of 34 strengths defined as consistent and near-perfect performance on an activity. Buckingham and Clifton (2001) defined this near-perfect performance as composed of three factors:

- Talents or naturally recurring patterns of thought, feeling, or behavior;
- Knowledge, which consists of facts and lessons learned; and
- Skills, or the steps of an activity.

Two principles are embedded in strengths. First, for an activity to be a strength, there must be consistent performance of that activity. Second, the strength does not need to be present in all aspects of an individual's life for that person to excel. By maximizing strengths, individuals will become the best at their profession. To Buckingham and Clifton (2001), focusing solely on weaknesses is not anywhere near as effective as sharpening strengths.

It becomes important to distinguish natural talents from those that can be learned. Thus, professionals can build on their dominant strengths. When professionals personally reflect on their activities, they can reveal these naturally recurring dominant strengths (Buckingham & Clifton, 2001).

Clifton StrengthsFinder

Clifton StrengthsFinder was developed by the Gallup Organization under the leadership of educational psychologist Donald O. Clifton, and it has formed the basis for the positive psychology movement. Rather than focusing on mental illness, the positive psychology movement studies mental health. It is a field that emphasizes factors that

contribute to a sense of well-being, optimal human functioning, and the ability to contribute to society (Seligman & Csikszentmihalyi, 2000).

Clifton believed that each individual's talents are "naturally recurring patterns of thought, feeling, or behavior that can be productively applied" (Hodges & Clifton, 2004, p. 257). Clifton was later awarded a commendation by the American Psychological Association for his life's work and his belief in the critical importance of identifying and developing the positive attributes of individuals (McKay & Greengrass, 2003).

When Clifton first designed the interviews that later became the basis for the Clifton StrengthsFinder, he began with the simple question: "What would happen if we studied what is right with people?" (Lopez et al., 2005, p. 25). From this initial question emerged a philosophy of developing strengths as the basis for achieving excellence. This strengths philosophy is the belief that individuals are able to gain far more when they expend effort to build on their talents than when they spend a comparable amount of effort to remedy their weaknesses (Clifton & Harter, 2003).

Clifton StrengthsFinder is designed to measure the raw talents that can be developed into strengths. Its purpose is to identify signature themes of talent that can be productively applied to achieve success (Lopez et al., 2005). Clifton StrengthsFinder is grounded in more than 30 years of studying success across a wide variety of functions and based on more than 2 million interviews used to select and develop talented employees. Designed to identify talent and increase productivity and morale of employees, Clifton StrengthsFinder is currently available in 17 languages and respondents come from nearly 50 different countries.

Clifton StrengthsFinder can be administered online in 30 to 45 minutes, and it is the first assessment instrument of its kind developed expressly for the Internet. Over a secure connection, Clifton StrengthsFinder presents 177 items to the participant. Each item consists of a pair of opposite self-descriptors, such as "I read instructions carefully" versus "I like to jump right into things." The participant is asked to choose the statement that best describes him or her, and to what extent. The respondent is given 20 seconds to respond to each pair of descriptors before the system moves on to the next pair. The timed nature of the instrument intentionally taps into people's first reaction (Lopez et al., 2005).

After completing the StrengthsFinder assessment, the respondent receives the result of the assessment. Clifton StrengthsFinder measures a person's response against 34 different themes of talent that are indicative of success. It then reveals each individual's five most dominant themes, or signature themes.

Several studies have explored the relationship between participation in Clifton StrengthsFinder and increased levels of confidence. One of the first studies conducted with a sample of 212 students from the University of California-Los Angeles showed that individuals who focus on their signature themes—their areas of greatest talent—have the best opportunity to build strengths and become more successful (Crabtree, 2002; Rath, 2002).

Researchers collected surveys before and after the assessment to measure the potential impact of the Clifton StrengthsFinder on various desired outcomes. The results showed that confidence levels were significantly higher at the end of the semester

(posttest) than at the beginning (pretest), and statements from student reflection papers at the end of the semester also supported the statistical findings (Hodges & Harter, 2005).

A follow-up survey with 459 readers of *Now, Discover Your Strengths* (Buckingham & Clifton, 2001), conducted seventy-five days after completion of Clifton StrengthsFinder assessments indicated a perceived value of strengths development (Harter & Hodges, 2003). The majority of respondents reported that they were making better choices in their lives, were more productive, and had increased self-confidence as a result of learning about and focusing on their strengths (Hodges & Clifton, 2004).

The Current State of the Healthcare Industry

Gallup, the company that developed Clifton StrengthsFinder, conducted surveys on workplace attitudes collected from more than 1 million employees from the United States healthcare industry. The results show that healthcare employees are more engaged at work than their counterparts in other industries. They also demonstrate stronger emotional connections to their organizations and the people with whom they work (Blizzard, 2005).

However, the level of satisfaction among healthcare employees with the organizations they work for has declined. Only 13% of healthcare employees said they were extremely satisfied with their workplaces, compared with 22% of employees working in other industries (Blizzard, 2005).

How can healthcare organizations build their success by improving employee engagement and overall workplace satisfaction? According to Blizzard (2005), the answer lies in three of the items in Gallup's employee engagement survey on which healthcare employees gave particularly high ratings:

- At work, I have the opportunity to do what I do best every day.
- I know what is expected of me at work.
- The mission or purpose of my company makes me feel my job is important.

These three factors uniquely distinguish the healthcare sector from other industries. A hospital or healthcare facility is like a small community, and each employee—nurse, physician, administrator, and clerk—fills a niche within the community and contributes his or her talents, skills, and knowledge to its success. Job expectations tend to be particularly well-defined in healthcare organizations, and employees are more likely to feel that they are in the right role (Blizzard, 2003).

Healthcare employees also believe strongly in what they are doing and have a high level of commitment to their organizations' missions. This explains why the number of healthcare employees who strongly agree with the items *I know what is expected of me at work* and *I have the opportunity to do what I do best every day* is 10% and 11% higher, respectively, than employees in other industries. This indicates that healthcare organizations have good processes in place to hire the right people and help them effectively understand their jobs (Blizzard, 2005).

Current challenges faced by healthcare organizations. Today, many healthcare organizations have flattened their organizational structures. These expanded jurisdictions, particularly in among first-line staff, make it harder for managers to develop rapport with each individual employee. Managers usually work during the day, so employees working the early morning and/or night shifts tend to have little personal contact and interaction with their managers.

Most healthcare organizations are in the process of implementing various strategic initiatives and tactical plans to improve quality and control costs. A key challenge for administrators is integrating all these activities with a unifying goal that employees can understand and to which they can relate. If healthcare administrators want employees to support fully an initiative, they must link that initiative to the organization's mission and vision (Krueger & Killham, 2005).

Why is employee engagement so important? Studies have continually demonstrated that engagement; the degree to which employees are fully involved in and satisfied with their work drives financial performance, patient loyalty, staff turnover, and safety outcomes. Healthcare organizations cannot hope to improve on these measures unless they improve employee engagement. This involves more than just altering organizational processes; the high degree of role specificity in healthcare settings also creates a challenge for organizations seeking to improve their employees' levels of engagement (Krueger & Killham, 2005).

A deep sense of mission is a common thread among healthcare workers, and it is often the reason why most people enter the healthcare industry, which highlights the importance of focusing on mission and recognition in a field in which many employees are driven by a desire to help people. When it comes to targeting workplace improvements, healthcare organizations should look at ways to improve areas such as access to needed materials and equipment, as well as improving skills training, improving patient service quality, and preventing medical errors (Blizzard, 2005).

According to Blizzard (2003) healthcare employees can be divided into five basic categories:

- Administrative/Clerical;
- Licensed/Technical (licensed practical nurses, radiology);
- Professional (pharmacists, physical therapists);
- Registered Nurses; and
- Support (housekeeping).

Each survey participant was asked to rate his or her overall satisfaction with the hospital as a workplace. Results showed that, on average, Support personnel made up the most satisfied category, followed by Professionals and Administrative/Clerical. The least satisfied categories were Registered Nurses and Licensed/Technical (Blizzard, 2003).

The relatively high levels of satisfaction among Support and Administrative/Clerical could be a result of the competitive salary and benefits packages that healthcare organizations tend to offer, especially for lower-level positions. Among Registered Nurses and Licensed/Technical, low satisfaction levels could be a result of high turnover and staffing shortages in these areas. Radiology technologists and nurses nearly always top the list of position vacancies at most hospitals (Blizzard, 2003).

Gallup also found that while competitive salaries and benefits were often an important consideration for newer staff, the engagement of existing employees in a healthcare organization tended to be based on factors such as the relationship they have with their managers and the overall dynamic of the team with which they work. Given the shortage of workers in Registered Nurses and Licensed/Technical categories, the inevitable stress of unfilled job vacancies and friction within overworked teams could be a major factor in low levels of engagement (Blizzard, 2005).

Gallup showed that nurses gave the highest rating to the following item: *This last year, I have had opportunities at work to learn and grow* (Blizzard, 2003). While this might appear favorable, it could actually be a cause for concern for managers. Why? Overall engagement scores are generally low among nurses, and staff turnover is consistently high. This suggests that hospitals may be investing considerable resources in training nurses, only to lose them when they leave to work for a competitor.

Using Clifton StrengthsFinder to improve healthcare employee engagement. Clifton StrengthsFinder aims to identify the most prevalent human talents, which are the building blocks of a strong and productive life. Strengths are viewed as developed talents; specifically, strength is defined as a talent that is honed with the knowledge and skills that are needed to achieve excellence (Hodges & Clifton, 2004). Hospital administrators looking to use Clifton StrengthsFinder to improve employee engagement in their organization should first determine which job categories are most and least engaged with their jobs.

Gallup indicates that the biggest difference in employee engagement lies with the manager (Blizzard, 2003). Managers of the most successful nursing units not only open their doors so their employees can come to them, but also leave their offices to visit employees in their working environments. They talk to their employees and listen to what they have to say. They express interest, not only in their team members' work issues, but also in their personal lives. They don't just seek out their happy employees, but also talk to the unhappy ones and allow them to voice their concerns.

Strengths as extension of virtues. The second school of thought put forth by Peterson and Seligman (2004), describes strengths as extensions of virtues. The notion

that there is a higher meaning and purpose to life infuses such a tradition. They discuss six core virtues that have existed in both historic and cultural perspectives. Virtues are core characteristics valued by philosophical and religious leaders; these include wisdom, courage, humanity, justice, temperance, and transcendence. To Peterson and Seligman, personal strengths are how an individual displays virtues. As an example, to be seen as having the virtue of humanity, one might be described by terms such as strength of love, kindness and generosity, or social intelligence.

Justice and humanity would seem the most recurring nonreligious-based virtues. Both tend to be named explicitly and are believed to be universal (Peterson & Seligman, 2004). Temperance and wisdom follow these with transcendence in final position (although this virtue is not usually named explicitly).

Classifying positive characteristics falls into three conceptual levels. The first are universal virtues: core characteristics such as wisdom, courage, humanity, justice, temperance, and transcendence (Peterson & Seligman, 2004). The authors put forth that these are universal virtues. The second classification is character strengths, which help define virtues. The virtue of wisdom is characterized by the strengths of creativity, love of learning, open-mindedness, curiosity, and perspective. Each of these strengths embodies unique qualities, but shares the common component involving acquisition and use of knowledge. The third classification, situational themes, encompasses the habits that lead people to manifest certain strengths in certain situations. Considered neither good nor bad, they may be used to achieve people's strengths or to pursue wrong purposes. There are different themes for different situations such as work or family. All in all, virtues, strengths, and situational themes make up a person's character, as viewed

by the virtues school of thought. More details are given in the section below in this chapter.

Strength Identification Systems

Regardless of schools of thought that view personal strengths, they create benefits for people, taking a variety of forms linked to positive well-being. Research indicates that people with high levels of hope perform better in academics and athletics (Snyder & Lopez, 2002). The strength of social connectedness has been linked to lower mortality rates, increased resistance to communicable diseases, and faster recover from surgery. If CEOs can build on the strengths of not only themselves, but also those who work within their organization, they can have an even greater impact than just creating high performing organizations. Recognizing that, to achieve one's best, people must have knowledge of their strengths, and psychologists have generated classification systems.

The Value In Action, a measurement system, was developed by psychologists Peterson and Seligman (2004). Throughout three years, they developed a classification system of strengths into six general categories of virtues labeled:

- wisdom,
- courage,
- justice,
- humanity,
- temperance, and
- spirituality.

Further, Peterson and Seligman (2004) described the definitions and analyzed hundreds of prospective traits, creating 24 strengths, distributed across the six categories of virtue.

They are:

- Wisdom and Knowledge—creativity, curiosity, open-mindedness, love of learning, perspective;
- Courage—bravery, persistence, integrity, vitality;
- Humanity—love, kindness, social intelligence;
- Justice—citizenship, fairness, leadership;
- Temperance—forgiveness and mercy, humility/modesty, prudence, self-regulation; and
- Transcendence—appreciation of beauty, gratitude, hope, humor, spirituality.

Peterson and Seligman (2004) created a measurement system for these strengths, the Value In Action Inventory survey. Items were generated for a questionnaire and subject to psychometric examinations.

Reliability and validity studies were conducted for both an adult version and a youth version; unfortunately little published psychometric data are available. The Value In Action Survey of Character Strengths has been translated into 10 languages and is being used by researchers around the world, among other things, to build better communities, help young people live productive lives, and promote Positive Psychology (Peterson & Seligman, 2004). A Value In Action Institute of Values has been created to help researchers and psychologist refine surveys used in the field of Positive Psychology.

When reviewing the many questionnaires being used to measure leadership and leadership traits, most were created by researchers to gain insight into a theory they wished to prove or disprove. This researcher was drawn to StrengthsFinder, as it was developed within a business environment to understand best practices of managers.

The Principles and Benefits of Clifton StrengthsFinder's Strengths-Based Approach

The Clifton StrengthsFinder attempts to create a real-world spontaneous reaction to situations by providing participants with paired statements to which they must respond within a 20-second time limit (Buckingham & Clifton, 2001; Clifton & Anderson, 2002). There are no right or wrong answers. Participants complete an online survey in which they choose one statement from each of 177 paired questions. The Clifton StrengthsFinder then sorts the statements listing respondent's top five strengths. There are 34 themes, discussed in Chapter Three. The Clifton StrengthsFinder has proved to be both consistent and accurate as a measure of strengths (Lopez et al., 2005).

Clifton StrengthsFinder, though grounded in historical tenets and practices, is also built on modern-day educational principles (Cantwell, 2005). Strengths development involves three stages: (a) identification of talents, (b) integration of identified talents into one's self-view, and (c) behavioral change (Clifton & Harter, 2003).

In the first stage, individuals increase self-awareness by discovering positive self-knowledge. According to Buckingham and Clifton (2001), spontaneous reactions (such as naturally taking charge of a group in a tense situation), yearnings (the desire to achieve a goal), rapid learning (of a musical instrument or other skill), and satisfaction (from delivering an important speech or organizing a major event) may all serve as indicators that one is drawing on areas of talent.

The second stage of strengths development begins with individuals recognizing and psychologically owning their talents (Buckingham & Clifton, 2001). Individuals must recognize the value derived from performing activities congruent with their talents.

Finally, they should make a conscious effort to seek out opportunities to exercise their talents and share information about talents with family, friends, and fellow students or coworkers. To complete the strengths-building process, they should add relevant knowledge and skills to their talents (Buckingham & Clifton, 2001).

Clifton StrengthsFinder dynamically focuses on strengths rather than weaknesses (Seligman, Steen, Park, & Peterson, 2005). It is intended to help participants discover their natural talents and gain unique and valuable insights into how to develop such talents into strengths—strengths that equip them to succeed and to make important decisions that enable them to balance the demands of employment and personal life.

A strengths-based approach to working with employees should also include efforts to personalize the learning experience. This involves encouraging employees to set goals based on their strengths and helping them to apply their strengths in unique ways (Cantwell, 2005). Specifically, this requires that leaders and managers consider and act upon the strengths, interests, and needs of each individual employee (Seligman et al., 2005). Leaders need to encourage their team members to talk about goals within the context of their personal strengths, reconciling personal goals (of the employee) and assigned goals (by the manager or the organization).

By helping employees understand the connection between their strengths and their personal goals, and offering guidance in the application of their strengths in the most effective ways, managers can encourage feelings of competence and empowerment in their team members, providing them with choices and opportunities (Aronson, Fried, & Good, 2002). The establishment of mutual goals serves an energizing function, contributing to persistence and sparking action by leading to renewed interest, new

discoveries, and practical use of knowledge, strategies, and skills (Locke & Latham, 2002).

Another useful approach involves allowing employees to select a project or role that most closely resonates with their own particular constellation of strengths (Lopez et al., 2005). This allows them to leverage their unique strengths and gives them the opportunity to select activities that will bring out their best natural talents. Timely feedback and the development of strategies, grounded in knowledge and emphasis of strengths, can greatly enhance the pursuit of shared goals (McRae & Costa, 1987).

Clifton and Nelson (1992) recognized, "Strengths develop best in response to other human beings" (p. 73). They also believed that relationships help define who we are and who we can become—strengths establish connections between people, whereas weaknesses create division in relationships. Networking with supporters of strengths development within the organization also affirms the best in employees and provides a platform for praise and recognition for strengths-based successes (Harter & Hodges, 2003). Strengths-based education promotes the development of long-term, high quality relationships within the team and between managers and their employees (Seligman et al., 2005).

In effective strengths-based models, educators use strengths to help others achieve excellence and to move beyond an individual focus to a more team-oriented perspective (McRae & Costa, 1987). Within an organization, when leaders are mindful of their employees' strengths, they can empower their employees while strengthening the mentoring relationship (Harter & Hodges, 2003). For example, when providing feedback on a project, a leader could begin by highlighting what was done well (which strengths

were showcased) rather than what was done poorly (which weaknesses undermined performance). This fosters a learning environment in which affirming peer-to-peer feedback is a regular feature, and employees are taught to cultivate the skill of noting their colleagues' strengths in action (Aronson et al., 2002). As they discover their own strengths, they will, in turn, learn to think of their coworkers in terms of their strengths.

Leaders also need to approach strengths-based education from a developmental perspective, conceptualizing strengths not as static traits, but as dynamic qualities that can be developed throughout time (Seligman & Csikszentmihalyi, 2000). If employees are to maximize their strengths, leaders need to help them actively seek new experiences that will expose them to information, resources, or opportunities to heighten their skills and knowledge about how to mobilize their strengths most effectively (McRae & Costa, 1987).

By building strengths, individuals within a team can bring their best talents to projects while filling the gaps by sharing personal resources; thus, the strengths of others may be leveraged to manage individual weaknesses (Seligman et al., 2005). When leaders establish a culture in which employees view themselves and others through "strengths-colored glasses" (Clifton, Anderson, & Schreiner, 2006, p.73), they help to foster appreciation for differences, highlight the value of collaboration and teamwork, and establish a powerful sense of relatedness.

Conclusion

Performance-oriented leaders promote changes required to achieve objectives. They restructure, develop new skills, and reward innovation (Kirkpatrick & Locke, 1991). A few researchers have explored the difference between certain styles of

leadership and bottom-line performance (Day & Lord, 1986; Gabbert, 2005; Hartman, 2004; Sashkin & Burke, 1989; Sawan & Blaihed, 1982), but in most cases they have picked a style, and not looked at the CEOs traits or strengths.

The first reason that this researcher has chosen the StrengthsFinder is Clifton's perspective on strengths. Clifton clearly believes that strengths are innate talents. The second reason, which was mentioned earlier, as opposed to other strengths perspectives that begin with a theory, the Clifton StrengthsFinder measurement system was built on managers and why they excelled in those roles. This study aims to investigate the strengths of CEOs and their ability to excel at controlling the use of labor.

Chapter Three: Methodology

The purpose of this study is to ascertain the personal strengths of hospital CEOs and determine if there is any relationship between their personal strengths and their ability to control the use of labor at the not-for-profit hospitals they run.

This chapter presents the research questions and methodology used. The chapter starts with a brief introduction to the basic research inquiry and the research questions. It then provides a detailed description of criteria for the selection of research subjects, the instruments used, the research design, and statistical analyses.

Research Questions

The primary research questions for this study are listed below:

1. What are the individual personal strengths among hospital CEOs, as measured by the Gallup Organization instrument known as StrengthsFinder?
2. Do relationships exist between a CEO's particular strengths and his or her ability to control a hospital's use of labor?
3. Are the top-performing hospitals (as benchmarked in the top two quartiles of Solucient data in terms of lowest use of labor) led by CEOs who share at least one particular personal strength?
4. Are the lowest-performing hospitals (as benchmarked in the bottom two quartiles of Solucient data in terms of using the most labor) led by CEOs who share at least one particular strength?
5. Are there any strengths shared between the CEOs in the top-performing hospitals and the lowest-performing hospitals?

Selection of Subjects

Two hospital systems agreed to allow access to the hospital CEOs in their health systems, as well as to their Solucient database (Please see Appendix A for the agreement letter).

The first of these hospital systems is a nonprofit, faith-based Protestant system. It has 11 hospitals with total revenues of $3.45682 billion in 2007. The second is a nonprofit, faith-based Catholic system. It has four hospitals with total revenues of $644.7 million in 2007.

Church-related healthcare systems can be found in every state of the union, including Alaska and Hawaii (American Hospital Association, 2007). Thus, they can be considered a proxy for all not-for-profit hospitals within the United States. Church-related healthcare systems were chosen because they represent 18% of the total hospitals owned by systems, and they represent 33% of the total number of not-for-profit beds available in the United States, as shown in Figure 1 below.

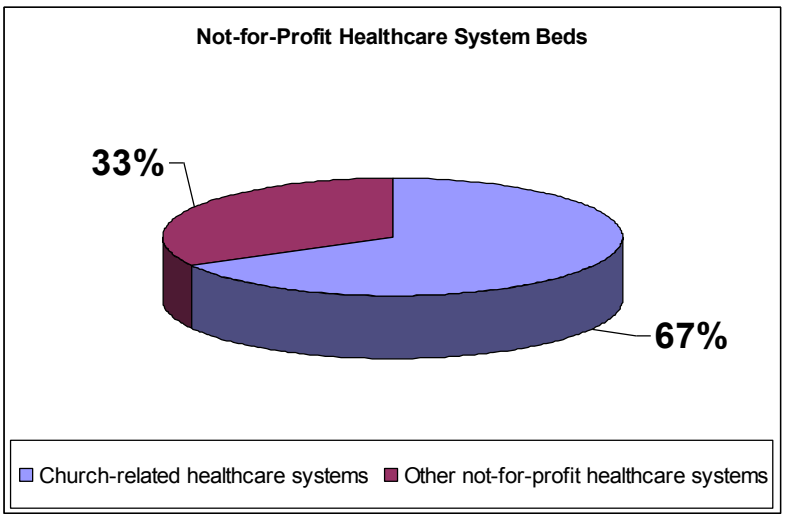

Figure 1. Percentage of Church-Related Healthcare System Beds as Related to Other Not-For-Profit Health System Beds (based on report from the American Hospital Association, 2008).

The subjects are the CEOs of each of the 15 individual hospitals within the two systems. The CEOs have either a clinical background (M.D. or R.N.) or a master's degree in hospital or business administration. Some have both. Each system's CEOs have significant tenure, with little turnover from year to year. There are both males and females in the position of CEO.

Privacy of Research Subjects

Throughout this research study, the subjects were treated in conformity with the guidelines for the protection of human subjects as prescribed by the recognized standards and the Pepperdine University Graduate School of Education and Psychology. The researcher protected each individual's rights and every subject's participation was entirely voluntary. There was minimal physical, emotional, or deception risk involved in the collection or dissemination of data. All personal information was kept confidential and was not reproduced in any form whatsoever. Information gathered was used for aggregation purposes only and no individual hospital or hospital CEO was noted or identifiable in any way in any document or presentation. To keep further their identities confidential, both hospital systems were reported only in aggregate without regard to size of institution or physical place of the institutions.

Measurement of Strengths

The strengths-based philosophy, upon which Clifton StrengthsFinder was developed, strives to label what is right in people and explores ways to empower individuals to flourish rather than simply survive (Buckingham & Clifton, 2001). The strengths-based approach is built on the belief that every individual has resources that can be mobilized toward success (Clifton et al., 2006).

Although there are several measurement tools that may be used to identify positive individual qualities, the most effective and widely used assessment today is the Clifton StrengthsFinder, an instrument developed by the Gallup Organization under the direction of educational psychologist Donald O. Clifton (Clifton & Harter, 2003). The research behind Clifton StrengthsFinder began in the 1950s when Clifton, then an educational psychologist at the University of Nebraska, became intrigued by the influence many successful teachers had on their students. This inspired his graduate dissertation and later became his life's work (Clifton et al., 2006).

Clifton believed that focusing on an individual's best qualities, instead of making a comparable investment in overcoming their weaknesses or deficiencies, is likely to lead to greater success and higher levels of engagement and productivity (Clifton & Nelson, 1992). His early research included the study of positive and negative attitudes (Clifton, Hollingsworth, & Hall, 1952) as well as the study of teacher-student characteristics (Dodge & Clifton, 1956). He recognized the critical importance of identifying and developing the positive attributes of individuals. For more than 40 years, he studied these talents in individuals and discovered that, of all the seemingly infinite talents they possessed, top performers had certain talents in common (Liesveld & Miller, 2005).

Clifton's work has dramatically altered traditional branches of psychology and created the strengths-based psychology: the study of what is right with people, not what is wrong with them (Clifton & Nelson, 1992). In 2002, Clifton was awarded a commendation by the American Psychological Association as the "father of strengths-based psychology and grandfather of positive psychology" (McKay & Greengrass, 2003, p. 124).

Clifton StrengthsFinder employs the strengths-based approach to measure strengths and other predictors of achievement (Clifton & Harter, 2003). It assesses 34 possible talent themes that are common in how high performers naturally think, feel, and behave (Liesveld & Miller, 2005). This helps organizations and their leaders to identify specific qualities in their employees, which will enable these individuals to succeed in their roles within the organization.

Clifton StrengthsFinder is an Internet-based measure consisting of 177 paired comparison items and requires between 30 and 45 minutes to complete. Available in 17 languages, the instrument has been taken by more than 4 million people worldwide (Clifton et al., 2006). After the assessment, participants are provided with personal feedback on their five most dominant clusters of talent, or signature themes. This is accompanied by descriptive statements about each signature theme, as well as numerous recommended strategies and action items to develop each talent into a strength.

The Clifton StrengthsFinder was created from more than 25 years of studying success across a wide variety of professions within both the business world and in the field of education. The item pairs were selected from a database of criterion-related validity studies, including more than 100 predictive validity studies (Rath, 2007). Almost all the Clifton StrengthsFinder themes have test-retest reliability during a six-month interval between .60 and .80. For respondents taking multiple administrations of the Clifton StrengthsFinder, the top five themes remain exactly the same 80% of the time and, four of the top five themes remain the same 95% of the time.

The Clifton StrengthsFinder has been used most extensively within the business realm. According to Buckingham and Clifton (2001), great organizations must not only

accommodate that every employee is different, they must maximize those differences. The Gallup Organization asked more than 195,000 employees working with more than 35 companies: "At work, do you have the opportunity to what you do best?" Buckingham and Clifton (2001) found that people who strongly agreed to this statement were 50% more likely to work in business with lower employee turnover and 44% more likely to work in a business unit with higher customer service scores.

Clifton StrengthsFinder: Development and talent themes. The best leaders realize that many talents and strengths are needed to achieve important and challenging organizational goals (Lopez et al., 2005). Strengths-based leaders lead with their talents and strengths, and they actively endeavor to develop the talents and strengths of people with whom they work. They orchestrate opportunities for themselves and others to use their talents to achieve the organization's shared goals.

Clifton and Nelson (1992) defined a talent as a "naturally recurring pattern of thought, feeling, and behavior that can be productively applied" (p. 14). A theme is a group of similar talents. By refining dominant talent themes with knowledge and skill, individuals embark on the process of building strengths, which is defined as the ability to provide consistent, near-perfect performance in a given activity (Clifton et al., 2006).

Clifton StrengthsFinder was developed primarily from an empirical basis, meaning that the items generated were those that were most descriptive of the highest achievers across a number of careers and environments (Lopez et al., 2005). Data from studying success in more than 2 million individuals across a wide variety of functions in education and the workplace was considered in developing Clifton StrengthsFinder (Harter & Hodges, 2003). Potential items, or talents, were initially derived from a

qualitative review and identified based on their power to predict desired positive outcomes. These descriptions initially resulted in more than 5,000 items, which were then condensed to 177 item pairs on the basis of construct and criterion validity evidence, including more than 100 predictive validity studies (Schmidt & Rader, 1999).

Many items were pilot-tested in the development phase to assess their contributions to the measurement of themes and the consistency and stability of theme scores (Clifton et al., 2006). Those with the strongest psychometric properties, including thematic correlation, were retained, thereby balancing the amount of theme information and the length of the assessment (Schmidt & Rader, 1999). This is outlined in Figure 2.

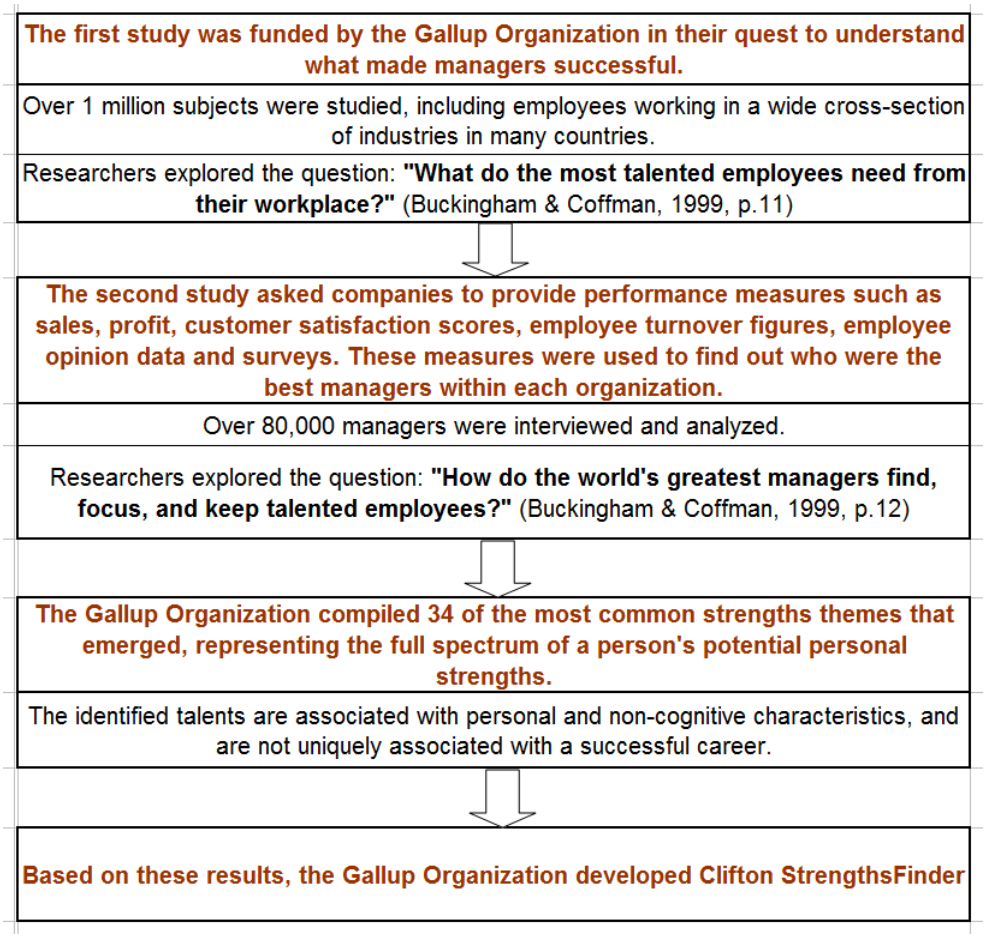

Figure 2. Process of Measurement of Strengths by Gallup Organization.

The 34 StrengthsFinder themes compiled by the Gallup Organization and developed into the framework of Clifton StrengthsFinder are listed and defined in Table 1 below.

Table 1

StrengthsFinder Themes and Definitions

The 34 Themes	Shared Theme Description
Achiever	Great deal of stamina, they work hard and take great satisfaction from being busy and productive.
Activator	Make things happen by turning thoughts into action—often impatient.
Adaptability	They go with the flow; tend to be now people who take things as they come and discover the future one day at a time.
Analytical	Search for reasons and causes—they have the ability to think about all factors affecting a situation.
Arranger	Can organize with a flexibility that complements this ability; like to figure out how all the pieces and resources can be arranged for maximum productivity.
Belief	Have certain core values that are unchanging. Out of these values emerges a defined purpose for their life.
Command	Have presence—can take control and make decisions.
Communication	Generally find it easy to put thoughts into words—good conversationalists and presenters.
Competition	Measure their progress against others. Strive to win and revel in contests.
Connectedness	Have faith in the links between all things. They believe there are few coincidences and every event has a reason.
Consistency	Keenly aware of the need to treat people the same—set up clear rules and adhere to them.
Context	Enjoy thinking about the past. Understand the present by researching its history.
Deliberative	Take serious care in making decisions or choices. Anticipate the obstacles.

(*table continues*)

The 34 Themes	Shared Theme Description
Developer	Recognize and cultivate the potential in others. Spot the signs of each improvement and derive satisfaction from them.
Discipline	Enjoy routine and structure. Their world is best described by the order they create.
Empathy	Can sense the feelings of others by imagining themselves in others' lives or others' situations.
Focus	Can take a direction, follow through, and make the corrections necessary to stay on track. They prioritize, and then act.
Futuristic	Inspired by the future and what it could be. Inspire others with their visions of the future.
Harmony	Look for consensus. Don't enjoy conflict; rather they seek areas of agreement.
Ideation	Fascinated by ideas; able to find connections between seemingly disparate phenomena.
Includer	Are accepting of others. Show awareness of those who feel left out, and make an effort to include them.
Individualization	Are intrigued by the unique qualities of each person. Have a gift for figuring out how people who are different can work together productively.
Input	Have a craving to know more; often, they like to collect and archive all kinds of information.
Intellection	Are characterized by the intellectual activity—introspective and appreciate intellectual discussions.
Learner	Great desire to learn and want continuously to improve. The process of learning, rather than the outcome, excites them.
Maximizer	They focus of strengths to stimulate personal and group excellence; seek to transform something strong into something superb.
Positivity	Have an enthusiasm that's contagious. Upbeat and can get others excited about what they're going to do.
Relator	Enjoy close relationships with others; find deep satisfaction in working hard with friends to achieve a goal.
Responsibility	Take psychological ownership of what they say they will do. Committed to stable values such as honesty and loyalty.

(*table continues*)

The 34 Themes	Shared Theme Description
Restorative	Are adept at dealing with problems. Good at figuring out what's wrong and resolving it.
Self-Assurance	Feel confident in their ability to manage their own lives; possess an inner compass that gives them confidence that their decisions are right.
Significance	Want to be very important in the eyes of others. Independent and want to be recognized.
Strategic	Create alternative ways to proceed. Faced with a scenario, they can quickly spot the relevant patterns and issues.
Woo	Love the challenge of meeting new people and winning them over.

Note. Adapted from *Clifton StrengthsFinder 2.0*, by T. Rath, 2007, New York, NY. Copyright 2007 by the Gallup Press.

Meeting scientific standards for test development is an important aspect in evaluating the use of any instrument. Such standards have been developed by the American Educational Research Association, the American Psychological Association, and the National Council on Measurement in Education (1999).

Before using any instrument, two issues should be addressed by those who are using the results. The first has to do with the reliability of the instrument and the consistency of the measurement (Lopez et al., 2005). Are the results a dependable, consistent indicator of the quality that is being measured?

Test-retest reliability assesses the extent to which participants' responses to items on each theme are stable over time (Seligman & Csikszentmihalyi, 2000). The highest possible test-retest reliability score is 1.00, which would indicate that all participants who retook a test after a period of time responded exactly the same the second time as they did in the first, despite not knowing their initial results. It is generally accepted by statisticians that a test-retest reliability estimate of .70 is evidence of acceptable stability over time (American Educational Research Association et al., 1999).

When Lopez et al. (2005) evaluated the reliability of Clifton StrengthsFinder in a recent study of 706 professional employees, almost all of them exhibited test-retest reliability after a six-month interval of between .60 and .80—a very respectable reliability result by current psychometric standards. As shown in Table 2, additionally, 23 of 34 (more than two thirds) of the Clifton StrengthsFinder themes had reliability results of greater than .70, and only three themes scored less than .65.

Table 2

Reliability of Scales of the 34 Theme Scales

StrengthsFinder Themes	Reliability Coefficient
1. Achiever	0.73
2. Activator	0.73
3. Adaptability	0.73
4. Analytical	0.76
5. Arranger	0.66
6. Belief	0.75
7. Command	0.76
8. Communication	0.75
9. Competition	0.78
10. Connectiveness	0.58
11. Consistency	0.71
12. Context	0.62
13. Deliberative	0.76
14. Developer	0.68
15. Discipline	0.73
16. Empathy	0.74
17. Focus	0.68
18. Futuristic	0.71
19. Harmony	0.70
20. Ideation	0.73
21. Includer	0.66
22. Individualization	0.69
23. Input	0.70
24. Intellection	0.76
25. Learner	0.77
26. Maximizer	0.66

(*table continues*)

StrengthsFinder Themes	Reliability Coefficient
27. Positivity	0.79
28. Relator	0.65
29. Responsibility	0.65
30. Restorative	0.55
31. Self-Assurance	0.73
32. Significance	0.77
33. Strategic	0.72
34. Woo	0.81

Note. Adapted from *The Clifton StrengthsFinder Technical Report: Development and Validation,* by C. Asplund, S. Lopez, T. Hodges, & J. K. Harter, 2005, Princeton, NJ. Copyright 2005 by The Gallup Organization.

The second evaluation standard has to do with the validity of the instrument (Lopez et al., 2005). This raises the question: Does this instrument actually measure what it claims to measure? For instruments that are not meant to predict future behavior and have no correct or incorrect answers, the type of validity that is applicable is construct validity (Schmidt & Rader, 1999). Construct validity is an indication of what the scores on an instrument mean, and whether they can be used to understand people accurately (Seligman & Csikszentmihalyi, 2000).

Schreiner (2006) documented a national study conducted in 2004 and 2005 to determine both the reliability and validity of the Clifton StrengthsFinder when used with college students. A total of 438 students from 14 colleges and universities (five community colleges and nine universities) across the United States participated in the study. Each college student completed three online instruments: the Clifton StrengthsFinder, the California Psychological Inventory (CPI-260; Gough & Bradley, 1996), and the 16PF (Cattell, 1993). The students returned eight to 12 weeks after they initially took the tests and completed the same tests a second time. Students did not

receive the results from any of the tests until the end of the study. All results were then analyzed by an independent researcher (Schreiner, 2006).

The mean test-retest reliability estimate across all 34 Clifton StrengthsFinder themes in this college student study was found to be .70, which meets scientific standards as determined by American Educational Research Association et al. (1999). The themes with the greatest stability were Discipline, Deliberative, Intellection, Positivity, and Competition, all with reliability estimates of .80 or higher (Schreiner, 2006).

Since only five top themes are provided to students, it is also important to determine the degree to which the top five themes remained the same over time (Lopez et al., 2005). Of the students in this study, 52% had at least three themes that remained among their top five themes both times (Schreiner, 2006). Another 35% retained two of their top five themes over time, 11% retained only one of their themes, and only 2% did not retain any of the same five themes from the first test to the second. A further frequency analysis indicated that in the vast majority of cases, the themes that did not remain in students' top five in the retest did remain in their top 10.

The construct validity of the Clifton StrengthsFinder was obtained in this study by correlating students' scores on each of the 34 Clifton StrengthsFinder themes with their scores on the other two instruments: the CPI-260 and the 16PF. These two instruments are among the most valid and reliable psychological measures of personality (Schmidt & Rader, 1999). Certain Clifton StrengthsFinder themes were expected to be at least moderately related to scales on these other instruments—for example, 16PF contains Holland's (1973) six vocational types (Realistic, Artistic, Investigative, Social, Conventional, and Enterprising).

The results demonstrated strong evidence of construct validity, based on the correlations between Clifton StrengthsFinder and the other two instruments used in the study. The Clifton StrengthsFinder theme of Achiever, which measures a strong need for achievement, hard work, and productivity, showed a correlation score of .47 with the Achievement scales on the CPI-260 (Schreiner, 2006). Woo, described as a characteristic of those who enjoy the challenge of meeting new people, significantly correlated with the Extraversion scale on the 16PF with a correlation score of .62. In the same manner, 137 other different predicted relationships between specific Clifton StrengthsFinder theme scores and their counterparts on the CPI-260 and 16PF were explored—a total of 128 (93.4%) of these predictions were confirmed by statistically significant correlations scores, providing strong evidence for the construct validity of the Clifton StrengthsFinder.

Another correlation study by Lopez et al. (2005) showed that the psychometric structure of Clifton StrengthsFinder scores was stable across countries, languages, age, and gender. In Gallup's 2004–2005 college student study, the most significant gender differences were in the themes of Achiever, Belief, Consistency, Developer, Discipline, Empathy, Harmony, Input, and Responsibility, where women scored higher than men, and in Ideation, where men scored significantly higher than women (Schreiner, 2006). Most of the racial differences were slight, but ethnic minorities scored higher than Caucasian students on the Significance, Harmony, and Analytical themes, while Caucasians scored higher than ethnic minority students on the Adaptability, Self-Assurance, and Strategic themes.

Academic success has also been linked to strengths development, as measured by the Clifton StrengthsFinder. A study by Williamson (2002) conducted at a private university in which students were either enrolled in an English class that served as a control group (i.e., did not participate in strengths development) or a treatment group in which the students completed the Clifton StrengthsFinder assessment and participated in two presentations on strengths theory and a one-on-one discussion of the participants' individual StrengthsFinder results with a trained strengths consultant. Students in the treatment group who participated in the Clifton StrengthsFinder development program finished the first college semester with significantly higher GPAs than the control group. Another statistically significant finding was that only two of the 32 students (6.25%) in the treatment group failed to meet minimum academic standards, compared to eight of 40 students (20%) of the control group.

Strong evidence shows that Clifton StrengthsFinder effectively measures what it claims to measure, based on its test-retest reliability and validation with two other well-respected personality instruments (Rath, 2007). As these empirical studies indicate, Clifton StrengthsFinder can have a significant impact on desired outcomes such as confidence, productivity, life choices, self-confidence, goal-directed thinking, interpersonal relations, and career success (Hodges & Clifton, 2004).

Hospital Performance Measures Database

The relationship between hospital CEOs personal strengths and the financial health of their institutions as defined by controlling the use of labor was examined in this study. The benchmark used to assess the financial health was FTEs per adjusted discharge. This measure was chosen instead of cost, as it controlled for wages paid by

hospitals in different markets or was determined by whether their staffs are unionized. FTE per adjusted discharge is the amount of labor used by the hospital on a per-case basis for each patient from the time he or she enters the institution until he or she leaves the institution. Adjusted discharge measures both inpatient and outpatient activity.

ACTION O-I. This performance measure (FTEs per adjusted discharge) was included in the software program database known as Solucient ACTION O-I. It is an Internet-based comparative business tool for operational and financial performance of hospitals (Thomson Corporation, 2007). It is the leading source of healthcare business intelligence, and its mission is to provide comprehensive, result-oriented information to aid institutions, drive business growth, manage costs, and deliver quality care.

Hospital and health system administrators use this database to compare the operational and financial performance at the system, hospital, and department levels. They then use this information to:

- Identify key areas of opportunity in cost, utilization, and productivity;
- Set fiscal and operational goals or benchmarks for improvement; and
- Establish fair and realistic budgets or financial plans (Thomson Corporation, 2007).

More than 900 U.S. hospitals participate in the ACTION O-I program reporting, analyzing data from up to 270 departments in each facility.

Research Design

Setting and sample. The researcher received permission from the executives of each of the two hospital systems to have access up to 15 hospital CEOs, which made it easier to request the CEOs of the individual hospitals to participate in the research. The

appropriate executive of each system agreed to have the researcher present the purpose and methodology of the study directly to all the hospital CEOs within their system.

The researcher presented the purpose of the study and the relevance of subject participation at a scheduled meeting with the hospital CEOs by phone or in person one-on-one. Following the presentation or phone conversation, the researcher sent a follow-up letter and packet to each potential participant (see Appendix A for letter).

The packet included:

- A copy of Clifton StrengthsFinder 2.0. Within the book was a sealed packet with a code that gave each CEO access to the Internet site and allowed him or her access to the survey;
- A large white envelope with no identification;
- A larger yellow envelope with postage and addressed to Mark Sauer and Associates, CPA;
- Instructions on mailing of the results of the Clifton StrengthsFinder;
- Instructions on obtaining the FTEs per adjusted discharge data from the system office;
- Instructions on mailing of the results of the data of both their StrengthsFinder 2.0 results and their hospitals' FTEs per adjusted discharge.

In order to protect the privacy of the individual CEOs who participated in the study, the StrengthsFinder results and the quartile reporting of their hospital standing in 2008 for FTEs per adjusted discharge were sealed in a plain white envelope provided in the packet. No demographic data were collected. Another larger prepaid FedEx envelope was provided with an address to an accounting firm used by the researcher. The envelope

was mailed to this accounting firm, which removed the FedEx envelope and forwarded only the plain white envelope so that the researcher did not even have access to the from field on the FedEx receipt, thus assuring confidentiality and privacy of the participating CEOs. In accordance with university policy, the participation by the hospital CEOs was completely voluntary and the data gathered was used only for research purposes for the dissertation.

The results of the 177 paired question survey gave each CEO his or her top five strengths (the online questionnaire is proprietary and cannot be reproduced in the thesis). This information was used to compare their strengths with the use of labor in their hospitals. It was emphasized that no one within the system office had access to the data or work papers. The work papers include the StrengthsFinder's 2.0 results, FTEs per adjusted discharge, and the excel sheets analyzing the results.

Upon successfully completing the dissertation, the researcher returned to a scheduled hospital CEO meeting to present the findings. This also gives the researcher an opportunity to thank personally everyone for participating in the research.

Each hospital provided the benchmark against similar hospitals based on size and was case-adjusted to determine if they were in the top two quartiles (least use of labor) or bottom two quartiles (most us of labor) for this measurement (FTEs per adjusted discharge). This was forwarded as per the instructions above to the researcher via the accounting firm. Using these quartiles as the measure of performance, the researcher conducted the statistical analyses described later in this chapter and reported the findings in the dissertation. This part of the study was quantitative and aimed at creating correlations and examining the strength of relationships between CEO's self-reported

strengths and the performance measures of the hospital that the CEO leads. This study did not intend to find causation or cause and effect; it only sought to determine the degree of association between CEOs strengths and the financial health of their hospital.

Statistical analyses. The data analyses consisted of the following steps. The performance measure of cost-effectiveness of the hospital of each of the 14 CEOs who participated in the study was reported in quartiles (1st and 2nd quartile representing the most cost-effective to the 3rd and 4th the least). The presence or absence of each strength among the CEOs top five strengths was obtained from the records of the CEOs who returned their top five signature themes in a confidential envelop to the researcher. The relationships between the quartile standings for the performance measures (Q1 and Q2 vs. Q3 and Q4) and presence of a strength in the top five were calculated for statistical significance using the chi-square test of significance. Statistical significance was established at the alpha level of .05, two-tailed.

Summary

Strengths-based leadership begins with understanding the nature of strengths. Each individual has talents, and their most dominant talents become their strengths, which form the greatest opportunity for achievement and excellence (Rath, 2007). The key to building these strengths is first to identify dominant talents, which are often found within the top themes in Clifton StrengthsFinder, and then further develop and refine them with knowledge and skills (Hodges & Clifton, 2004).

No single leader can be expected to fulfill every single talent theme. However, the most outstanding leaders realize that building a team with the right combination of strengths is critical to achieving important goals. They first focus their efforts on their

own talents and capitalize on whatever strengths they have in performing their leadership roles and functions, and then rely on other people who have strengths they do not have (Harter & Hodges, 2003). They build an organization of people with talents and strengths that complement their own.

Clifton StrengthsFinder strengths-based approach to leadership focuses on the strengths each individual can bring to the process of leadership (Hodges & Clifton, 2004). Its focus is on the strengths of people, providing opportunities for leaders and their employees to learn, grow, and flourish. Clifton StrengthsFinder, with its proven reliability and construct validity, can help leaders develop their own strengths as well as identify others who have the talents needed to complement their leadership functions, thus enabling the organization to bring its vision to reality.

The goal of this research design and methodology was to determine and understand the relationship between CEOs' personal strengths and their ability to control labor usage in their hospital. The StrengthsFinder has been used in many different organizational settings, including the healthcare sector. However, few studies exist in the healthcare industry that clearly relate personal strengths to the bottom-line performance. There was a knowledge gap in this context that is filled by the findings of the current study.

Chapter Four: Research Findings

This chapter includes a review of the purpose of the study and summarizes the methodology of this study, including a description of the data collection as well as the two major instruments used in the study. The five research questions that guided this study are also listed, and the results of the research are stated using the five questions as the organizer. The purpose of this study was to explore the relationship between certain personal strengths (i.e., their personality attributes) of hospital CEOs and the administrators' ability to control the labor costs of the hospitals they run.

Participants

Two hospital systems agreed to allow access to the hospital CEOs in their health systems, as well as to their Solucient database. The first of these hospital systems is a nonprofit, faith-based Protestant system. It has 11 hospitals with total revenues of $3.45682 billion in 2007. The second is a nonprofit, faith-based Catholic system. It has four hospitals with total revenues of $644.7 million in 2007. A total of 14 hospital CEOs of the 15 CEOs from these two systems completed the surveys during the period from March 11, 2010 to April 11, 2010.

Instrumentation

Two measures were employed in this study—the Clifton StrengthsFinder and the Thomson's Solucient Action O-I database. The Clifton StrengthsFinder is an online self-administered strengths measure, which participants complete by choosing one statement from each of 177 paired questions in an online questionnaire (Clifton & Anderson, 2002). The Clifton StrengthsFinder then sorts the statements listing respondent's top five strengths from a possible 34 different strengths. The Clifton StrengthsFinder has been

demonstrated to be both a consistent and accurate measure of strengths (Lopez et al., 2005). The Clifton StrengthsFinder was created from more than 25 years of studying success across a wide variety of professions within both the business world and in the field of education. The item pairs were selected from a database of criterion-related validity studies, including more than 100 predictive validity studies (Rath, 2007). Almost all the Clifton StrengthsFinder themes have test-retest reliability throughout a six-month interval between .60 and .80. For respondents taking multiple administrations of the Clifton StrengthsFinder, the top five themes remain exactly the same 80% of the time and, four of the top five themes remain the same 95% of the time.

The Thomson's Solucient Action O-I database is owned by Thomson, a leading healthcare information content company, which provides information, analysis, and related products for hospitals, integrated healthcare delivery systems, managed-care organizations, and pharmaceutical manufacturers. It is an Internet-based comparative business tool for operational and financial performance of hospitals (Thomson Corporation, 2007). It is the leading source of healthcare business intelligence, with its mission to provide comprehensive, results-oriented information to aid institutions, drive business growth, manage costs, and deliver quality care. More than 900 U.S. hospitals participate in the ACTION O-I program reporting, analyzing data from up to 270 departments in each facility. Hospital and health system administrators use this database to compare the operational and financial performance at the system, hospital, and department levels.

The performance measure (FTEs per adjusted patient discharge) was included in the software program database known as Solucient ACTION O-I. This industry standard

of labor usage was used to benchmark the 14 hospitals led by the participating CEOs in the study against other similar or like hospitals. The performance measure of cost-effectiveness of each of the hospitals was reported in quartiles (1st and 2nd quartile representing the most cost-effective to the 3rd and 4th the least).

Limitations of Study

One of the main limitations is the number of participants in this study—14 hospital CEOS in total—which is considered a small sample size given the vast number of CEOs in hospitals across America. As of 1999, 13% of all hospitals were religious (totaling 18% of all hospital beds); this amounts to 604 nonprofit hospitals out of an estimated total of 4,573 hospitals in the United States (Uttley, 2002). Of these 604 hospitals, many are a product of mergers with public, nonsectarian hospitals, and not all of these 604 hospitals are Catholic; many are Baptist, Methodist, Shriner (Masonic), or Jewish. Such small-sized trials in terms of included subjects are prone to provide over- or underestimated results (Borenstein, 1997).

Additionally, the online self-reporting nature of Clifton's StrengthsFinder could also give rise to some lack of control on the part of the researcher, such as varying amounts of control over the temporal order in which information is presented (Jenkins & Dillman, 1995), which might affect the results. The effect of these limitations will be further discussed in Chapter Five.

Data Collection and Statistical Procedures

Each of the 14 CEOs from the two hospital systems completed the Clifton StrengthsFinder 2.0 from March 11 until April 11, 2009. The CEOs provided their top five strengths to the researcher in such a way that the confidentiality of the CEOs was

protected. The hospital of each of the CEOs provided the researcher the benchmark against similar hospitals based on size and was case-adjusted to determine if they were in the top two quartiles (least use of labor) or bottom two quartiles (most use of labor) for the measurement (FTEs per adjusted patient discharge).

The presence or absence of any strength among the CEOs top five strengths was obtained from the records of the CEOs who returned their top five strengths in a confidential envelope to the researcher. The hospitals then provided the researcher the labor cost performance of the hospital as measured by the Thomson's Solucient Action O-I database.

The statistical analyses consisted of the following steps. The performance measure of cost-effectiveness of the hospitals run by the 14 CEOs who participated in the study was reported in quartiles (1st and 2nd quartile representing the most cost-effective to the 3rd and 4th the least). The presence or absence of each strength among the CEOs top five strengths was obtained from the records of the CEOs who returned their top five strengths in a confidential envelop to the researcher.

The percentage of the total of the eight CEOs from the high performing and the six CEOs from the low performing hospitals who had a strength in their top five were also calculated for each of the 34 strengths. The percent of the eight CEOs from the high performing and the six CEOs from the low performing hospitals who had a strength in their top five was also calculated for each of the 34 strengths.

The relationships between the quartile standings for the performance measures (Q1 and Q2 vs. Q3 and Q4) and presence of a strength in the top five were calculated for

statistical significance using the chi-square test of significance. Statistical significance was established at the alpha level of .05, two-tailed.

Research Questions

The primary research questions for this study are listed below:

1. What are the individual personal strengths among hospital CEOs, as measured by the Gallup Organization instrument known as StrengthsFinder?
2. Are the top-performing hospitals (as benchmarked in the top two quartiles of Solucient data in terms of lowest use of labor) led by CEOs who share at least one particular personal strength?
3. Are the lowest-performing hospitals (as benchmarked in the bottom two quartiles of Solucient data in terms of using the most labor) led by CEOs who share at least one particular strength?
4. Are there any strengths shared between the CEOs in the top-performing hospitals and the lowest-performing hospitals?
5. Do relationships exist between a CEO's particular strengths and his or her ability to control a hospital's use of labor ?

Results

Research question 1. What are the individual personal strengths among hospital CEOs, as measured by the Gallup Organization instrument known as StrengthsFinder? The number of times a CEO from the 14 hospitals had a top five strength as measured by the StrengthsFinder is presented in Column 6 of Table 3. The CEOs from the 14 hospitals taking the survey had 23 of the 34 strengths in their top five strengths. The 14 CEOs had a wide range of talents in their top five although a few strengths were more common than

others. Eleven strengths were not included in the top five profile of any of the 14 CEOs. These 11 strengths are Analytical, Belief, Command, Consistency, Context, Deliberate, Discipline, Focus, Harmony, Includer, and Significance. Seven of the 34 Strengths were included in the top five of four or more of the CEOs' profiles; the top three of these Strengths were Strategic (9 CEOs), Achiever (7 CEOs), and Relator (5 CEOs). Other common strengths were Adaptability, Learner, Ideation, and Maximizer.

Table 3

Number and Percentage of Times CEOs From High (Q1 and Q2) and Low (Q3 and Q4) Performance Hospitals Having a Strength in Their Top Five

Top 5 Strengths Strengths	Q1 & Q2 Responses	%	Q3 & Q4 Responses	%	Total	%
Strategic	5	63%	4	67%	9	64%
Achiever	6	75%	1	17%	7	50%
Relator	3	38%	4	67%	7	50%
Learner	6	75%	0	0%	6	43%
Ideation	2	25%	3	50%	5	36%
Adaptability	1	13%	3	50%	4	29%
Maximizer	1	13%	3	50%	4	29%
Activator	2	25%	1	17%	2	14%
Futuristic	2	25%	1	17%	2	14%
Responsibility	2	25%	1	17%	3	21%
Restorative	2	25%	1	17%	3	21%
Arranger	1	13%	1	17%	3	21%
Developer	1	13%	1	17%	3	21%
Connectedness	0	0%	2	33%	2	14%
Empathy	1	13%	1	17%	2	14%
Communication	1	12%	0	0%	1	7%
Competition	1	12%	0	0%	1	7%
Individualization	1	12%	0	0%	1	7%
Input	1	12%	0	0%	1	7%
Intellection	1	12%	0	0%	1	7%
Positivity	0	0%	1	17%	1	7%
Self-Assurance	0	0%	1	17%	1	7%
Woo	0	0%	1	17%	1	7%
Total CEOs	8		6		14	

Research question 2. Are the top-performing hospitals (as benchmarked in the top two quartiles of Solucient data in terms of lowest use of labor) led by CEOs who share at least one particular personal strength? As shown in Table 4, six of the eight, or 75%, of the CEOs have either Achiever and/or Learner as one of their strengths in the top five. Five or 62.5% of the CEOs have Strategic as one of their top five strengths. Three of the eight CEOs also have Relator in their top five.

Table 4

Number and Percentage of Times CEOs From High (Q1 and Q2) Performance Hospitals Having a Strength in Their Top Five

Strengths	Responses	%
Achiever	6	75%
Learner	6	75%
Strategic	5	63%
Relator	3	38%
Activator	2	25%
Futuristic	2	25%
Ideation	2	25%
Responsibility	2	25%
Restorative	2	25%
Adaptability	1	13%
Arranger	1	13%
Communication	1	13%
Competition	1	13%
Developer	1	13%
Empathy	1	13%
Individualization	1	13%
Input	1	13%
Intellection	1	13%
Maximizer	1	13%
Total of CEOs	8	

Research question 3. Are the lowest-performing hospitals (as benchmarked in the bottom two quartiles of Solucient data in terms of using the most labor) led by CEOs

who share at least one particular strength? As shown in Table 5, at least three of the six CEOs of the lower performing hospitals had included the following strengths in their top five profile: Adaptability, Ideation, Maximizer, Relator, and Strategic.

Table 5

Number and Percentage of Times CEOs From Low (Q3 and Q4) Performance Hospitals Having a Strength in Their Top Five

Strengths	Responses	%
Relator	4	67%
Strategic	4	67%
Adaptability	3	50%
Ideation	3	50%
Maximizer	3	50%
Connectedness	2	33%
Achiever	1	17%
Activator	1	17%
Arranger	1	17%
Developer	1	17%
Empathy	1	17%
Futuristic	1	17%
Positivity	1	17%
Responsibility	1	17%
Restorative	1	17%
Self-Assurance	1	17%
Woo	1	17%
Total CEOs	6	

Research question 4. Are there any strengths shared between the CEOs in the top-performing hospitals and the lowest-performing hospitals? The number of times one of the 34 strengths was included in the top five of CEOs of both the highest performing and lowest performing hospitals are shown in Table 6. Thirteen of the 34 strengths were shared between the CEOs of top performing and lowest performing hospitals. This set of 13 strengths is a subset of the 24 strengths that were included in the top five profile of

any of the 14 CEOs. There were three strengths that at least two CEOs from each of the two performing groups had included in their top five: Strategic, Relator, and Ideation. The most common strength in the top five between the two groups was Strategic; five of the CEOs from the high and four from the low performance hospitals have Strategic as one of the top five strengths. Two CEOs from the high performing hospitals and three from the low performing hospitals have Ideation as a strength in their top five, while three of the eight or 37.5% of the high performance and four of the six or 66.7% of the low performance group had Relator as one of their top five.

Table 6

Number and Percentage of CEOs From High and Low Performance Hospitals Both Having a Strength in Their Top Five

Top 5 Strengths Strengths	Q1&2 Responses	%	Q3&4 Responses	%	Total	%
Strategic	5	63%	4	67%	9	64%
Achiever	6	75%	1	17%	7	50%
Relator	3	38%	4	67%	7	50%
Ideation	2	25%	3	50%	5	36%
Adaptability	1	13%	3	50%	4	29%
Maximizer	1	13%	3	50%	4	29%
Activator	2	25%	1	17%	3	21%
Futuristic	2	25%	1	17%	3	21%
Responsibility	2	25%	1	17%	3	21%
Restorative	2	25%	1	17%	3	21%
Arranger	1	13%	1	17%	2	14%
Developer	1	13%	1	17%	1	14%
Empathy	1	12%	1	17%	1	14%
Total CEOs	8		6		14	

Research question 5. Do relationships exist between a CEO's particular strengths and his or her ability to control a hospital's use of labor? A chi square test of significance was calculated for each of the strengths, based on the occurrence of a CEO in either

group (Q1 and Q2 or Q3 and Q4) having the strength in their top five. The chi-square table of counts classified by inclusion of the specific strength in the top five and the status of the CEO classified as either being ranked in the upper- or lower-two quartiles based on the performance measure, FTE per adjusted discharge, was calculated for each of the 23 strengths for which at least one CEO from either the high or low performing group had that strength in the top five. The two strengths that are statistically different are the strengths, Achiever and Learner, and the results of these two analyses are shown in Tables 7 and 8. Since the statistical significance of the other 21 relationships between strengths and the performance measure of cost of the hospital do not meet the decision of being less than .05, they are not presented as separate analyses.

Table 7

Counts by Presence of Strengths: Achiever and Quartile of Performance Measure: FTE per Adjusted Patient Discharge

Achiever	Quartile 1 and 2	Quartile 3 and 4
Top Five	6	1
Not Top Five	2	5

Note: chi $^2 = 4.66$, $p < .05$

The statistical significance of all 34 Strengths is shown in Table 8.

Table 8

Counts by Presence of Strengths: Learner and Quartile of Performance Measure: FTE per Adjusted Patient Discharge

Learner	Quartile 1 and 2	Quartile 3 and 4
Top Five	6	0
Not Top Five	2	6

Note: chi $^2 = 7.88$, $p < .01$

The two groups of CEOs with differing records of cost performance in the hospitals they led were similar on 22 of the 34 strengths (with each of them reporting none on 11 of the strengths: Analytical, Belief, Command, Consistency, Context, Deliberative, Discipline, Focus, Harmony, Includer, Significance) as identified by the Clifton StrengthsFinder 2.0. Based on the statistical analyses using the chi-square test, the two groups of CEOs had statistically significant differences on two strengths: Learner and Achiever. As shown in Table 9, the two groups were statistically different on Achiever at the .05 level of significance, and the two groups were statistically different on Learner at the .01 level of significance.

Table 9

Statistical Significance of the Relationship Between Presence of a Strength in the Top Five and High (Q1 and Q2) and Low (Q3 and Q4) Performance Hospitals of CEOs

Strength	High	Low	Total	difference
Strategic	5	4	9	ns
Achiever	6	1	7	$p < .05$
Relator	3	4	7	ns
Learner	6	0	6	$p < .01$
Ideation	2	3	5	ns
Adaptability	1	3	4	ns
Maximizer	1	3	4	ns
Futuristic	2	1	3	ns
Responsibility	2	1	3	ns
Restorative	2	1	3	ns
Arranger	1	1	2	ns
Connectedness	0	2	2	ns
Developer	1	1	2	ns
Empathy	1	1	2	ns
Communication	1	0	1	ns
Competition	1	0	1	ns
Individualization	1	0	1	ns
Input	1	0	1	ns

(*table continues*)

Strength	High	Low	Total	difference
Intellection	1	0	1	ns
Positivity	0	1	1	ns
Self-Assurance	0	1	1	ns
Woo	0	1	1	ns
Total Of CEOs	8	6	14	

The high performing CEOs also had Strategic as one of their strengths. Five of the eight CEOs have Strategic as one of their top five, but the CEOs with the lower performance measures on cost also had this strength. In fact, four of the six or 66.7% of these CEOs had Strategic in their top five compared with the five of eight or 62.5% of the high performing CEOs having this strength. Thus, while the high performing group often had Strategic as a strength, so did the low achieving CEOs.

Chapter Five: Discussion

This chapter summarizes and discusses the results presented in the previous chapter, analyzing these findings in the light of the original purpose of the study. The researcher also discusses the limitations of this study, including the determining factor selected to indicate and quantify a successful CEO, the small study sample of CEOs, and the impact of Clifton's StrengthsFinder being a self-administered survey.

Purpose of Study

The purpose of this study was to explore the relationship between certain personal strengths (i.e., their personality attributes) of hospital CEOs and their ability to control the labor costs of the hospitals they run. Do CEOs have strengths that correlate with their success in controlling the labor costs in the hospitals they lead?

Controlling the cost of labor becomes crucial to a CEO's success, as labor accounts for one of the largest costs that a CEO can manage directly. A CEO is the ultimate person who decides who to hire and how many people to hire. Through the process of budgeting and then delegating to their vice presidents and managers the labor component of their budgets, CEOs set the tone for labor consumption.

It should be noted that the executive team also retains considerable power in decision making relating to controlling labor costs, rather than just the CEO. However, through monthly reviews of budgeted to actual costs, and through reports to boards of trustees, CEOs are constantly monitoring and adjusting the use of labor to meet volumes of patient care provided by the institution, which in turn influences the decisions made by the hospital's executive team.

Results and Conclusions Based on Data Analysis

The individual personal strengths among the CEOs as measured by the StrengthsFinder 2.0 had 23 of the 34 strengths in their top five strengths. The 14 CEOs of hospitals in this study had some strengths that were more common to their top five than others.

As a total group. More than half of all the 14 CEOs had seven of the 34 strengths in their top five. The top three common strengths were Strategic, Achiever, and Relator. Other strengths that were included in the top five of four or more of the CEOs' profiles were Adaptability, Learner, Ideation, and Maximizer.

Eleven strengths were not included in the top-five profile of any of the 14 CEOs. These 11 strengths are Analytical, Belief, Command, Consistency, Context, Deliberate, Discipline, Focus, Harmony, Includer, and Significance.

Nine of the 14 CEOs had Strategic as a strength in their top five. They can be characterized as having a way of thinking that helps them sort through quickly what is important to achieve, and selecting the most effective path to meet their goal after considering a number of alternative paths and possible solutions to the potential barriers to meeting the intended destination or goal (Rath, 2007).

Seven of the 14 CEOs had Achiever in their top five. The CEOs with the strength of Achiever like to be busy, working tirelessly to achieve their goals, and desire high productivity through their engagement. They have a strong and constant desire to excel and achieve at a high level. They must accomplish something every day in order to feel satisfied and good about themselves. Their desire to achieve provides considerable

motivation, since to them their achievements are not necessarily the end, but rather an interest in continuously meeting challenges to achieve something (Rath, 2007).

With five of 14 CEOs having Relator as one of their top five strengths, this group of CEOs as a whole are interested and motivated by being around others, building close relationships with friends and colleagues. They are comfortable in intimately knowing others and wish to share their views and feelings with others. They prefer to be in relationships with others rather than be at a distance from them (Rath, 2007).

Highest performing hospitals. For the purposes of this study, eight of the 14 CEOs were determined to be in the top two quartiles of the cost performance measure and thus judged to be using labor in the most effective manner. Six of the eight, or 75%, of the CEOs have either Achiever and Learner as one of their strengths in the top five, making these two the top strengths of the CEOs in the highest performing hospitals. Five or 62.5% of these top-performing CEOs have Strategic as one of their top five strengths, while three of the eight CEOs also have Relator in their top five. This concentration of these three strengths (Achiever, Learner, Strategic) in the top five provides a portrayal of this group that can be described as productive, active, and interested in improving its members' performance.

As Achievers, they have a great deal of stamina, and they work hard and take great satisfaction from being busy and productive. They have a strong and constant desire to excel and achieve at a high level. They desire to accomplish something every day in order to feel satisfied and good about themselves.

As Learners, they also have a greater desire to learn and to improve themselves to be even more effective and productive. They love to learn and develop their

competencies and skills. They want to become better and better at what they do and enjoy the challenge of learning and growing.

They are also Strategic in the way they carry out their responsibilities as leaders. CEOs with Strategic as a strength adopt an important way of thinking through a strategy, in which they sort quickly through what is important to achieve and select the most effective path to meet the goal after considering a number of alternative paths and possible solutions to the barriers to meeting the intended destination or goal (Rath, 2007). The strength of Relator also indicates that some of these leaders have a strong interest and desire to have strong relationships with others, like to be with others, and get pleasure from being with close friends and colleagues.

Given the themes of these top Strengths, the higher performing CEOs, as measured by labor cost performance, more often considered themselves hardworking, like to be busy, work tirelessly to achieve their goals, and desire high productivity through their engagement. Thus, they may have a restlessness in their leadership style, always striving to achieve and be productive.

Lowest performing hospitals. For the purposes of this study, six of the 14 CEOs were determined to be in the bottom two quartiles of the cost performance measure and thus judged to be using their labor resources in the least effective manner. At least three of the six CEOs of the lowest performing hospitals (using the most labor) shared these strengths in their top-five profile: the top two are Relator and Strategic (four CEOs), followed by Adaptability, Ideation, and Maximizer (three CEOs). As a group, they enjoy close relationships with others and find satisfaction in working hard with friends to achieve a goal (Relator). The Strategic strength helps them to create alternative ways to

proceed; when faced with a scenario, they can quickly spot the relevant patterns and issues to deal with the situation.

They can also be portrayed as being quite flexible; adaptable; living in the present, as opposed to being futurist in their thinking and planning; and can handle disruptive and unexpected events with a calmness (Adaptability). They are fascinated by ideas and the connections between different ideas and points of view. They seek out connections (Ideation). They also have an interest in achieving excellence, using their own gifts and talents in doing so, but also in helping and guiding others with whom they work also to achieve excellence. Thus they desire to use positively their strengths in assisting others use their strengths to get the most of the talents of those involved (Maximizer).

It is interesting to note that, when compared with the CEOs in the high performing hospitals as measured by the use of labor, these CEOs are more heterogeneous in their profile of strengths; that is, they do not have as concentrated a group of strengths as the CEOs from the higher-performing hospitals. At least 50% of the CEOs from the low-performing hospitals share five strengths, whereas the high-performing CEOs have only three strengths that are common to 50% or more.

Common strengths between high and low performers. The two groups of CEOs with differing records of cost performance in the hospitals they lead were similar on 13 of the 34 Strengths, as identified by the Clifton StrengthsFinder 2.0. A relationship of statistical significance was found in the CEOs of the higher performing hospitals who possessed the Strength of Achiever ($p < .05$), and Learner ($p < .01$). The high-performing and low-performing CEOs also shared the strength of Strategic. There were three

strengths that at least two CEOs from each of the two performing groups included in their top-five profile. They were Strategic, Relator, and Ideation.

The most common strength between the two groups was Strategic; in fact, four of the six (low performers) and five of the eight (high performers) shared this strength, Thus, while the high-performing group often had Strategic as a strength, so did the low achieving CEOs. Therefore, this strength is a common one among these CEOs, but is not a distinguishing theme between the two groups.

Two CEOs from the high-performing hospitals and three from the low-performing hospitals also have Ideation as a strength in their top five. With this strength, they tend to be fascinated by ideas and like to make connections between the different ideas and points of view.

Three of the eight or 37.5% of the high-performance group and four of the six or 66.7% of the low-performance group had Relator as one of their top five. CEOs who have Relator as a strength enjoy having close friends and colleagues. They are comfortable in forming deep relationships with others and desire to learn about the goals and aspirations of others and share their own perspectives. They prefer to be around other people than being aloof and distant from others. In sum, the CEOs from both groups can be described as being motivated by ideas, like to be engaged in strategic problem solving, and desire to form strong relationships with others (Rath, 2007). Based on the statistical analyses using the chi-square test, the two groups of CEOs had statistically significant difference on two strengths: Learner and Achiever.

Interestingly, while Learner was a top strength of highest performing CEOs (six out of eight), it did not appear as a top-five strength in any of the lowest performing

CEOs. This could show that the desire to learn is very motivating in achieving high performance, since CEOs with this strength do not view their achievements as an end, but rather a means to continuously enrich themselves with knowledge to meet new challenges and achieve something greater. A CEO whose signature theme is Learning will always be drawn to the process of learning, highly energized by the entire process of gaining knowledge—the challenge of learning something new, the early efforts to practice what has been learned, and the growing confidence of being a skilled expert.

Such CEOs will thrive in dynamic work environments where they are expected to learn a lot about a new subject in a short period of time before moving on to the next topic. The Learner theme does not necessarily mean that these individuals seek to become the subject matter expert, or that they are striving for the respect or prestige that accompanies a professional or academic credential. To a Learner, the outcome of the learning is less significant than the journey, the process of getting there.

Conversely, Connectedness was a strength in two of six of the lowest performing CEOs, but did not appear as a strength in any of the top-performing CEOs. Someone who has the strength of Connectedness may be strongly against harming others, are often deeply religious, and have the ability to demonstrate great empathy. While this is noble, perhaps when viewed in the context of hospital leadership, this strength is not a defining trait of a competent leader.

Limitations of Study

Control of labor. The ability to control labor was chosen as an indicator of successful leadership in a hospital CEO, as literature has shown that many positive indicators of good leadership are invariably linked with labor control. A recent survey of

senior partners from 40 venture capital firms identifies three distinct attributes of successful chief executives (Weisman, 2005):

1. Building an effective business model. This requires a leader who can align a technology with a market opportunity and crystallize an idea employees and financial backers can buy into.
2. Turning a business model into a business, focusing on operational efficiency, and setting priorities against a backdrop of limited money and time.
3. Hiring managers, building a team, and focusing on expanding the footprint of a business while handing over day-to-day functions to other managers.

All of these three indicators relate either directly or indirectly to labor control. As such, it was determined that a focus of operational efficiency and effective use of funds are indicators that can be measured with reasonable accuracy in the hospital context by FTEs per adjusted patient discharge.

However, it should be noted that the ability to control labor is not the only factor that indicates or characterizes a good hospital CEO, nor can FTEs per adjusted patient discharge be a precise measure of labor control skill. There may be other underlying factors that influence control of labor that are not reflected in the FTE per adjusted patient discharge figures. Additionally, the basis of deriving this measure of a hospital's performance during a specific time period relies on information from that domain, the accuracy of which cannot be entirely and completely verified by this researcher (Zaslavsky, 2001).

Small sample size. Sample-size determination is often an important step in planning a statistical study. The study must be of adequate size relative to the goals of the

study. It must be large enough that an effect of such magnitude as to be of scientific significance will also be statistically significant (Lenth, 2001).

One intrinsic shortcoming of small sample sizes is called Small Study Effect: that small-sized trials in terms of included subjects are prone to provide over- or underestimated results (Borenstein, 1997). It was noticed that, when compared to larger studies, smaller ones give a higher variability of estimates when the number of observations is low. This may provide pseudorandom fluctuations of these parameters and a biased estimation of the real effect (Richy, Ethgenri, Bruyere, Deceulaer, & Reginster, 2004).

In the case of this study, the number of CEOs who participated is small, and a single person difference could significantly alter the results and subsequent analysis. Hence, the restricted sample size can lead to a potential over- or underestimation of the effect size that cannot be detected even in peer reviewing processes (Richy et al., 2004). Additionally, it has been found that whenever a measure is based on a sample from a larger population, random variation is introduced by sample; by chance, a larger- or smaller-than-average rate of successful outcomes will appear in the sample than in the population (Zaslavsky, 2001).

As Boen and Zahn (1982) point out, there are prejudices about what sample size is right. Often, a study has a limited budget, and that in turn determines the sample size. Another common situation is that a researcher may have established some convention regarding how much data is enough.

An alternative to increasing sample sizes might be to broaden the scope of the study (broader demographics of subjects or variables), which may make the results more

widely applicable (Lenth, 2001). Zaslavsky (2001) also suggests that when small or unequal sample sizes complicate reporting, precision might be improved using indirect estimation techniques that incorporate auxiliary information, which can help to summarize the strength of evidence in studies with small samples.

Statistical inference, and its sub-discipline of sampling theory, is an essential part of quantitative research. Statistical inference is concerned with the problem of drawing conclusions about a population on the basis of measurements or observations made on a sample of individuals from the population (Everitt, 1998). Bock and Sergeant (2002) posit that when small sample sizes are being employed—for instance, when each subpopulation of interest has fewer than 30 respondents—researchers should be very careful to ensure that any inferences are appropriate given the data collection, unless a small sample represents a high proportion of the population, in which case such concerns are less relevant.

Researchers have long been mindful of the role of sample size when presenting the results of research. Even when quantitative studies have sample sizes in the thousands, it is commonplace to indicate where there is limited confidence in the results; when the sample size for a subgroup of interest is small—typically less than 30, 50 or 100, depending upon the researcher—it is common practice to present it with appropriate caveats (Bock & Sergeant, 2002).

Problems Relating to Self-Administered Surveys

Especially when human subjects are involved, there are a number of intangible factors that can affect the results, which might or might not have a correlation with the variable or outcome being studied. One limitation in this study is that Clifton

StrengthsFinder, the primary research tool, is a self-administered survey. Wright and Barnard (1978) write that the problems of completing self-administered questionnaires fall into two classes: problems with the language used and problems arising from the way information is arranged spatially. Respondents extract meanings and cues from the spatial arrangement of information, and it can even include other important visual phenomena, such as colors and brightness.

In a self-administered survey, respondents must first perceive the information before they can comprehend it. Respondents are often given introductory material and instructions. Also, they must comprehend directions that are meant to guide them through the questionnaire. Jenkins and Dillman (1995) further elaborate that once respondents perceive the information, they must comprehend the layout (the visual aspect) of the information as well as the wording (the verbal aspect). In an interviewer-administered questionnaire, the interviewer plays a critical role in the perceptual process. In contrast, the entire onus of perception is on the respondent in a self-administered format, in which he or she is free to start anywhere and to make his or her own decisions as to which parts of the questionnaire to examine in what order.

From the researcher's perspective, this self-administered method is detrimental, for it gives the researcher very little control over the perceptual process. To maintain the integrity of the survey, it would be best if respondents started at a specified point at the beginning of the questionnaire, read prescribed words in the order intended, provided answers to each question, and moved sequentially through the questionnaire (Jenkins & Dillman, 1995).

However, in practice, there is some evidence to suggest that the effect of self-administration is minimal. A study by Kaplana, Siebera, and Ganiatsa (1997) sought to compare the self-administered Quality of Well-Being Scale with the established interviewer-administered form. Quality of Well-Being Scale is a general measure of health-related quality of life that has been used in a wide variety of populations and clinical studies, and thus serves as a good comparison to Clifton StrengthsFinder, which is a similar psychometric tool. Additionally, the respondents were 218 English speaking adults who worked in primary care clinics.

According to Kaplana et al. (1997), these respondents were randomly assigned to complete either the interviewer-administered or self-administered Quality of Well-Being Scale. Data from the study demonstrated that the self-administered Quality of Well-Being Scale yielded scores equivalent to the interviewer-administered form. Further, Quality of Well-Being Scale scores remained stable throughout the course of a one month interval. The results suggest that self-administered tests may produce data comparable to the more difficult and expensive interviewer-administered version.

As to whether the computer-based administration of Clifton's StrengthsFinder has any effect on its result, a study by Knapp and Kirk (2003) suggests that for the sample populations of 352 undergraduates randomly assigned to respond anonymously to a survey, Internet and touch-tone telephone systems achieve the same results as traditional pencil and paper surveys.

Given the above findings, it appears that the motivational aspect of responding to self-administered surveys is a key factor that can positively or negatively influence the respondents' desire to read the questions and formulate and express appropriate and well-

formed answers. Motivational considerations influence whether respondents begin the process of filling out the questionnaire and how they do so (Jenkins & Dillman, 1995).

Dillman (1978) and Goyder (1988) further theorize that from a social exchange perspective, people are more likely to complete a self-administered questionnaire if they expect that the costs to them of completing it are less than the expected rewards to them or groups with which they identify. When a topic is of high personal relevance, subjects will proceed with an in-depth review of the material.

The recommendations for increasing efficacy of self-administered surveys includes explanations of the study's usefulness to the respondent or groups with which the respondent is likely to identify, including questions that are likely to be salient or of interest to the recipient, and laying out the questionnaire in a format that is easy and encourages the respondent to get a sense of progress from being able to proceed quickly through it (Jenkins & Dillman, 1995).

In line with these suggestions, upon successfully completing the dissertation, the researcher returned to a scheduled hospital CEO meeting to present the findings. This also gave the researcher an opportunity to thank personally everyone for participating in the research.

Another oblique but interesting influence on a subject's response to a survey is the way he or she feels on the day, or specifically just prior, to taking the self-administered questionnaire. Most affective-cognition theories assume that affective influences on thinking are subconscious (Fiedler, 2001; Forgas, 2002), and studies show that people have little direct conscious awareness of their mental state of mind at any given time (Nisbett & Wilson, 1977). This is augmented by the theory put forth by

Martin, Ward, Achee, and Wyer (1993), stating that one's mood is a significant input, and implying that decisions and choices made by a person may often be based on high-level inferences informed by mood.

To shed some light on the consequences of moods, and also the processing mechanisms that mediate moods, Forgas, Laham, and Vargas (2005) conducted three experiments to explore the influence of transient mood states on the accuracy of responses to specific questions (in this case, questions regarding eyewitness accounts). Videotapes were used to induce happy, neutral, or sad moods in subjects. The use of video films to manipulate moods has been extensively tried and tested both in laboratory and field research, and has been found to produce salient and enduring moods (Forgas, 2002; Forgas & Moylan, 1987).

All three experiments showed evidence that transient moods do have a marked effect on one's ability to answer specific questions regarding observed situations. Interestingly, Forgas et al. (2005) found that positive mood increased and negative mood decreased the subject's tendency to incorporate misleading details into his or her responses. Paradoxically, happy mood reduced accuracy yet increased confidence in one's answers, suggesting that people had little conscious awareness of their cognitive processes (Nisbett & Wilson, 1977), and were unaware of the effect of their mood states on their thinking and responses (Berkowitz, Jaffee, Jo, & Troccoli, 2000).

This demonstrates the potential and unavoidable affect a positive or negative mood, present in the subjects on the day of their self-administered Clifton's StrengthsFinder test, could have on their responses, an element that is beyond this researcher's control.

Other Findings of Interest

Implications based on findings. This study's findings suggest that the StrengthsFinder instrument may have a role greater than its current use as leadership self-analysis and/or coaching. It may help organizations pick CEOs who have a particular strength or strengths to improve effectively the results of the organization.

The two strengths—Achiever and Learner—can be considered as possible valid predictors of the leadership success of a CEO in a hospital, if the criterion of a successful CEO is the leader's ability to control labor in the hospitals that he or she operates. Being Strategic is an important strength since having it may be necessary for being a CEO of a hospital such as the ones included in this study, but having the strength of Strategic may not differentiate between the more and least successful leaders in hospitals where cost is an important factor in being a successful leader.

This leads into another issue: how hospitals, for-profit or not-for-profit, still have to manage costs to stay alive. For-profit and not-for-profit hospitals compete for patients, revenues, and profit margins and leaders of the nonprofit sector argue that for-profit hospitals enjoy the advantage of easy access to cheaper equity capital and, moreover, are not burdened with the presumption that they owe society uncompensated community benefits (Reinhardt, 2000). Leaders of the for-profit sector counter that nonprofit hospitals benefit from a variety of tax preferences and, moreover, need not pay any monetary returns to anyone for the equity capital made available to them.

This brings to light the general belief that religious nonprofit hospitals are more charitable than the secular, nonreligious ones. Every hospital writes off a certain percentage of medical revenue as charitable care, and Uttley (2002) argues that the

religious hospitals aren't the most charitable of hospitals. For-profit hospitals provided, on average, only 0.8% of their gross patient revenue as charity care; religious hospitals came in with 1.9%. On the other hand, the secular nonprofit hospitals had 2% and the secular public hospitals provided 5.1%.

Uttley (2002) also puts for that, despite the religious label, these religious hospitals are more public than public hospitals. Religious hospitals get 36% of all their revenue from Medicare; public hospitals get only 27%. In addition to that 36% of public funding, they get 12% of their funding from Medicaid. Of the remaining 44% of funding, 31% comes from county appropriations, 30% comes from investments, and only 5% comes from charitable contributions that are not necessarily religious.

However, this research only focused on two religious not-for-profit hospitals, and only examined one aspect of a CEO's skill: controlling labor costs. This research found that out of 34, there were at least 13 strengths shared by all not-for-profit CEOs. Further, two strengths, Achiever and Learner, were statistically significant in their ability to control labor at their non-profit hospitals.

The most effective leaders, Gallup researchers discovered, are the ones who are able to put whatever skills and strengths they have to the best use (Rath & Conchie, 2008). It did not matter what their strengths were in terms of the different StrengthsFinder themes; what was most important was that the leaders understood the strengths they had and were able to leverage those strengths to help them to be effective in their roles (Robison, 2009).

It may be that other strengths such as Relator may help a hospital in the recruitment and retention of medical staff or community relations. Hospital missions

often are much greater than that of a bottom-line orientation. A hospital employee with the Connectedness theme is well-suited to the healthcare environment because of his or her humanity and deep feelings for people; on the other hand, he or she can be emotional, lacking the objectiveness and rational thinking often required on the job. Employees who possess the Intellection theme can make fine nursing educators who have no problem conversing with others in their field about ideas, theories, and the latest concepts.

Someone whose signature theme is Self-Assurance will be able to take risks, to meet new challenges, to stake claims, and, most important, be able to deliver. He will have confidence not only in his abilities, but in his judgment. Unlike many, he is not easily swayed by someone else's arguments, no matter how persuasive they may be. His assertiveness may be quiet or loud, depending on his other themes, but it is solid and strong. He will be open to guidance and suggestions from others, but no one can tell him what to think; he alone will form conclusions, make decisions, and act.

While self-assurance can make this individual a capable leader—he possesses confidence and the ability to take decisive action and deliver results. However, his strong mentality might cause problems when working in a team or a supporting role. If his suggestions are repeatedly vetoed or ignored, he may feel dissatisfied and underappreciated. The potential negative effect of certain strengths can be further studied in greater detail.

If particular personal strengths do relate to a CEO's ability to control labor costs, hospitals and hospital systems may be able to use such information to recruit and promote individuals with those characteristics; it is perhaps one strategy to run healthcare institutions more cost-effectively.

This is significant, and this researcher will continue to explore the various strengths of not-for-profit CEOs to see if other strengths relate to other activities undertaken by hospital CEOs such as marketing, market share, physician recruitment and retention, and quality. A firm named the Collaborative for Leadership Excellence, LLC (http://www.clellc.com) has been formed to continue this research and coach hospital CEOs to create cultures of clinical excellence.

This dissertation will also be the centerpiece of a written article to be published within the American College of Healthcare Executives publication as well as presented at its annual meeting. It will also be used for presentations to the Governance Institute and national speaking engagements.

This research may lead to aiding boards of hospitals and CEOs of health systems to plan better for succession of their CEOs to select those who can help control cost. It could also help in the recruitment of a new CEO if a hospital is in financial jeopardy. If a relationship exists, this study could create further studies into relationships among CEOs' strengths and their ability to build market share, control supply cost, and improve quality of care delivery. The possibilities could be endless.

Another spin-off could be the ability to use this research to coach CEOs and their teams to use their strengths to improve their organizations' performance. It may be that the strengths of others on the team have as much to do as the CEO in controlling labor costs. Thus, further research could be undertaken to look at the entire executive teams' strengths and the performance of the hospital overall and their division in particular.

Beside boards and system executives, this study could help recruiters zero in on the right candidate if the hospital is facing financial jeopardy. It could also aid them in

understanding how to round out the team if they are recruiting a position other than the CEO.

This research could aid CEOs, once they understand their own strengths, to recruit and retain on their executive team, complementary strengths to create high-performance hospitals. They could unleash unknown talent that was once unrecognized because of human resource systems that had the executive teams trying to correct their weaknesses.

By building strengths, individuals within a team can bring their best talents to projects while filling the gaps by sharing personal resources; thus, the strengths of others may be leveraged to manage individual weaknesses. When leaders establish a culture in which employees view themselves and others from a strengths-based perspective, they help to foster appreciation for differences, highlight the value of collaboration and teamwork, and establish a powerful sense of relatedness.

Recommendations for further research. Good managers care about their employees' welfare and goals, and this is where Clifton StrengthsFinder can be a powerful tool to identify an employee's strengths and potential weaknesses, and allow the manager to decide what role would best suit this individual. The results of this study of Clifton StrengthsFinder can help hospital administrators and team managers identify specific leadership personality types and characteristics in their employees. This will enable leaders to take steps to prevent losing talented staff members because their signature themes, or areas of greatest talent, are not being fully realized in their current roles of responsibility.

It is no surprise that employee engagement and satisfaction continues to be a problem in the healthcare industry. Although employees are positive about what they do,

they often feel dissatisfied with those for whom they do it. Many healthcare employees are on a continual quest to find a better environment in which to carry out their personal calling. To manage this effectively, healthcare organizations need to go back to the basics and reconnect with the minds and hearts of their employees.

The findings of this research suggest that further research into the use of Clifton StrengthsFinder as a predictor of CEOs success on an organization's outcomes merits further study. With little known about the personality and management strengths of hospital CEOs and how those strengths relate to their ability to control labor costs, this study's results can provide a baseline for continued research on hospital CEO strengths. The results of the study may begin to build a method of examining hospital CEOs' strengths and determining how, if at all, those strengths can control labor costs in these times of fiscal uncertainty.

Leaders who are strongly self-aware and realistic about their own talents and strengths are the most likely to pick a team that helps shore up their weaknesses (Robison, 2009). A strong strategist, for example, will recognize the importance of having a relationship builder on board. This ability to build a well-rounded team is the mark of a successful leader, no matter which particular talents or strengths he or she possesses.

The findings of the study presented in this dissertation could also be supplemented by further research into labor control abilities of leadership teams and CEOs in other hospital environments, such as a comparison of strengths of CEOs in for-profit versus nonprofit hospitals. This dissertation concentrated on two specific hospital systems: both nonprofit, with religious missions. Bisaha and Blizzard (2005) have

already found that employee engagement, as a very close indicator of labor control efficiency, was higher at religious hospitals compared to their nonsectarian counterparts.

A common criticism of for-profit hospitals has been that they focus on operating efficiency at the expense of quality of care, as compared to nonprofit hospitals, which usually promote social awareness, assistance of the less privileged, and other community-driven initiatives. As such, would there be a similar difference in ability to control labor and engage employees in a profit-driven setting? Would CEOs in for-profit hospitals with successful labor control demonstrate certain strengths above their less successful counterparts? Further studies could embellish the findings of this dissertation by shedding light on these questions.

Given the inclusion of CEOs in this study, it may provide a basis for a new branch of research into executive teams. Comparing their leadership to effectiveness in organizational performance may reveal different results than those found in the current research into leadership, which seldom have CEOs included in the research.

Conclusion

The 14 CEOs of hospitals in this study had some strengths that were more common to their top five than others. As a total group, more than half of the 14 CEOs had these strengths in their top five: Achiever, Relator, and Strategic, with nine of the 14 or 64.2 % having Strategic as a strength in their top five. The group as a whole can be described as being motivated by ideas, preferring to be engaged in strategic problem-solving, and desiring to form strong relationships with others (Rath, 2007). Moreover, CEOs in the two groups, based on a measure of cost performance of the hospital, did not have the same profile of strengths in their top five. Based on the results of this study,

CEOs in the higher performing group have significantly more strengths of Learner and Achiever than do the CEOs of the low-performance group. Given the themes of these two strengths, the higher performing CEOs, as measured by cost performance, see themselves as hard working and working tirelessly to achieve high productivity through their engagement. They have a constant need to excel and achieve at a high level. Thus, they may be restless and demanding of others, always striving to achieve and be productive. They also have a greater desire to learn and to improve themselves to be even more effective and productive. They constantly want to develop their competencies and skills. They want to become better in all they do. Taken these two strengths together, these reflect and point to a strong motivation to grow, improve, be effective, and work hard to achieve the goals they have set for themselves. They view achieving and improving as satisfying, rewarding, and motivating.

These two strengths can be considered as possible valid predictors of the leadership success of a CEO in a hospital, if the criterion of a successful CEO is the leader's ability to control labor in the hospitals that they operate. Being Strategic is an important strength since having it may be necessary for being a CEO of a hospital such as the ones included in this study, but having the strength of Strategic may not differentiate between the more and least successful leaders in hospital where cost is an important factor in being a successful leader.

Strengths development begins with individuals recognizing and psychologically owning their talents. Clifton StrengthsFinder provides an effective and dynamic way of improving mission-directed thinking, employee satisfaction, self-confidence, and strengths development in healthcare organizations. Employees should make a conscious

effort to seek out opportunities to exercise and share information about their talents with their managers and coworkers. To complete the strengths-building process, they should add relevant knowledge and skills to the talents.

This study's findings suggest that the Clifton StrengthsFinder instrument may have a role greater than its current use as leadership self-analysis and/or coaching. It may help organizations pick CEOs who have a particular strength or strengths to improve effectively the results of the organization. This research only looked at one aspect: labor cost of not-for-profit hospitals. It may be that other strengths such as Relator may help a hospital in the recruitment and retention of medical staff or community relations. Hospital missions often are much greater than that of a bottom-line orientation.

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APPENDIX A

Informed Consent to Participate in Research

Dear Participant,

My name is Dennis J. Patterson and I am a Research Investigator at Pepperdine University. I am writing to request your voluntary participation in a study I am undertaking regarding the relationship between personal strengths of Chief Executive Officers and their control of labor cost in non-profit hospitals.

The following is intended to provide you with information about this study.

STUDY TITLE

The Relationship of Chief Executive Officers and their control of labor cost in non profit hospitals

PARTICIPANTS

Your permission is requested to voluntarily participate in a study conducted by Dennis J. Patterson, Research Investigator under the supervision of Dr. Robert Paull faculty advisor at Pepperdine University, Graduate School of Education and Psychology. You were selected as a possible participant based upon meeting the criterion of the research study. Participation in this study is voluntary.

PURPOSE OF THE STUDY

To ascertain if there is any particular strength of a non-profit hospital Chief Executive Officer as defined by Clifton StrengthsFinder, and their ability to control labor cost using FTEs per adjusted discharge in the calendar year 2008.

PROCEDURES

If you agree to participate in this study, you will be asked to complete a survey. The survey will take approximately 45 minutes to complete. The survey is entirely voluntary. You may refuse to answer any question or choose to withdraw from participation at any time without any penalty or loss of benefits to which you are otherwise entitled.

POTENTIAL RISKS AND DISCOMFORTS

The risks involved with participation in this study are no more than one would experience in everyday life. You do not have to answer any question you would rather not answer. There are no consequences if you decide not to complete the survey.

POTENTIAL BENEFITS TO PARTICIPANTS AND/OR TO SOCIETY

Your participation will provide information that will create new and deeper understandings of whether the StrengthsFinder is useful as a tool to identify Chief Executive Officers strengths. Further this study will ascertain if certain strengths helps CEOs to control labor cost in their hospital. The study will gather information about CEOs top five top strengths and wheither or not there is a relationship to the number of Full Time Equivalents they used by adjusted discharge.

PAYMENT FOR PARTICIPATION

Participants will receive the Gallup Book, "Strengths Based Leadership" for their involvement in the study.

CONFIDENTIALITY

No personal identifying marks of any kind will be present on any of the survey forms. All data resulting from this study will be kept in a locked file cabinet in the researcher's office All the data stored on computer is locked with a password. The data sheets will be stored separately from the signed consent forms. All data will be analyzed and reported in aggregate. The investigator will take all measures to protect the confidentiality of the participant records and your identity will not be revealed in any publication that may result from this project. The confidentiality of records will be maintained in accordance with applicable state and federal laws.

PARTICIPATION AND WITHDRAWAL

Participation is voluntary and you may choose to withdraw from the study at any point with no consequences.

IDENTIFICATION OF INVESTIGATORS

If you have questions regarding the study, please contact Dennis J. Patterson, Investigator, at email xxx or by phone xxx. You may also contact my advisor Dr.Robert Paull, at email xxx or by phone xxx.

RIGHTS OF RESEARCH PARTICIPANTS

Participation is voluntary and you may discontinue participation at any time without penalty. If you have questions regarding the rights of research participants, please contact Dr. Robert Paull, Faculty Advisor, at xxx or you may also contact Dr. Doug Leigh, Chair of the Graduate and Professional Schools' Institutional Review Board at xxx.

SIGNATURE OF RESEARCH PARTICIPANT

I understand to my satisfaction the information in the consent form regarding my participation in the research project. All of my questions have been answered to my satisfaction. I have received a copy of this informed consent form which I have read and understand. I hereby consent to participate in the research as described above.

_____
Print/Type Name of Participant

_____ _____
Signature of Participant Date

Thank you in advance for your consideration.

APPENDIX B

Letter From Healthcare System CEOs

Mr. Dennis J Patterson
Research Investigator
xxx
xxx

Dear Mr. Patterson:

Thank you for your request to participate in your research for your research at Pepperdine University. We would be pleased to participate. It is my understanding that you will request the volunteer participation of each of our hospital CEOs. If they agree to be part of the study they may at any time withdraw their agreement and their information will not be included in your study.

Those that agree will take an online survey called the Clifton StrengthsFinder 2.0. They will then provide you directly with their top five strengths. In addition they will provide to you from our data base for the calendar year 2008 the following data: Full Time Equivalents per Adjusted Discharge and the quartile ranking of their hospital compared to similar hospitals in that data base.

This information will be provided via an envelope provided by you, and sent to your accountant in a pre-stamped envelope. This pre-stamped envelope will be removed and the blank envelope with the information will be forwarded to you. No demographic or names of participants or their hospitals will be provided to maintain the confidentiality of the participants. This information in your research will only be displayed in the aggregate. The aggregate information will also include another system, and our individual results will not be provided to us about our CEOs participation.

We look forward to the outcome of this research; please contact me if there is anything more I can do.

Sincerely,

APPENDIX C

Instructional Letter to Hospital CEO

Mr. xxx: your system CEO has agreed to allow me to request your help in gathering data for my Research Paper at Pepperdine University. Your system is one of two that has agreed to participate.

In accordance with Mr. xxx's instruction and University policy, your participation is completely voluntary. The results from your survey and information analysis using the Solucients data from 2008 will be reported only in the aggregate combining both system's results. There will be no mention of your name, your hospital's name, or the system in the dissertation. The hypothesis of the study is that there is a correlation between at least one personal strength of CEOs and the use of FTEs by adjusted discharge and patient day.

My research is based on two mammoth research studies that took place over 25 years. The first asked over a million employees from a range of companies, industries and countries, "What do the most talented employees need from their workplace?" The first study led to a second one, again over a similar range of companies where researchers worked to discover "How do the world's greatest managers find, focus, and keep talented employees?" Using a number of corporate performance measures and interviewing over 80,000 managers, many pointers were developed to describe what makes the best managers. From this research, the Gallup Organization in 1999 compiled the 34 most common themes, all of which represent a person's strengths. (These strengths are interpreted as 'developed talents' by the authors. This means that these strengths are viewed as extensions of a talent. More precisely, the strength constructs combined talent with associated knowledge and skills and is defined as the ability to consistently provide near-perfect performance in a specific task).

Enclosed with this letter are:

- A copy of Clifton StrengthsFinder 2.0. Within the book is a sealed packet with a code which will give you access to the internet site and allows you access to the survey. This is a survey of 177 statements of your strengths. It should take approximately 40 minutes to complete. Again, your participation is completely voluntary. Please remember that there is no right or wrong answer, as we all have different strengths. And, you can choose not to answer any of the questions. This instrument will identify your top five strengths. When you determine your top five strengths, please check them off on the checklist that is included. I request that you mail a copy to me in the envelope enclosed with this letter.
- A large white envelope with no identification, and
- A larger yellow envelope with postage and address to Mark Sauer & Associates CPA
- Please obtain the Soluctient data from the system office of your hospital's FTEs per adjusted discharge, and the ranking of your hospital against similar hospitals

for the fiscal year 2008.
- Instructions on mailing of the results of the Soluctient data.

In order to protect your privacy in the study, you will seal the StrengthsFinder results, and the quartile reporting of your hospital standing in 2008 for FTEs per adjusted discharge in a plain white envelope provided in the packet. No demographic data information should be included. Do not reveal your name or that of your hospital. Another larger pre-paid envelope is provided with an address to an accounting firm used by the researcher. You will then mail the envelope to this researcher's accounting firm. They will remove the stamped envelope and forward only the plain white envelope to the researcher. This will assure that I do not have even access to the post mark thus assuring your confidentiality and privacy.

If you have questions about this survey, please contact me at xxx and/or xxx.

If you wish to participate in the study, please sign the attached Informed Consent. Send it in the enclosed letter envelope to the researcher at xxx.

Thank you for your time. I look forward to receiving your information.

Sincerely,

Dennis J. Patterson
Pepperdine Research Investigator

APPENDIX D

Reporting Sheet for CEOs to Report Their Top Five Strengths

Each participant checked the top five strengths obtained in their survey and included it in a plain white envelop provided by the researcher.

StrengthsFinder Themes
1. Achiever
2. Activator
3. Adaptability
4. Analytical
5. Arranger
6. Belief
7. Command
8. Communication
9. Competition
10. Connectiveness
11. Consistency
12. Context
13. Deliberative
14. Developer
15. Discipline
16. Empathy
17. Focus
18. Futuristic
19. Harmony
20. Ideation
21. Includer
22. Individualization
23. Input
24. Intellection
25. Learner
26. Maximizer
27. Positivity
28. Relator
29. Responsibility
30. Restorative
31. Self-Assurance
32. Significance
33. Strategic
34. Woo

APPENDIX E

Your Strengths: The Research Behind StrengthsFinder

This section is adapted from the Clifton StrengthsFinder 2.0 Technical Report: Development and Validation by Asplund, Lopez, Hodges, and Harter (2007).

INTRODUCTION

The Clifton StrengthsFinder (CSF) is an online measure of personal talent that identifies areas where an individual's greatest potential for building strengths exists. By identifying one's top themes of talent, the CSF provides a starting point in the identification of specific personal talents, and the related supporting materials help individuals discover how to build upon their talents to develop strengths within their roles. The primary application of the CSF is an evaluation that initiates a strengths-based development process in work and academic settings. As an omnibus assessment based on strengths psychology, its main application has been in the work domain, but it has been used for understanding individuals in a variety of settings – employees, executive teams, students, families, and personal development.

STRENGTHS THEORY

When educational psychologist Donald O. Clifton first designed the interviews that subsequently became the basis of the CSF, he began by asking, "What would happen if we studied what is right with people?" From this emerged a philosophy of using talents as the basis for consistent achievement of excellence (strength). Specifically, the strengths philosophy is the assertion that individuals are able to gain far more when they expend effort to build on their greatest talents than when they spend a comparable amount of effort to remediate their weaknesses (Clifton & Harter, 2003).

Clifton hypothesized that these talents were "naturally recurring patterns of thought, feeling, or behavior that can be productively applied" (Hodges & Clifton, 2004, p. 257). "Strengths" are viewed as the result of maximized talents. Specifically, a strength is mastery created when one's most powerful talents are refined with practice and combined with acquired relevant skills and knowledge. The CSF is designed to measure which raw talents can serve as the foundation of strengths. Thus the purpose of the instrument is to identify "Signature Themes" of talent that serve as a starting point in the discovery of talents that can be productively applied to achieve success.

DEVELOPMENT OF THE CLIFTON STRENGTHSFINDER

Gallup, widely known for its polls (Gallup, 2004; Newport, 2004) and employee selection research (Harter, Hayes, & Schmidt, 2004; Schmidt & Rader, 1999), developed numerous semi structured interviews to identify talent that could be enhanced and used to pursue positive outcomes in work and school. In the 1990s, under the leadership of Donald Clifton, Gallup developed the CSF as an objective measure of personal talent that could be administered online in less than one hour. More than two million employees and

students worldwide have competed in this measure as of January 2007.

Clifton, over his 50-year career at the University of Nebraska, Selection Research Incorporated, and Gallup, studied "frames of reference" (Clifton, Hollingsworth, & Hall, 1952), teacher-student rapport (Dodge & Clifton, 1956), management (Clifton, 1970; 1975; 1980), and success across a wide variety of domains in business and education (Buckingham & Clifton, 2000; Clifton & Anderson, 2002; Clifton & Nelson, 1992). He based his research and practice on straightforward notions that stood the test of time and empirical scrutiny.

First, he believed that talents could be operationalized, studied, and capitalized upon in work and academic settings. Talents are manifested in life experiences characterized by yearnings, rapid learning, satisfaction, and timelessness. These trait-like "raw materials" are believed to be the products of normal healthy development and successful experiences over childhood and adolescence. "Strengths" are viewed as extension of talent. More precisely, the strength construct combines talents and associated knowledge and skills and is defined as the ability to consistently provide near-perfect performance in specific task. (Though labeled the Clifton StrengthsFinder, the instrument actually measures the talents that serve as the foundations for strengths development.)

The prominence of dimensions and items relating to motivation and to values in much of the interview research informed the design of an instrument that can identify those enduring human qualities. An initial pool of more than 5,000 items was constructed on the basis of traditional validity evidence. Given the breadth of talent assessed, the pool of items was considered large and diverse.

Subsequently, a smaller pool was derived to review quantitative item functioning and a content review of the representation of themes and items within themes (with an eye toward the construct validity of the entire assessment). Specifically, evidence used to evaluate the item pairs was taken from a database of criterion-related validity studies, including over 100 predictive validity studies (Schmidt & Rader, 1999). Factor and reliability analyses were conducted in multiple samples to assess the contribution of items to measurement of themes and consistency and stability of theme scores – thereby achieving the goal of a balance between maximized theme information and efficiency in instrument length. During the development phases, a number of sets of items were pilot tested. The items with the strongest psychometric properties (including item correlation to theme) were retained.

In 1999 a 35-theme version of the CSF was launched. After several months of data collection, researchers revisited the instrument and, based on analyses of theme uniqueness and redundancy, decided on 177 items and 34 themes. Since 1999, some theme names have changed, but the theme descriptions have not changed substantially.

Today, the CSF is available in 24 languages and is modifiable for individuals with disabilities. It has been taken by more than two million individuals all over the world. It is appropriate for administration to adolescents and adults with a reading level of 10th grade or higher. In 2006, Gallup researchers undertook a comprehensive review of CSF

psychometrics, which led to some revisions in the instrument. Confirmatory studies validate the 34-theme structure in both adult and student population. In reviewing more than one million cases in multiple studies, some possible improvements in theme validities and reliabilities were identified. Some of the improvements involved rescoring of existing items, whereas some others required the addition of some new items. These new items were drawn from Gallup's library of talent-related items and from researchers' experience in building structured interviews and providing talent feedback. Finally, there were items that had been included in the 177-item version of the CSF but never used in theme scores.

A thorough review of each of these items showed many to be unnecessary as with distracters or scored items. They were consequently removed. The result of all these item changes was a slight reduction in the length of the instrument, from 180 items to 177.

Research both inside and outside of Gallup contributed a number of investigations into the CSFs continuing reliability, validity and applicability to both the general population and college students in particular. Those most recent studies have included:

CONFIRMATORY STUDIES:

- Sieci (University of Massachusetts): n = 10,000
- Lopez (University of Kansas), Hodges (Gallup), Harter (Gallup): n= 601,049
- Asplund (Gallup): n = 110.438
- Asplund: n = 250,000
- Asplund: n = 472,850

RELIABILITY STUDIES:

- Schreiner (Azusa Pacific): n – 438
- Lopez, Harter, Hodges: n = 706
- Asplund (Gallup): n = 110.438
- Asplund: n = 250,000
- Asplund: n = 472,850

OTHER VALIDITY STUDIES:

- Lopez, Hodges, harter: n= 297
- Achreiner: n = 438

- Stone (Harvard): n = 278

UTILITY STUDIES:

- Asplund: n = 90,000 employess in more than 900 business units
- Various additional case studies

Separately, each of these studies affirms the ongoing viability of the CSF. More importantly, the collective evidence of all this work is convergent regarding the psychometric properties of the CSF. More importantly, the collective evidence of all this work is convergent regarding the psychometric properties of the CSF, as well as regarding the details of its validity.

Notwithstanding the confirmatory evidence provided by this body of research, Gallup researchers identified some areas in which the CSF could be improved psychometrically. In particular, it was observed that some of the items could be improved, removed, or replaced. As a logical first step to improving the psychometrics, Gallup researchers thoroughly examined each unscored statement to whether it could be used to improve the performance of the assessment. Unscored statements that showed no utility were removed if possible. (Several of the unscored statements are paired with a scored statement, and therefore are not subject for removal at this time). (Rath & Conchie, 2008, p. 239–244)

APPENDIX F

StrengthsFinder 2.0 Privacy Policy

Privacy Statement

Protection of personal privacy has always been a hallmark of Gallup. Since its inception in 1935, Gallup has maintained the anonymity of each survey respondent unless express consent to the release of a respondent's personal information or individual responses has been provided by that respondent. In a like manner, Gallup protects the identity of individuals who access its Web sites. Please read the following policy for further details as to the types of information collected through Gallup Web sites, including personal information, and how it is treated.

INFORMATION COLLECTED BY GALLUP WEB SITES

Gallup Web sites gather information in two ways: (1) indirectly (for example, through our site's technology), and (2) directly (for example, when you, the site visitor, voluntarily provide information on various pages).

Information Collected Indirectly

Gallup indirectly collects a variety of information pertaining to use of its Web sites. One type of this information is that which is related to site traffic volume and patterns, such as the number of visitors to a given site or page on a daily basis. This type of indirectly collected information is gathered through various means, such as an IP address, which is a number that is automatically assigned to your computer whenever you are surfing the Web. Web servers, the computers that "serve up" Web pages, automatically identify your computer by its IP address. When you visit a page from Gallup, our servers log your computer's IP address.

Only designated administrators can access this information, and it is used only for administrative and planning purposes to meet the needs of our users, such as to improve the content of the site and to customize the content and/or layout of the site for individuals or groups of users.

Other types of indirectly collected information are stored in "cookies." Cookies are small files of electronic information that a Web site can transfer to a visitor's hard drive to help that visitor while on the site. Some Gallup sites use cookies simply to store a user code so that the user does not have to re-enter their information when rejoining the site. The use of cookies is standard on the Internet. Although most Web browsers automatically accept cookies, the decision of whether to accept them is yours. A browser can usually be adjusted to prevent the reception of cookies, or to provide notification whenever a cookie is sent to you. Even without accepting a cookie, users can still access most of the features offered by Gallup Web sites.

We may use third-party advertising companies to serve ads on our behalf. These companies may use cookies and action tags to measure advertising effectiveness. Any information that these third parties collect via cookies and action tags is completely anonymous.

Information Collected Directly

Gallup also collects information that is voluntarily provided by site visitors, such as a name or an e-mail address. When Gallup collects this type of information, we will notify you as to why we are asking for the information and how it will be used. It is entirely your decision to provide the requested information. Such personal data is collected when a site visitor registers with a site or requests Web services. This information is kept totally confidential, and will be used only to contact you. You may choose to have this information removed at any time. Gallup will never barter, trade, or sell access to our database of registered users.

Correcting and Changing User Information and Preferences

If you are receiving e-mail communications from Gallup but wish to discontinue this service, you may request to do so at any time by e-mailing us at xxx.

You also have the option to request a revision of your user information at any time by e-mailing the requested changes to xxx.

Information Security

Gallup employees understand the need for user privacy, and we maintain strict security procedures to protect your information. Gallup has appointed a Privacy Policy Administrator to monitor privacy practices. Access to user data is strictly limited to specific individuals who are trained to respect user privacy. The access given to these employees is restricted to their need of such information for business reasons. A log of those who accessed the data is maintained and monitored to prevent security breaches.

Third-Party Information Storage

Some information is stored for Gallup by authorized third-party companies. These companies are carefully selected by Gallup. We limit such third parties in their access to and use of your personal information, and like Gallup, they will never barter, trade, or sell access to your information.

Children and Privacy

Gallup encourages parents and guardians to spend time with their children online and to be fully familiar with the sites visited by their children. Gallup sites will not contain content that is generally considered unsuitable for children.

Links to Other Sites

Gallup Web sites may contain links to sites owned and/or operated by other organizations, and the privacy policies of those sites may differ from that of Gallup. These sites may collect data and make use of it in ways that Gallup does not. We encourage you to review the privacy policies posted on all third-party sites.

Transfer of Information to the United States

In accessing Gallup Web sites, you may be transferring personal data that is used by Gallup for statistical, administration, or marketing purposes. As a worldwide organization, Gallup collects data that may be transferred internationally throughout Gallup offices worldwide. In using any Gallup site you consent to having your information transferred to and processed in the United States or any other country in which Gallup is located. If Gallup seeks to collect any additional personal data, you will be informed of the proposed uses of that data and asked for your consent.

Policy Updates

This Privacy Policy is Gallup's promise to its Web site users. Additional information that is particular to specific Gallup sites may exist, and updates to this policy may be posted. For these reasons we suggest that users who may have specific concerns about the information being gathered and use of that information regularly view the Privacy Policy on each site. Gallup reserves the right to change the policy on use of information collected at any time.

Additional Questions or Comments

If you have any additional questions or comments regarding Gallup's Privacy Policy, please e-mail us at xxx.