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THE ORGANIZATIONAL EFFECTS OF EDUCATIONAL BACKGROUND ON HOSPITAL LEADERSHIP: A SYSTEMATIC LITERATURE REVIEW

LAUREN MCMANEMIN
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Reviewed and approved* by the following:

Jonathan Clark
Professor of Health Policy and Administration
Thesis Adviser

Rhonda BeLue
Professor of Health Policy and Administration
Honors Adviser

* Signatures are on file in the Schreyer Honors College.

ABSTRACT

In 2013, the hospital CEO turnover rate in the United States reached the highest percentage seen in over 30 years. Researchers and the general public blame the lack of medical insight of current business leadership for the high turnover, and call for an increase in physician executives. In response to this demand for physician leadership, and the limited amount of current research on the subject, this systematic literature review analyzes whether the educational background (MD vs. MBA) of hospital leadership affects certain elements of the organization (quality, finance and employee engagement). The paper utilizes three management theories, (1) Upper Echelons Perspective, (2) Leadership Identity Theory and (3) Followership, as theoretical guides for interpretation and organization of the analysis. A large majority of the articles reviewed (18 out of 23) argue that physicians make better hospital executives. Only a limited set of articles support business executives, all within the employee engagement section of the analysis. Several studies partially or fully argue that the educational background of the leader has zero effect on hospital outcomes. In total, the majority of the findings within the theories and the reviewed articles support physician hospital executives. However, even though many perspectives are offered in the literature, very few authors conduct formal analyses to test their ideas. Additionally, a majority of the authors supporting physician executives recognize the need for management training before taking on such a role.

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ACKNOWLEDGEMENTS

The entire process of writing the following thesis presented a multitude of learning opportunities and difficulties. I have never written a complete thesis before, let alone a comprehensive literature review. From the beginning, I certainly bit off a lot more than I could chew. However, throughout this debilitating experience I learned a lot about research, thesis writing, literature reviews, hospital leadership, and personal motivation. I faced many difficulties including problems with time management, a lack knowledge about research, and issues with narrowing down the scope of the study. Through all of the trials and tribulations, I successfully completed the thesis with help from a strong sense of personal drive and the guidance of my thesis adviser.

My thesis adviser, Jonathan Clark, was instrumental to the completion of my honors thesis. Thanks to his instruction on how to write a proper literature review, his previous experiences with the subject of the study, and his assistance in narrowing the scope of the research I was able to write my first systematic literature review. His guidance and ability to conquer any problem were keys to the completion of this paper. Also, I would like to thank my family and friends for their never ending support and nagging. You all got me through this seemingly never-ending process. Lastly, I apologize to Ben for having to hear me stress out about this thesis for the past year. Thank you everyone for your support, this paper is a testament to your positive influence on my life.

I accept the responsibility for all the ideas presented in this paper. I also accept the responsibility of citing all my references appropriately, and would like to thank all those researchers for their hard work and dedication to the healthcare industry.

Chapter 1

Introduction

The American College of Healthcare Executives (ACHE) reported in 2013 the highest hospital CEO turnover rate (20%) since tracking began in 1981 (2014). Researchers, and the general public, associate the trend with the lack of medical insight of hospital CEOs with a business education (Gunderman & Kanter, 2009; Stoller, 2009; Robeznieks, 2014). The recent encouragement of physician leadership has led to a rise in the percentage of hospitals hiring leaders with medical backgrounds (Robeznieks, 2014). The increase in CEO turnover, and the shift in leadership, suggest the need for an investigation into the relationship between executive background and organizational performance. Does the educational background of a hospital CEO impact the success of the organization?

Past research details that a hospital CEO can influence the strategy, financial status, employee engagement and quality of the organization (Reeleder et. al., 2006; Brunninge, 2005; Thornton, 2002; Clark et. al., 2012; Dückers, et. al., 2009; Saint et. al., 2010). One study even found that a hospital CEO's sense of optimism can significantly improve the organization's overall performance (Langabeer & Yao, 2012).

When examining leadership theories for insight into the role of education in leadership, the Upper Echelons Perspective suggests that the educational background of a CEO can influence the strategy and structure of the organization (Hambrick & Mason, 1984). In addition, DeRue and Ashford's Leadership Identity Theory highlights the importance of personal beliefs and background in terms of internalization of the leadership role and employee acceptance (2010). The concept of Followership also supports the impact of leadership background on

employee engagement and organizational success (Kelley, 1988). These theories each offer a different perspective on the influence of a CEO's educational background on organizational outcomes, but empirical study of the subject among hospital leadership has been limited. During the initial development of hospital systems, the appointment of physician CEOs was not controversial (Falcone & Satiani, 2008). However, during the expansion of insurance and changes in payer structure in the 20th century, the hospital system began to hire more business experts to navigate the new complicated terrain (Falcone & Satiani, 2008). Today, many are questioning whether that transition was appropriate (Falcone & Satiani, 2008; Gunderman & Kanter, 2009; Stoller, 2009; Robeznieks, 2014).

The chorus of those arguing against business-oriented hospital leaders continues to rise, with limited empirical support for such claims (Gunderman & Kanter, 2009; Stoller, 2009; Robeznieks, 2014). To date, papers supporting the merits of physician leadership have lacked theoretical underpinnings. Moreover, the aforementioned theories related to leadership and educational background have received only limited application to the health care industry. Hospital-physician relations also makes it difficult to relate findings in other industries. Within hospitals, CEOs lead organizations of very highly trained and skilled professionals who earn a high salary and are often not directly employed by the hospital. Engagement from these individuals may prove more difficult than the acceptance of employees in other industries. Differences in the education of the CEO compared to physicians may further complicate this relationship. However, even with the recent increase in physician hospital CEOs, now over five percent of all hospital leaders, a robust investigation into these issue has not been undertaken (Stoller, 2009). Current research lacks a comprehensive examination of the educational background of hospital CEOs.

This paper synthesizes and reviews research related to the direct effect of educational background on the influence of hospital CEOs, in an attempt to understand whether a demand for physician leadership remains warranted. The organizational elements under investigation include quality, finance and employee engagement. Past studies suggest, that these elements do have receive direct influence from the organization's CEO. Prior to analyzing healthcare industry findings, I review three leadership theories which add four additional propositions to the research question. The propositions mostly support the merits of physician leaders as a potentially fruitful option for the CEO role (3 out of 4). The one study in support of business leaders highlights the financial capabilities of these individuals. I then review the healthcare industry research on this issue and find that a majority of the results also support the ability of physician leaders particularly in terms of quality and physician engagement (15 out of 18).

This paper adds to the lack of formal analysis available today on the subject of hospital CEOs' educational background. With three well-known leadership theories as my guide I attempt to create a deeper understanding of why educational background matters. This thesis concludes with considerations for future research.

Sub-Chapter 1: Research Question

In this section, I will draw upon the previous research on leader influence in order to formulate propositions regarding the possible moderating effect of management's educational background on organizational performance. Prior research establishes a leader's direct effect on organizational outcomes (Reeleder et. al., 2006; Brunninge, 2005; Thornton, 2002; Clark et. al., 2012; Dückers, et. al., 2009; Saint et. al., 2010). The analysis of the research question considered

in this paper follows a systematic literature review, which is detailed in the methods section. The research question for this paper remains as follows: *Does the educational background of a hospital's leadership have an effect on organizational outcomes?*

The educational background referenced within the research question breaks into two categories often seen within the healthcare world. Most hospital leaders appear to have either clinical or administrative educational training. Under the clinical education category the list includes physicians and nurses with degrees such as MD, RN and LPN. The business related degrees considered include MBA, MHA and CPA. To simplify the analysis during this initial investigation the two main categories of education, medical or business, are used rather than the individual degrees.

There exists a multitude of theories and definitions connected to the idea of leadership, with the historic list of concepts spanning from the 1840s until today (Horne, 2011). However, the universal definition of a leader, and thus leadership, details an individual who guides a way or direction (Merriam-Webster, 2014). In this paper, I specifically consider the organization's CEO as the leader under investigation. The availability of information on CEOs in all industries, including healthcare, makes this selection criteria easier to navigate. Also, the prior work on the direct influence CEOs have on organizations provide this study with a firm foundation.

Prior studies have connected leadership with "productivity, job satisfaction, self-efficacy, learning behavior, organizational culture or team performance" (Dückersa et. al., 2009, p. 2). These elements have been quantified in a variety of ways, including return on assets (Clark et. al., 2012), employee participation (Dückersa et. al., 2009) and quality improvements (Saint et. al., 2010). In congruence with these published studies, the three main organizational outcomes considered in this study include quality, finance, and employee engagement. This paper will

address the overall effect of the hospital CEO on these three organizational elements. **Figure 1** provides an overview of the corresponding elements in the research question divulged within the previous paragraphs. The arrows signifying a relationship between Education and Leadership illustrate the conclusions of the Upper Echelons Perspective and the argument that educational background influences leadership decisions (Hambrick & Mason, 1984). The second set of arrows illustrate a causal relationship between the Leader and Organizational Outcomes, which past research supports (Reeleder et. al., 2006; Brunninge, 2005; Thornton, 2002; Clark et. al., 2012; Dückers, et. al., 2009; Saint et. al., 2010).

Does the educational background of a hospital's leadership have an effect on certain elements of the organization?

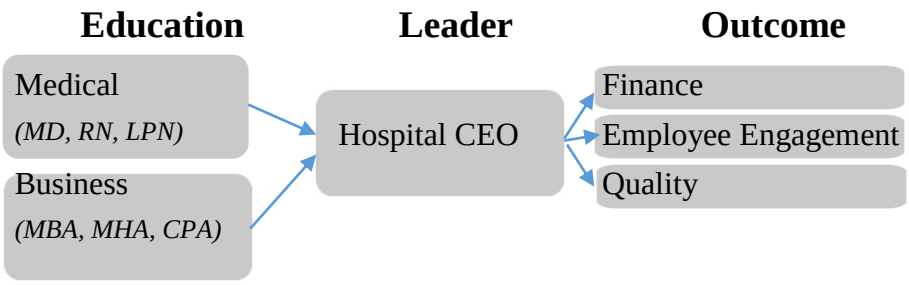

Figure 1. Research Question Breakdown

The following sections will further touch upon the research question proposed in an attempt to clarify the ongoing debate of who should lead hospitals today. This literature review begins with a discussion of prevalent leadership theories that explain the complicated relationship between leaders and followers. The next section includes the methodology associated with the analysis and the literature review of certain studies that connect to the

research question. The paper then concludes with a discussion of future analyses and suggestions, while addressing some limitations of the paper.

Chapter 2

Leadership Theories

This section discusses three leadership theories relevant to the topic at hand. The three theories include Upper-Echelons Perspective, Leadership Identity, and Followership. Within each breakdown of the theories, I connect the constructs to the proposed research question and develop additional "propositions" to the original question. In total, these theories suggest that the educational background of a hospital CEO does affect the organization and its followers. Mainly, these theories support the increase in physician leaders.

Sub-Chapter 1: Upper Echelons Perspective

In order to further understand the inherent nature of organizations and why these entities make certain choices, researchers Hambrick and Mason synthesized a multitude of organizational research into the theory termed Upper Echelons Perspective (1984). This theory proposes that organizational outcomes, including strategic choices and performance, are driven by certain background characteristics of the managers. **Figure 2** contains a visual of the theory created by the researchers. Hambrick and Mason argue that organizational situations are subject to upper echelon characteristics which orient managers in making strategic decisions. These decisions lead to certain organizational outcomes, which then generate future organizational situations. This pattern suggests that these upper echelons background characteristics, including

demographic characteristics, career experiences and educational background, remain an integral part of the direction and success of an organization.

Hambrick and Mason base the necessary use of upper echelon characteristics in the decision making process on human limitations in terms of strategic complexity (1984). The nature of these decisions, including "bounded rationality, multiple and conflicting goals", tend to limit the ability to choose based solely on a "techno-economic basis" (Hambrick & Mason, 1984, p. 194). Thus, managers and decision-makers tap into behavioral knowledge and assumptions in order to overcome these complexities. Within the strategic choice process managers experience a limited visualization of the issue, selective perception, and individual interpretation based upon personal cognitive base and values. The researchers focus on background characteristics as drivers of cognitive base and values, with support from years of research on the power of demographics as indicators of choice.

One of the background characteristics within the Upper Echelon Theory is formal education. Hambrick and Mason state that education assists in developing an individual's knowledge and skill set (1984). Also, the type of education chosen displays the values and cognitive preferences held by the individual. Past research compiled by the theorists suggests that the amount of formal education of a manager, of any type, is positively associated with a tendency towards innovation. In addition, managers with little formal management education experience more variation from industry performance averages than those with greater amounts of management education. Due to the organizing nature of those drawn to managerial education, the researchers state that organizations consisting of executives with formal management education have more administratively complex structures. These administrative complexities include formal planning systems, budget thoroughness and strict coordination structuring. The

education of the executive team influences the decisions made every day, with organizational outcomes facing substantial pressure from preconceived values.

The overall concept of the Upper Echelon Perspective connects greatly to the research question of this paper. The theory follows the notion that the educational background of a leader can affect certain outcomes within an organization (Hambrick & Mason, 1984). In connection with the theory, physician leaders, due to the work priorities cultivated by their education, should produce better quality outcomes for organizations. The medical background of the physician leader generates a heightened focus on patient care which may produce better quality (Kaissi, 2005). The famous sociologist, Eliot Freidson, argues that physicians reflect a clinical mentality and develop a strong loyalty to patients (1970). The loyalty to patients may results in an increased focus on quality of care for these individuals. Also, physician leaders obtain more formal education than business managers, which may generate a stronger tendency to participate in innovative projects (Hambrick & Mason, 1984). The Institute for Healthcare Improvement argues that innovation in an organization has a direct connection to better quality of care for patients (2015). In that line of thinking, a physician leader's inherent tendency for innovation could improve overall quality within the hospital. In terms of the Upper Echelons Theory, organizations with physician CEOs should experience more patient-focused decision making and innovative projects, which will result in greater quality results in comparison to their business counterparts. In contrast, non-medical managers typically generate a strong allegiance to the organization as a whole (Freidson, 1970). The leaders with business degrees are likely to focus on generating organizational stability, which leads to more financially oriented decision-making (Kaissi, 2005). Additionally, due to their management education, these managers have a tendency to favor complex systems within the hospital, which could result in different

organizational outcomes. This could be especially prevalent in business-oriented departments including the finances of the organization. All in all, The Upper Echelons Perspective supports the concept that a hospital leader's educational background does effect an organization in the form of two propositions:

Proposition 1*: A physician CEO is more likely to focus on patient-care and encourage innovation within the hospital, which will improve the overall quality of the organization.*

Proposition 2*: A CEO with a business degree is more likely to focus on the finances of a hospital due to their organizational focus and their organizing tendency cultivated by formal business training.*

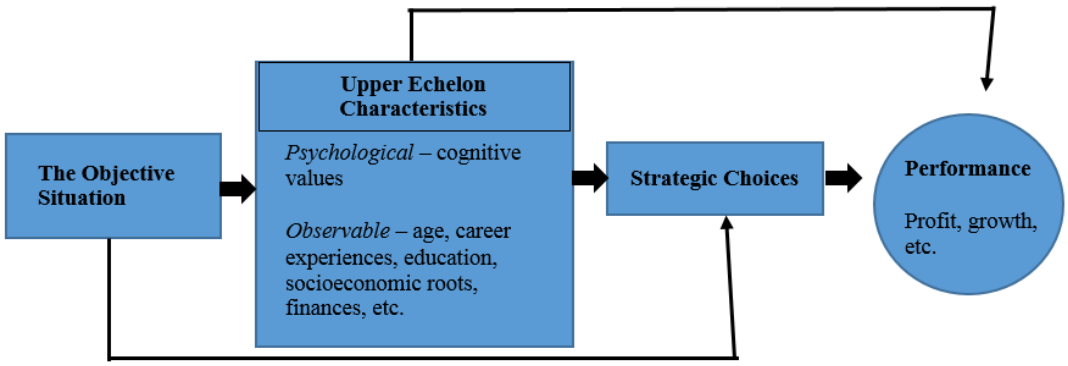

Figure 2. Upper Echelons Perspective

***The above illustration is a re-creation of the original construct by Hambrick and Mason, 1984.**

Sub-Chapter 2: Leadership Identity

Researchers DeRue and Ashford developed the Leadership Identity theory, which suggests a process in which leaders claim the identity of the role and then followers choose to

grant the assertion (2010). The leadership identity involves, "all three levels of self-construal… [including] individual internalization, relational recognition and collective endorsement" (DeRue & Ashford, 2010, p. 629). Individual internalization presents the individual a choice between identifying as a leader or a follower in terms of personal attributes and wants. At the same time the individual chooses the role based upon relational recognition, which calls upon the innate reciprocation of role identities with other individuals. Lastly, the collective endorsement for the individual's role selection alters the leadership identity. The endorsement might stem from those higher up in the hierarchy or the broad social context. The need for support and acceptance from individuals lower in the hierarchy was also seen in the studies by Dückers and researchers, which found that employee engagement stemmed from beliefs about the leadership team (2009). When all three of the elements align the identity chosen by the individual, whether leader or follower, becomes strengthened and the leadership identity construction process begins.

The construction of a leadership identity involves a constant claiming and granting process between the leader and follower (DeRue & Ashford, 2010). The process consists of two dimensions, verbal/nonverbal and direct/indirect. Example scenarios for those seeking a leader identity include, the direct verbal act of assigning tasks to others or the indirect verbal act of name-dropping influential people. Once the individual makes the identity claim, it is up to the opposing individual to reciprocate by granting the assertion and claiming the opposite identity. A pattern forms through "deviation-amplifying loops", which continuously reinforce past claims and grants (DeRue & Ashford, 2010, p. 633). **Figure 3** provides an illustration of the leadership identity process created by the researchers. Once the process is set in motion, the leadership identity selected and reinforced becomes an important aspect of the individual's participation within the organization. Individual identities remain significant drivers of cognition, emotion,

motivation and action (Day & Harrison, 2007; Gardner & Avolio, 1998; Shamir et. al., 1993). Identifying oneself as a leader enhances the desire to lead and engage in the leadership role (Chan & Drasgow, 2001; Kempster, 2006). The assertion of the leadership identity motivates individuals to search for more role opportunities and skill development (Day et. al., 2009).

Mismatched leadership identification can result in a decrease of leader influence (DeRue & Ashford, 2010). DeRue and Ashford explain that a failure to reinforce the deviation-amplifying loops through proper granting of an identity deteriorates the original leadership claim. The perceived credibility of the leader is one reason a follower may not grant the leadership claim. This credibility also connects to the collective endorsement element within the identity construct. A leader in an organization must appear credible to all the followers within his or her domain, or else the leadership identity process crumbles and no one chooses to follow. The destruction of the leadership identification process creates unclear leader-follower relationships, which causes tension and conflict.

The leadership identity process and the power of identity selection provides certain insights into the debate over hospital CEO educational backgrounds. Certain elements of the Leadership Identity Theory resonate with the assumed influence of educational background differences. First DeRue and Ashford state that a selected identity, whether leader or follower, begins with internalization of that identity and a desire to assume the role (2009). Physicians, or others with medical backgrounds, might struggle with this internalization of a leadership identity (Lee, 2010). Typically physicians enjoy more autonomous roles that do not embody the group orientation of managerial positions (Lee, 2010; Bujak, 2002). The lack of proper internalization of the leader identity could create a mismatched leadership identification issue, which leads to organizational conflict and mismanagement. This conflict could result in poorer outcomes for the

organization in all three elements: quality, finance and physician engagement. The need for collective endorsement for a successful leadership identification may create issues for CEOs with a business background. The support and acceptance from the medical staff in the organization, which makes up most of the employee population, might prove difficult for a CEO with a contrasting institutional logic. This acceptance of the CEO relies heavily upon the deemed credibility of the individual in the position. A hospital remains a highly medical environment, which regularly conflicts with the business entities attempting to keep the organization profitable. Based upon the process of the Leadership Identity Theory, the educational background of the hospital CEO could affect the organization, especially in terms of employee engagement and followership. From this theory, the hypothesis of this paper narrows into two additional propositions with contrasting logic. Leaders with a clinical background have the potential to discourage or improve employee engagement.

Proposition 3*: A CEO with a medical education is less likely to internalize a leadership role, which generates negative outcomes for the organization in terms of conflict and mismanagement.*

Proposition 4*: A CEO with a medical education receives higher acceptance from the medical staff, which induces employee engagement and organizational success.*

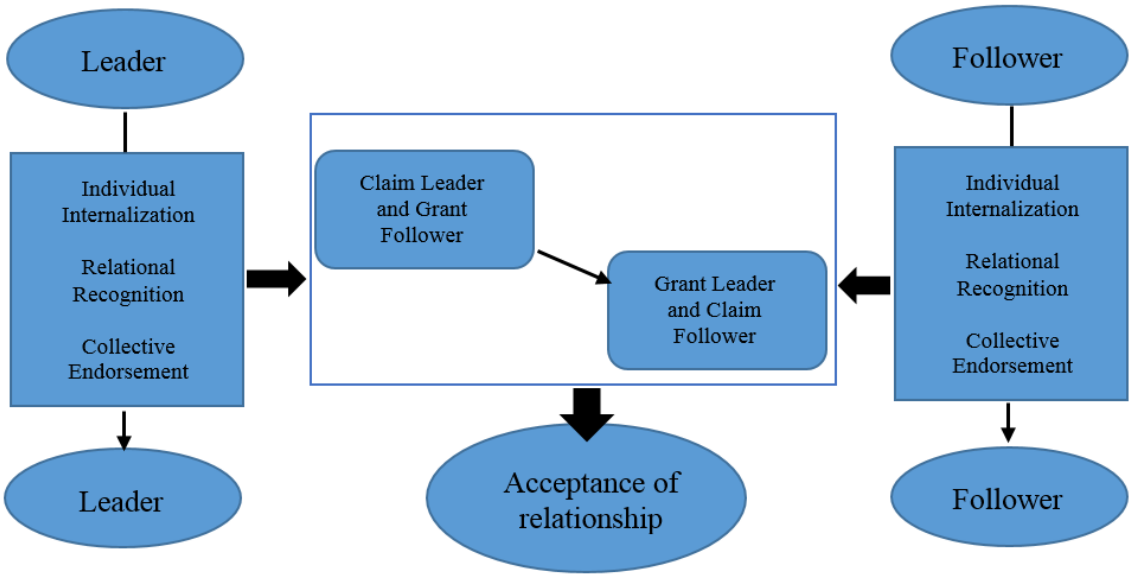

Figure 3. Leadership Identity Theory Construct

***The following illustration is a re-creation of the original construct by DeRue and Ashford, 2010.**

Sub-Chapter 3: Followership

Amidst a time of great focus on leadership theories, researcher Robert Kelley introduced the concept of Followership which placed great organizational importance on the role of the follower (1988). Kelley argues that although the leader remains an extremely important aspect of organizational success, a large part of this success relies upon how well the other employees follow. Any strategy set out by the leader of the organization requires the work of followers carrying out the plan. Kelley's Followership theory connects the hypothesis presented earlier in this paper by suggesting that the success of an organization inherently ties to the employees' perception of the leader.

According to Kelley, there are four types of followers including sheep, yes people, alienated followers and effective followers (1988). These categories map out on a two-dimensional scale of independent versus dependent and active versus passive, with effective followers resembling an active independence. **Figure 4** contains the follower classification chart developed by the researchers. In terms of this definition, the highly trained medical staff within hospitals may have the potential to become effective followers. These individuals thrive independently, due in part to the structure of medical training, and typically contribute actively to the organizational goal of treating patients. However even though hospital employees appear as perfect examples of effective followers, two aspects of Kelley's Followership theory may offset the medical staff's potential.

Kelley explains that in order for an employee to become an effective follower the individual first must see his or herself as equal to the leader (1988). Effective followers continually engage in self-management and are unafraid to challenge the opinions of the leader. These qualities lead to increased organizational productivity and innovation, which would otherwise be impossible if the follower did not feel equal to the leader. This idea of follower-leader equality may become increasingly challenging for organizations employing individuals of varying backgrounds. For example, a physician could have difficulties feeling equal to a CEO with an education in business. The two distinctive backgrounds create fundamental inequalities in terms of experiences and goals. This obstruction to follower-leader equality hinders the majority of hospital employees from becoming effective followers, thus limiting the success of the organization.

Another important aspect of effective followers proposed by Kelley states that these individuals share a commitment to the same goals as the leader (1988). If the goals of the leader

conflict with the follower's commitment, the follower loses enthusiasm for the job and the organization. Commitment to the goals of the organization affects the efficiency of task completion and the success of strategic initiatives. The educational backgrounds of medical and business individuals generate opposing goals and commitments. An individual with a finance degree may value financial stability higher than equal accessibility, which could conflict with the goals of an individual with a medical degree. The difference in fundamental goals of physicians and non-medical managers receives support from the well-known sociologist Freidson in 1970. According to Freidson, physician goals relate to patient care while non-medical managers typically generate goals focusing on the organization as a whole (Freidson, 1970). Thus, Followership suggests that medical staff have a greater potential to become effective followers for a physician leader who has similar goals and degree.

The Followership theory created by Robert Kelley supports the research question in connection to the effect of educational background on organizational success. An effective follower can drastically improve organizational outputs by working more efficiently and passionately. However, in order to generate effective followers these individuals must perceive certain equalities with the organizational leadership. The educational background of a hospital CEO may disband this sense of equality for certain staff members, and render them ineffective followers. The Followership theory furthers the fourth proposition of the proposed research question of this paper by adding the element of perceived sense of equality physicians feel with a medical leader.

Proposition 4: *A CEO with a medical education receives higher acceptance from the medical staff and* ***generates a sense of equality****, which induces employee engagement and organizational success.*

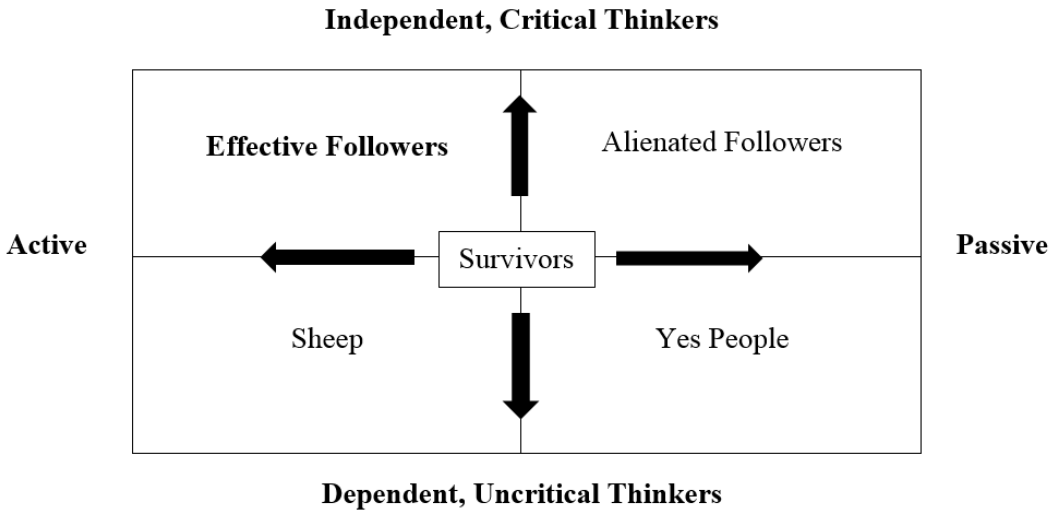

Figure 4. Followership Theory Classification Chart

***The following illustration is a re-creation of the original construct by Kelley, 1988**

Sub-Chapter 4: Research Question with Additional Theoretical Propositions

All three theories discussed add interesting insights to the research question in terms of whether an effect of educational background exists. Each theory supports the idea that the educational background of a hospital CEO could alter the success of the organization in varying ways. According to the theories, physician CEOs should have an increasingly positive effect on the employee engagement and quality of the organization (*Propositions 1* and *4*). A CEO with a business background could generate more influence on the finances of the institution and prevent mismanagement due to the internalization of the leadership role (*Propositions 2* and *3*). A table of these propositions is available in **Table 1**. Physician CEOs have the potential to improve organizational outcomes based on the inherent values developed during medical school. The values of physician CEOs connect to the values held by the majority of employees within the organization. This natural connection can result in heightened commitment from employees and

better organizational outcomes. With the theories as a guide, the rest of the paper incorporates a literature review of the current findings in healthcare connected to physician versus managerial leadership. The quantitative and qualitative reports attempt to answer the original question about the viability of physician leaders with real-world applications.

Table 1. Outline for the Effects of the Five Theoretical Propositions

Physician CEOs	
Positive Effect	Negative Effect
Proposition 1: *A physician CEO is more likely to focus on patient-care and encourage innovation within the hospital, which will improve the overall quality of the organization.*	***Proposition 3:*** *A CEO with a medical education is less likely to internalize a leadership role, which generates negative outcomes for the organization in terms of conflict and mismanagement.*
Proposition 4: *A CEO with a medical education receives higher acceptance from the medical staff and generates a sense of equality, which induces employee engagement and organizational success.*	
Business CEOs	
Positive Effect	Negative Effect
Proposition 2: *A CEO with a business degree will have a positive effect on the finances of a hospital due to their organizational focus and their organizing tendency cultivated by a formal business training.*	

This table details how each theoretical proposition from the three leadership theories affects (positively or negatively) the two CEO classifications (physician vs. business).

Chapter 3

Literature Review Methodology

For this literature review, I performed a systematic search of the ProQuest and Google Scholar databases on three separate occasions between the months of June 2014 and February 2015. I also reviewed journal articles that were deemed popular within the industry, which were listed within bibliographies and cited in news articles. The literature gathered was in the form of quantitative experiments, opinionated articles, literature reviews and longitudinal research.

The ProQuest searches utilized a two dimensional search string, with both the "OR" and the "AND" conjunctions used to gather as many articles as possible for the review. The "OR" conjunction was used between the terms "physicians" and "doctors". The "AND" conjunction was utilized to incorporate the terms "CEO", "chief executive officer", and "leadership". For the Google Scholar database the two search phrases included "Why physician CEOs?" and "business versus physician executives". Of the thousands of abstracts procured, 200 were reviewed for relevance due to their classification as a journal article and their recent publication date (past the year 2000). Of the 200 articles, the majority were selected from the ProQuest reviews. Articles were then excluded if they could not classify within the three research question elements (quality, finance and employee engagement) or did not mention a hospital CEO within the study. The final 23 articles within the literature review fit all of the inclusion criteria and also included popular articles from the industry that were deemed necessary to mention despite publication year. **Figure 5** illustrates the systematic literature review process as a detailed map. The next section of this paper delves into the 18 articles identified and classifies them within the three research question categories.

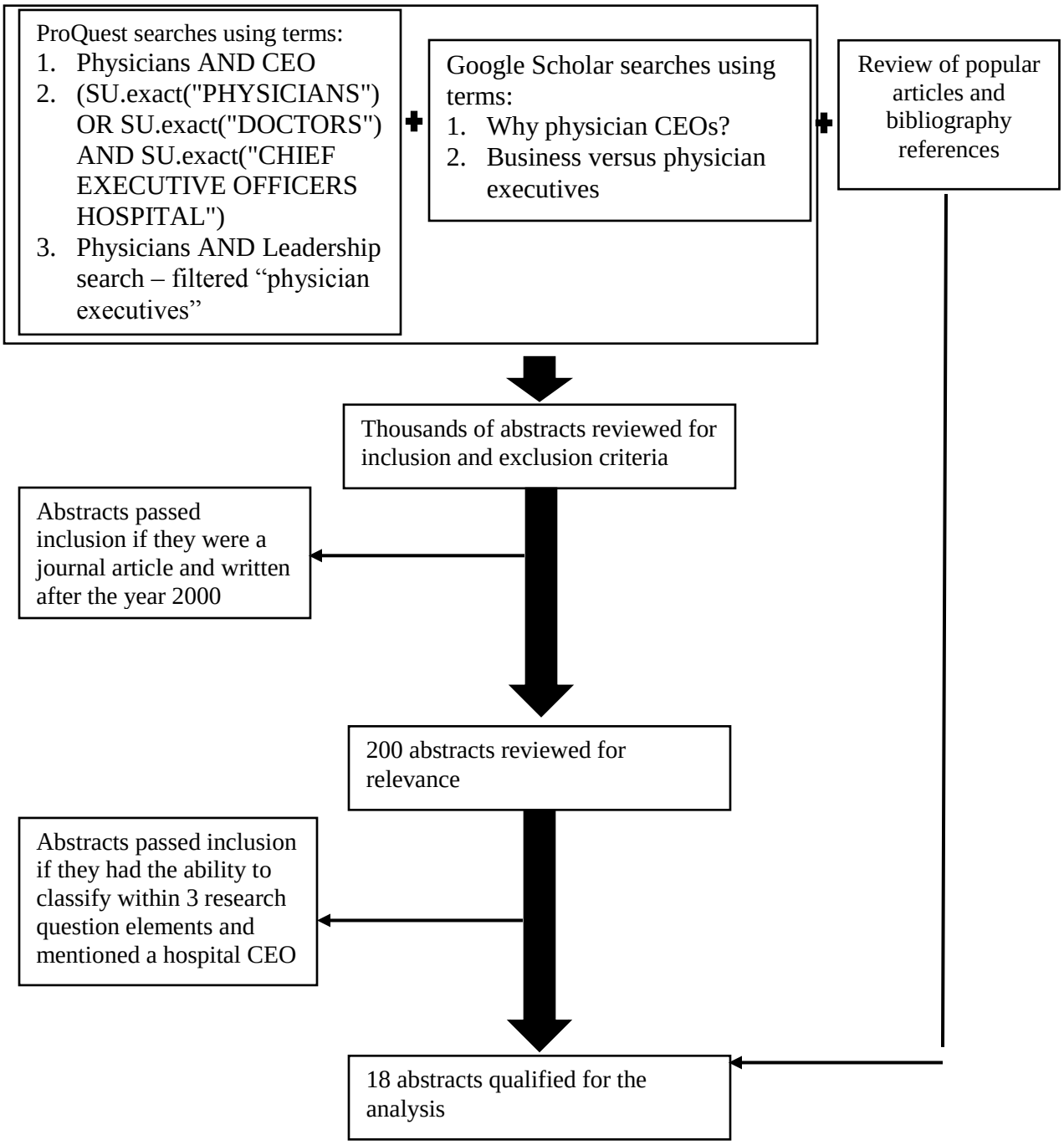

Figure 5. Detailed Map of the Literature Review Process

Chapter 4

Literature Review

The following literature review will analyze 18 health care industry articles that discuss the impact a hospital leader's educational background has on the organizational outcomes of quality, finance and employee engagement. The other 5 articles are mentioned in the discussion section. The conclusions gathered from the articles are interpreted through the four propositions developed in the leadership theory discussion. A breakdown of the articles supporting either educational background within each organizational outcome section is available in **Table 2**. This table displays a classification of the authors (last names) utilized in the literature review analysis. The names are classified by both the "effect" section and degree that the article supports. Three articles did not find any difference between educational degrees, so are placed in the "Does Not Support" section.

Table 2. Table of the Literature References Utilized in Each of the Three Sections of the Research Question

Research Question		
Quality		
Medical Degree	*Business Degree*	*Does Not Support*
1. *Proposition 1* and *4* 2. Goodall 3. Gunderman and Kanter[1] 4. Weber 5. Horton 6. Imison and Giordana[1]		
Finance (with Quality connection)		
Medical Degree	*Business Degree*	*Does Not Support*
1. Schultz and Pal[2] 2. Molinari et. al. 3. Dwyer[1, 2] 4. Rau	1. *Proposition 2*	1. Schultz and Pal[2] 2. Dwyer[2]
Employee Engagement/Relationships		
Medical Degree	*Business Degree*	*Does Not Support*
1. *Proposition 4* 2. Robeznieks[1, 2] 3. Angood and Birk 4. Lighter 5. Piper 6. Parayitam 7. Goler & Sorensen	1. *Proposition 3* 2. Bujak 3. Lee[1, 2] 4. Lazarus	1. Robeznieks[2]

[1]Mentions a need for training in order for mentioned results to occur
[2]Only partially supports the section

Sub-Chapter 1: Quality

A heightened national focus on quality of care due to government programs, such as Value Based Purchasing (VBP) and HAC Reduction, increase the debate over leadership education and qualifications. In order to improve hospital quality, and maintain a positive score within the governmental programs, many argue the need for physician leaders. The following section references five articles that address the subject of leadership background and its effect on hospital quality. Two of these articles are detailed in depth with references to the theories noted

above. All of the articles reviewed below support a positive effect of physician leadership on hospital quality (*Proposition 1* and *4*).

Goodall

Amanda Goodall's analysis of hospital quality rankings remains one of the few studies empirically evaluating the relationship between CEO educational background and organizational performance (2011). In the study, Goodall compiled a dataset of the top-100 ranked hospitals from U.S. News and World Report's "Best Hospitals" in 2009. The dataset only focused on three specialties, including Cancer, Digestive Disorders, and Heart and Heart Surgery. U.S. News and World Report scores the hospitals through an internally developed method called Index of Hospital Quality (IHQ). The IHQ evaluates quality performance scores within the three categories of structure, process and outcomes. Goodall then researched the educational backgrounds of the CEOs of the 100 hospitals within the dataset. Goodall classified the CEO as either a physician-leader or a non-physician manager. Within all three specialties, the IHQ mean score for hospitals with a physician-leader was significantly higher than the mean score for hospitals non-physician manager CEO. A hospital with a physician CEO was associated with an increase of eight to nine points on the IHQ scale. In the 'Honor Roll' group, a selection of the highest-ranking hospitals, 16 out of the 21 organizations had a physician CEO. Goodall admits that the findings only suggest causality, but argues that similar results on physician CEOs and quality outcomes support her conclusions. In order to strengthen causality, Goodall proposes the creation of a longitudinal study analyzing the quality scores of a hospital as the leadership changes from physician to non-physician mangers.

Goodall's results on the improved quality of hospitals with physician CEOs connects to the three theories guiding the interpretations of this literature review. As formulated in Proposition 1 of the research question, The Upper Echelons Theory suggests that physician leaders create an increase in quality performance due to their focus on patients and innovation (Hambrick & Mason, 1984). Goodall's study supports Proposition 1 by reporting a significant increase in quality scores for physician CEOs. Leadership Identity Theory also connects to Goodall's results by highlighting the importance of collective endorsement from followers, as mentioned in Proposition 4 (DeRue & Ashford, 2010). Medical outcomes, such as quality, are mostly generated by the followers with medical degrees. These individuals are more likely to collectively follow and support quality initiatives proposed by a relatable physician CEO, which results in better outcomes overall. Goodall acknowledges the power of collective endorsement by mentioning Falcone and Satiani's idea of physician-leaders earning support from followers due to "walking the walk" (2008, p. 92). Lastly, *Proposition 4*'s standpoint on Followership highlights the importance of effective organizational followers needing to feel equal to leaders (Kelley, 1988). The higher quality scores in organizations with physician CEOs might stem from the medical employees' acquiring a sense of equality with a medical leader, thus striving to improve performance as an effective follower.

Gunderman and Kanter

In a journal article by professors Gunderman and Kanter, the authors argue that the lack of physician leaders in hospitals presents an additional issue to the already turbulent healthcare sector (2009). The authors blame the absence of leadership training in medical schools, and a

fear of sacrificing clinical commitments as drivers for a lower amount of physician leaders. The lower amount of physician leaders within hospitals, specifically boardroom members such as the CEO, results in a lower focus on quality and patient health. Many important patient-related decisions, including resource allocation and organizational strategies, are made by executives who are likely to have little to no patient care experience. According to the authors, these executives tend to forget a hospital's ethical responsibility to the community by only focusing of financial elements. In addition, physician leaders improve quality by better understanding the processes that lead to inefficiencies and errors. As members of those intricate processes, physician leaders know where the problems truly arise and can effectively target the errors with appropriate organizational strategies. The authors argue that physician leaders are not only patient quality advocates, but are also allies to physicians frustrated with the business side of medicine. These frustrated physicians negatively impact the quality of patient care at the organization by jeopardizing patient safety. Physician leaders, who understand the frustrations of medicine, help alleviate stress in the medical employees by effectively addressing the mutual pain points. In total, Gunderman and Kanter believe that physician leaders can greatly assist in navigating organizations through the changes in healthcare by redirecting the focus of hospitals to patient care and quality.

Gunderman and Kanter's argument that physician leaders are more appropriately focused on patient care relates to the impact of Upper Echelon characteristics on strategic choices (Hambrick & Mason, 1984). As mentioned in Proposition 1 of this paper, leaders with medical backgrounds develop an enhanced patient-care focus due to the values inherent in the degree. This idea supports Gunderman and Kanter's demand for more physician leaders to improve quality in hospitals. The reference of physician leaders as allies to the medical staff connects to

collective endorsement found in Leadership Identity, and the sense of equality mentioned in Followership theory (*Proposition 4*). Yet again, these theoretical propositions, and this journal article, support the argument that physicians make better leaders within hospitals.

Conclusion of Quality

Goodall's study on hospital rankings and Gunderman and Kanter's in depth theoretical analysis were detailed fully due to the articles' credibility and formal positioning. Other informal articles were gathered during the literature review, which add to the points made above. Within an opinion piece for the magazine Physician Executive, author Weber also notes the prevalence of physician-led hospitals on the top 100 list (2001). Weber also mentions the success of the "Mayo model of medical leadership", which encompasses a formal dyad between medical and managerial positions throughout the organization. The model was created in support of physician leaders, allowing those individuals to always have the final say within the dyadic partnership. This informal observation about physician leaders in charge of the top 100 hospitals was made by Weber 10 years before Goodall's standardized study. Articles about physician leaders and improved quality were also published in other countries, including the United Kingdom. Richard Horton, from The Lancet newspaper, explains that many new governmental initiatives developed by the National Health Service (NHS) focus on an increase in physician leaders in order to improve the quality of health for UK citizens (2008). Authors Imison and Giordana argue that physician leaders are best for the UK due to their heightened quality focus and the previous success of these individual within the industry. Imison and Giordana reference Kaiser Permanente as an admirable institution, which employs many physician executives.

Although all of the studies approach the research question with different methodologies, the results remain mainly in support of physician leadership in terms of quality improvement. The arguments made by the authors of the five articles correspond with *Propositions 1* and *4*. All the authors argue that physician leaders are increasingly quality focused, which connects to *Proposition 1*. Goodall, Gunderman and Kanter, and Weber believe that physician executives improve physician engagement and thus quality, which corresponds with *Proposition 4*. Lastly, the articles by Goodall, and Gunderman and Kanter also support *Proposition 4*, which states that a hospital's higher quality is a result of the medical staff feeling equal to the executive team. The next section addresses the studies which incorporate both quality and financial outcomes related to a hospital leader's educational background.

Sub-Chapter 2: Finance (with Quality component)

A majority of the articles included within this literature review tie quality and financial outcomes together due to the increased influence of quality performance on financial reimbursement. The following section includes four articles that incorporate both subjects in the authors' analyses, with all the majority of the results suggesting that leaders with medical backgrounds improve hospital quality and finances. Two studies are detailed in depth, with the first study supporting the Upper Echelons Perspective. All of the journal articles support *Proposition 1* and fail to mention or support *Proposition 2*.

Schultz and Pal

Researchers Schultz and Pal conducted a controlled experiment in order to add to the existing studies on the strategic decision making differences between medically-trained and business-trained managers (2004). Schultz and Pal hypothesized that medically-trained senior leaders would focus more on quality based decision making, resulting in better quality for those organizations. In contrast, business-trained executives would use more financial information in the decision making process, generating better financial outcomes than the medical counterparts. Utilizing computer based simulations, the senior executive participants were asked to make resources allocation decisions while attempting to maximize net income and patient satisfaction. The researchers discovered only one statistically significant difference between the two educational backgrounds. Executives with medical training were more likely to base decisions on quality of care, which supports the original hypothesis of the study (Medical = 17, Business = 11.5, p =0.002). However, there was no significant findings to suggest that business-trained executives decide more in favor of financial information. Additionally, the researchers found no significant difference between the educational backgrounds in terms of the outcomes of net income, patient satisfaction and years in business. Schultz and Pal admit that the computer simulation in the study presents limitations to the results due to the lack of real world pressures. However, the researchers intend that the results help stimulate more empirical research on the educational background of hospital leadership.

The design and results of Schultz and Pal's study link primarily to The Upper Echelons Theory (*Propositions 1 & 2*), due to the focus on decision-making priorities of managers (Hambrick & Mason, 1984). The theory was a main driver of Schultz and Pal's hypothesizes for their experiment. In the beginning of the study, Schultz and Pal discuss the idea that a manager's

'upper echelons' can alter the strategic decision making process of those individuals. The researchers specifically focused on the educational background of the executives, believing that physicians would have a more patient-focus and business manager would focus more on finance. The results of the study empirically support The Upper Echelons Theory only to a certain extent. According to the results, a medical background can significantly influence one to make more quality focused decisions. This result only supports the first part of *Proposition 1* of the research question, and fails to support the possibility of increased quality outcomes due to a medical degree. However, *Proposition 2* receives no statistically significant support from Schultz and Pal's study. The executives with business backgrounds were not increasingly likely to make decisions based solely on financial information. Schultz and Pal's experiment most notably does not support the belief that managers with contrasting educational backgrounds generate different financial and quality outcomes. Schultz and Pal's results do not address the majority of the research propositions in this review.

Molinari et al.

The healthcare industry's increased focus on quality and cost of care has led to a shift in hospital governance board composition towards a greater number of physician representatives. Even though the reasoning behind the shift has lacked empirical support in the past, the trend continues based on the belief that physician board members improve the viability of the hospital. In order to address the lack of studies supporting this belief, researchers Molinari et al. assess the operating margins of 187 California hospitals with varying board compositions over a four year period (1995). The board compositions included no physicians, physicians from inside the

organization, physicians found outside of the organization, and both inside and outside physicians. Throughout the study, Molinari et al. utilized the Managerialist Theory and Agency Theory to interpret the effects of the board composition on the resulting operating margins. The Managerialist Theory supports the utilization of insider information as a tool to improve an organization, and the Agency Theory argues that insider informants distort the decision making process for personal gains. Of the 187 hospitals administered the California Health Facilities Commission and American Hospital Association Governance Survey, 38% of the organizations had no physicians on the governance board (Molinari et al., 1995). The hospitals with physicians on the board displayed a statistically significant increase in operating margin over the four year period (0.008, $p<0.001$), thus empirically supporting the Managerialist Theory. Additionally, inside and outside physician participation had the greatest positive effect on operating margin (0.02, $p<0.05$). This result supports both theories because the governance board receives key medical insider information, while also having the opinions of the outside physicians leveling out the personal incentives of the inside physicians.

Molinari et al. theorize that the improved operating margins for hospitals with physician participation on the governing board is a result of improved operational efficiency due to the increase of "operational knowledge and expertise necessary to make sound board decisions" (1995, p. 183). This theory does not directly support any of the theories or propositions developed within this literature review, but does discredit *Proposition 2* which argues that business degree leaders improve hospital financial outcomes. In general, the study by Molinari et al. supports the belief that physician leaders improve hospital outcomes. Unfortunately there is a major limitation of this study in terms of its applicability to this literature review. Molinari et al.'s experiment does not specifically focus on the effects of hospital CEOs, rather it analyzes the

governance board as a whole. However, the researchers note that the governing boards of all the hospitals in the study include the CEO.

Conclusion of Quality and Finance

The studies conducted by Schultz and Pal, and Molinari et al. represent formal experimentation on the effect of leadership education on hospital quality and financial performance. Two other articles by authors Dwyer (2010) and Rau (2013) add important propositions to this section without utilizing structured experimentation. Dwyer conducted a literature review gathering studies addressing the importance of medical managers today and the evolution of the role (2010). Of the journal articles analyzed there was large support for physician executives, which were found to improve patient care, strategic planning and cost control. These opinion and/or theoretical based journal articles were in support of *Proposition 1* and discredited *Proposition 2*. However, Dwyer repeatedly mentions a lack industry literature available and the absence of concrete evidence, which impairs the credibility of the literature review. Also, Dwyer mentions a few structured experiments that found no difference between the positive effects of medical managers and non-medical leaders on hospital performance. In general, Dwyer's article supports the theory that medical managers improve hospital performance, but concludes that these leaders still need business training in order to be successful (2010).

Rau's article looks at the ownership type of hospitals receiving Medicare's Value Based Purchasing (VBP) program incentive payment in 2013. Rau found that 122 of the 161 physician-owned hospitals are earning quality rewards, compared to 74% of all other hospitals being

penalized (2013). Additionally, the Medicare program is rewarding on average 0.21 percent more for each patient at a physician-owned hospital compared to .3 percent less for all other hospitals. The increase in financial returns due to the higher quality performance of physician-owned hospitals supports *Proposition 1* and contradicts *Proposition 2*. However, Rau notes that physician-owned hospitals have had problems with cherry-picking the best patients, and typically have lower volumes.

Of the four studies analyzed within the quality and finance section of this literature review, two articles strongly supported the improvement capabilities of physician leaders while the other two only partially supported *Proposition 2* of the research question. All in all, there was again a lack of support for leaders with a business education. Both Molinari et al.'s study on physician participation on a hospital governance board and Rau's review of VBP reimbursements directly supported *Proposition 1* of the research question. Shultz and Pal's decision-making experiment, and Dwyer's literature review partially support *Proposition 1*, but fails to link decision-making inclinations to outcomes and lack overall empirical evidence. The next section addresses the studies which reference the changes in employee engagement related to a hospital leader's educational background.

Sub-Chapter 3: Employee Engagement/Relationships

The employee engagement section of the literature review analysis revealed a more intense contention between those in support of physician leaders and business managers. Six articles argued that physician leaders improves employee engagement, which supports *Propositions 4*. However, one of the six articles only partially supported physician leaders and

mentioned a lack of influential difference between the degrees. Three journals contrastingly support managers with business degrees and the theoretical construct of *Proposition 3* by discrediting the capabilities of a physician leader. The nine journal articles are detailed within the following employee engagement section.

Physician Leaders Improve Employee Engagement

Both the Leadership Identity Theory and Followership support the idea that physicians have the potential to become more effective leaders in hospitals in comparison to business mangers simply due to their medical degree. The majority of staff within hospitals have a medical background, so these employees find a leader with a similar background increasingly relatable and credible. *Proposition 4* of the research question stems from the Leadership Identity Theory and suggests that a leader with a medical background will gain more acceptance from the employees and increase positive engagement in the organization. *Proposition 4* also relates to the Followership theory and claims that physician leaders create a sense of equality with their medical staff, which will generate effective followers who are committed to the organization. The following articles collected during the literature review process add further interpretation and backing for the research question propositions.

One of the pro-physician articles supports *Proposition 4* and argues that physician executives acquire more credibility on clinical issues than their business counterparts (Robeznieks, 2014). This credibility goes a long way with the clinical staff because, "the business of the business is medicine, and nurse leaders and physicians know the subject" (Robeznieks, 2014, pp. 15). Robeznieks predicts a great increase in physician executives in the

near future, with the high hospital CEO turnover rate presenting an opportunity to these new leaders. Already, top hospitals across the nation are selecting medical professionals for executive positions. However, the author warns that these physician leaders cannot approach management with the same independent attitude as seen in the medical field. The increase of physician executives must coincide with an increase in management training during the early years of a medical career (Robeznieks, 2014).

Angood and Birk highlight the increase in hospitals employing physician as major catalyst for an increase in physician leaders (2014). In possible connection to the changing healthcare environment, the amount of employed physicians has increased by 40% from 2001 to 2011. Angood and Birk argue that these newly employed individuals are increasingly likely to unite and follow a fellow physician leader. The authors quote another study on physician executives stating, "Teams led by leaders with extensive knowledge of their core business perform better than others" (Angood & Birk, 2014, p. 3). Another study referenced in the article found that organizations with greater amounts of physician leaders generated higher than average management scores (p. 3). Angood and Birk's focus on the increase of employed physicians generating a need for more physician leaders connects to *Proposition 4,* and the belief that physician executives are increasingly accepted by medical staff. Also, the authors note that physician leaders can act as "interface professionals who bridge medicine and management" (Angood & Birk, 2014, p. 3). Physician executives can better communicate with their peers, and have the ability to strengthen relationships between management and physician groups (Lighter, 2000). This creation of stronger management pathways relates to *Proposition 4* and the need for effective followers to feel equal to their leaders.

Physician leaders can also counter against poor employee engagement through a deeper understanding of how the medical staff works and thinks. Disruptive physician behavior can negatively affect quality of care, staff morale and overall financial performance (Piper, 2003). Many hospital CEOs, with limited medical experience, allow these behaviors to continue due to the generalized mentality that physicians always act obstinately. Physician executive have the potential to properly recognize and address disruptive physician behavior due to their familiarity with the profession (Piper, 2003). A management study conducted by researcher Parayitam found that a lack of competence-based trust in a leader can decrease employee implementation of new executive strategies and decisions (2010). The author explains that having a leader with a similar mentality of the followers can improve trust and encourage employee engagement in the implementation process (Parayitam, 2010). Physician leaders not only generate acceptance and equality, but also understand the mentality of the medical staff which additionally improves the employee engagement of these individuals.

A case study by Goler and Sorensen witnessed first-hand the power of physician leadership in improving employee engagement and productivity (2006). St. John's Clinic was increasingly failing due to problems with physician retention, productivity and compensation. In order to address these issues, the executive team decided to drastically reform the governance structure, so hired more physician leaders and created new medical executive committees. With the new governance in place, productivity increased by 9% and turnover decreased to less than 4% a year. The physicians within the organization felt heard and understood, so employee engagement improved overall (Goler & Sorensen, 2006). The sense of equality created by the restructuring of the governance team increased the amount of effective followers, which improved the organization's overall productivity (*Proposition 4*).

In total, the six articles detailed above support physician leaders due to the acceptance and sense of equality experienced by the medical staff following these individuals (*Proposition 4*). The employee engagement of the medical staff increases because, having a leader with a similar mentality makes the employees feel understood. However, the first article discussed by Robeznieks did not unequivocally support leaders with a medical background, and highlighted the need for proper management education for all physician leaders. The next section argues against physician leaders and in favor of business managers, suggesting that these managers are better equipped to organize and engage with the employees.

Business Managers Improve Employee Engagement

Within the review of Leadership Identity Theory, *Proposition 3* of the research question was developed. This proposition states that leaders with a medical degree have a difficult time internalizing the leadership role, which leads to the negative employee engagement outcome of mismanagement. Conversely, individuals with a business background have more training in management skills that can help create positive employee engagement structures. The following three articles expand upon *Proposition 3* with additional arguments against physician leaders.

The mentality and educational experience of medical staff, especially physicians, contrast with the skills need to properly lead (Bujak, 2002; Lee, 2010). Physicians embody a strong sense of autonomy and lack the experience of working within a team (Bujak, 2002; Lee, 2010). Not only do these individuals prefer working on tasks alone, they have a hard time evaluating and criticizing the abilities of their colleagues (Bujak, 2002; Lee, 2010). The lack of group attention and the difficulty with monitoring others provides challenges for physician leaders attempting to

embody this new role (*Proposition 3*). Additionally, physicians tend to focus more on personal patient improvement, and are less likely to look at the organization as a whole (Lee, 2010). This is a good mentality to have in terms of patient care, but this can hinder the success of a physician transitioning to a leadership role. The natural competitiveness of physicians influences them to distrust fellow physicians higher up the ladder (Bujak, 2002). This distrust lessens followership and engagement with the organizational goals. Even with all of these inherent difficulties associated with physician leaders, author Lee argues that a new management mentality can be taught to the new leaders (2010).

Mismanagement by physician leaders can also stem from these manager having difficulty giving up the patient contact side of their career (Lazarus, 2008). In order to take on the new management tasks, physician leaders are forced to limit patient encounters or even cut them out completely. The majority of physicians do not desire to give up seeing patients because that remains a major reason they chose a career in medicine. Sacrificing this major aspect could hamper a physician's internalization of the leadership identity (*Proposition 3*). Additionally, once the physician leader gives up seeing patients, the medical staff could view the new leader as a turncoat and no longer a fellow physician (Lazarus, 2008). This turncoat belief contradicts the points made in the previous section about the sense of equality generated by physician leaders.

The arguments against physician leaders within this section in essence promote the current management model involving business educated leaders. Physician leaders acquire an autonomous and competitive mentality during medical training, which limits the ability to manage properly at an organizational level. Physicians also find it difficult to give up seeing patients once taking on the management role, which can hinder internalization of the leadership

role (*Proposition 3*). The physician leaders who do end up decreasing patient care time can face resistance from fellow physicians that now view them as a turncoat.

Conclusion of Employee Engagement

In total nine articles are detailed with the employee engagement section of this literature review, with six supporting physician leaders and three arguing against. The six in support of physician leaders highlight the sense of equality the acceptance felt by the medical staff when managed by an individual with a similar mentality (*Proposition 4*). The other three article argue that physician leaders actually experience difficulty with internalizing the leadership role due to medical training, which leads to mismanagement (*Proposition 3*). Both an article in support of physician leaders and an article against stress the need for these leaders to acquire proper management training before becoming a successful leader.

Chapter 5

Discussion

Of the 18 articles reviewed within the three organizational outcomes of quality, finance and employee engagement, 15 of the papers supported leaders with a medical education over those with a business education. The articles within the section on quality supported physician executives in a manner that corresponds with *Propositions 1* and *4* of the research question. All the authors argued that physician leaders are increasingly quality focused (*1*); three papers claimed that physician executives improve physician engagement and thus quality (*4*); and two articles stated that a hospital's higher quality is a result of the medical staff feeling equal to the executive team (*4*). In the finance section, two articles strongly supported the improvement capabilities of physician leaders (*Proposition 1*) while five only partially supported that claim directly or via dismissal of any difference. The two with partial support fail to link decision-making inclinations to outcomes and lack overall empirical evidence. All in all, there was again a lack of support for leaders with a business education. Lastly, the employee engagement section detailed six articles in support of physician leaders due to the sense of equality and acceptance felt by the medical staff when managed by an individual with a similar mentality (*Proposition 4*). The other three articles in the employee engagement section argue that physician leaders actually experience difficulty with internalizing the leadership role due to medical training, which leads to mismanagement (*Proposition 3*).

Sub-Chapter 1: Limitations

Even though the concept of physician executives remains a hot topic within the health care industry today, there still is a lack of information to make definitive conclusions. The majority of articles available on the subject do not include concrete evidence on why one CEO is better than the other. The information is just not available to make concrete decisions. The theoretical constructs presented assist in the creation of opinions, but do not quantitatively support any conclusions. This lack of current literature limits the conclusions of this paper, but still provides a strong start into a thorough investigation of the subject at hand. Also, due to the lack of information on the connection between CEO education and organizational success, this study expanded out to include all forms of upper management. Without the expansion of the leadership definition, this thesis only included about ten articles for review. To fulfill a comprehensive literature review, the criteria required manipulation of the initial research question. However, the expansion of the leadership definition does not negatively affect the validity of this study, because the moderating nature of educational background can influence all forms of management. Lastly, five of the reviewed articles in support of physician executives argue a need for proper management training of these new leaders. These articles suggest that physicians are not ready to take on any management role until training is completed, thus weakening the conclusions in support of physician leaders.

Sub-Chapter 2: Future Considerations

Based on the limitations above, I recommend an increase in research on the subject of CEO education. Before creating any conclusions on either side of the debate, more quantitative

studies need to take place. Too many questions remain unanswered. Some researchers still believe that the educational background of a hospital CEO does not matter at all, as long as it is health care related (Matthews et al., 2013). While many in support of physician leaders argue a need for management skills (LeTourneau, 1997; Kingdig, 1997), a development of "clinical-fiscal performance methodologies" (Weil, 1997, p. 33), and a refocusing of physician's autonomous mentality (Falcone & Satiani, 2008). Physician management continues to rise exponentially, with 41.75% of managers today acquiring a medical background (LeTourneau, 1997; Storch & Northcott, 1989). In the future, these managers could reach the C-suite. If that remains the fate of health care leadership, then a focus on education and support for these medical individuals needs to increase.

Chapter 6

Conclusion

The first leadership theory discussed in this paper, the Upper Echelons Theory, suggests organizations with physician CEOs should experience more patient-focused decision making, which will result in greater quality results in comparison to their business counterparts. This concept is referenced as *Proposition 1* of the research question throughout the paper, with five articles supporting this proposition in the literature review. In contrast, non-medical managers typically generate a strong allegiance to the organization as a whole, which leads to more financial decision-making (Freidson, 1970; Kaissi, 2005). This idea becomes *Proposition 2* of the research question, which did not receive support from any of the literature reviewed. According to the Leadership Identity Theory, physician executives could have difficulty with internalizing the leadership role creating a mismatched leadership identification issue, which leads to organizational conflict and mismanagement of quality, finance and physician engagement. This idea becomes *Proposition 3* of the research question, which gains support from three articles reviewed. Contrastingly, the support and acceptance from the medical staff in the organization, which makes up most of the employee population, might prove difficult for a CEO with a business educational history. This concept is referenced as *Proposition 4* in the paper, and is supported by three articles in the quality section and six in the employee engagement piece. Lastly, the Followership Theory suggests that a physician background of a hospital CEO may create a sense of equality for certain medical staff members, and render them effective followers. The improved quality and employee engagement stemming from follower

effectiveness becomes an addition to *Proposition 4* in the paper, which receives support from two of the quality articles and six of the employee engagement references. All together 23 articles were reviewed in the literature review, with a majority of authors supporting physician executives.

In total, the results of this thesis adds certain insights to the limited quantitative information available on the controversy of the educational background of hospital CEOs. Additionally, many articles mentioned within this analysis argue a need for management training in order to properly prepare physician executives. In the future, researches must develop formal empirical analyses on the subject while also developing proper training mechanisms for these new leaders. All in all, the trend toward physician executives continues whether or not the idea is properly supported. If physicians remain the future leaders of the health care industry, then an increase focus on appropriate training mechanisms is required to ensure the success of these individuals.

BIBLIOGRAPHY

American College of Healthcare Executives [ACHE] (2014). Hospital CEO turnover 1981-2013. *American College of Healthcare Executives*. Retrieved from http://www.ache.org/pubs/research/ceoturnover.cfm

Angood, P. and Birk, S. (2014). The value of physician leadership. *Physician Executive, 40*(3), 6-20. Retrieved from http://search.proquest.com/docview/1535030585?accountid=13158

Brunninge, O. (2005). Organisational self-understanding and the strategy process. Doctoral dissertation, Jonkoping: Jonkoping International Business School.

Bujak, J. (2002). CEOs as saviors? *Physician Executive.* Retrieved from http://www.joebujak.com/CEOasSavior.pdf

Chan, K. and Drasgow, F. (2001). Toward a theory of individual differences and leadership: Understanding the motivation to lead. *Journal of Applied Psychology, 86,* 481-498.

Clark, J., Murphy, C. and Singer, S. (2012). How much do leaders matter? Organizational identity as a constraint on leader discretion.

Day, D. and Harrison, M. (2007). A multilevel, identity-based approach to leadership development. *Human Resource Management Review, 17,* 360-373.

Day, D., Harrison, M. and Halpin, S. (2009). An integrative approach to leader development: Connecting adult development, identity and expertise. *New York: Psychology Press.*

DeRue, S. and Ashford, J. (2010). Who will lead and who will follow? A social process of leadership identity construction in organizations. *Academy of Management Review, 35(4),* 627-647.

Dückers, M., Stegemanb, I., Spreeuwenberga, P., Wagner, C., Sanders, K. and Groenewegen, P.

(2009). Consensus on the leadership of hospital CEOs and its impact on the participation of physicians in improvement projects. *Health Policy, 91(3),* 306–313. Retrieved from http://www.healthpolicyjrnl.com/article/S0168-8510%2809%2900020-7/abstract

Dwyer, Alison J, MBBS, MBA, MHSM,F.R.A.C.M.A., F.C.H.S.M. (2010). Medical managers in contemporary healthcare organisations: A consideration of the literature. *Australian Health Review, 34*(4), 514-22. Retrieved from http://search.proquest.com/docview/849563702?accountid=13158

Falcone, R.E., and Satiani, B. (2008). Physician as hospital chief executive officer. *Vascular and Endovascular Surgery, 42 (1),* 88-94. Retrieved from http://ves.sagepub.com.ezaccess.libraries.psu.edu/content/42/1/88.full.pdf+html

Freidson, E. (1970). Profession of medicine: A study of the sociology of applied knowledge. *The University of Chicago Press*. Chicago.

Gardner, W. and Avolio, B. (1998). The charismatic relationship: A dramaturgical proposition. *Academy of Management Review, 23,* 32-58.

Goler, M. R., & Sorensen, D. E. (2006). Physician governance-the strength behind st. john's clinic. *Physician Executive, 32(1),* 52-8. Retrieved from http://search.proquest.com/docview/200066994?accountid=13158

Goodall, A. (2011). Physician-leaders and hospital performance: Is there an association? *Social Science & Medicine, 73(4),* 535-539. Retrieved from http://ftp.iza.org/dp5830.pdf

Gunderman, R. and Kanter, S. (2009). Proposition: Educating physicians to lead hospitals. *Journal of the Association of American Medical Colleges, 84,* 1348-1351. Retrieved from http://journals.lww.com/academicmedicine/fulltext/2009/10000/proposition__educating_physicians_to_lead.16.aspx

Horne, J. (2011). The philosophical foundations of leadership. *Leadership-central*. Retrieved from http://www.leadership-central.com/philosophical-foundations-of-leadership.html#axzz3OFt98rvx

Horton, R. (2008). The Darzi vision: quality, engagement, and professionalism. *The Lancet, London NW1 7BY, UK*. Retrieved from http://www.sciencedirect.com.ezaccess.libraries.psu.edu/science/article/pii/S0140673608609630

Imison, C. & Giordano, R. (2009). Doctors as leaders. *British Medical Journal, 338,* 979-980. Retrieved from http://www.jstor.org.ezaccess.libraries.psu.edu/stable/20512720?seq=2#page_scan_tab_contents

Kaissi, A. (2005). Manager-physician relationships: An organizational theory proposition. *The Health Care Manager, 24(2),* 165.

Kelley, R. (1988). In praise of followers. *Harvard Business Review*. Retrieved from https://hbr.org/1988/11/in-praise-of-followers

Kempster, S. (2006). Leadership learning through lived experience: A process of apprenticeship? *Journal of Management & Organization, 12(1),* 4-22.

Kindig, D. A. (1997). Do physician executives make a difference? *Frontiers of Health Services Management, 13(3),* 38.

Langabeer, J., & Yao, E. (2012). The impact of chief executive officer optimism on hospital strategic decision making. *Health Care Management Review, 37*(4), 310. Retrieved from http://search.proquest.com/docview/1038819594?accountid=13158

Lazarus, A. (2008). Adopting the CEO model--why physician executives should not be required

to practice medicine. *Physician Executive, 34(4)*, 24.

Lee, T. (2010). Turning doctors into leaders. *Harvard Business Review*. Retrieved from http://www.bumc.bu.edu/facdev-medicine/files/2010/10/HBR-Doctors-into-Leaders-10-26-10.pdf

LeTourneau, B., & Curry, W. (1997). Physicians as executives: Boon or boondoggle? *Frontiers of Health Services Management, 13(3)*, 3. Retrieved from http://net.acpe.org/Resources/Articles/Physicians_As_Executives.pdf

Lighter, D. (2000). The path to management: Physician executives in health care. *Hospital Physician*, 64-68. Retrieved from http://wwvv.turner-white.com/pdf/hp_may00_phyexec.pdf

Matthews, E., Collins, K. S., Collins, S. K., & McKinnies, R. C. (2013). Chief executive officers in US hospitals: A reexamination of workforce demographics and educational issues. *The Health Care Manager*, *32*(1), 69-76. Retrieved from http://search.proquest.com/docview/1499085816?accountid=13158

Merriam-Webster (2014). Definition- Lead. *An Encyclopedia Britannica Company.* Retrieved from http://www.merriam-webster.com/dictionary/lead?show=0&t=1420741769

Molinari, C., Alexander, J., Morlock, L., & Lyles, C. A. (1995). Does the hospital board need a doctor? the influence of physician board participation on hospital financial performance. *Medical Care*, *33*(2), 170-185. doi:10.1097/00005650-199533020-00005

Parayitam, S. (2010). The effect of competence-based trust between physicians and administrative executives in healthcare on decision outcomes. Management Research Review, 33(2), 174. doi:10.1108/01409171011015856

Piper, L. E. (2003). Addressing the phenomenon of disruptive physician behavior. The Health

Care Manager, 22(4), 335.

Rau, J. (2013). Doctor-owned hospitals prosper under health law. *Kaiser Health News*. Retrieved from http://kaiserhealthnews.org/news/doctor-owned-hospitals-quality-bonuses/

Reeleder, D., Goel, V., Singer, P. and Martin, D. (2006). Leadership and priority setting: The proposition of hospital CEOs. *Health Policy, 79(1),* 24 – 34. Retrieved from http://www.healthpolicyjrnl.com/article/S0168-8510%2805%2900272-1/abstract

Robeznieks, A. (2014). Hospitals eye docs for CEO roles as focus on quality and value grows. *Modern Healthcare, 44*(19), 18-9. Retrieved from http://search.proquest.com/docview/1524697936?accountid=13158

Saint, S., Kowalski, C., Banaszak-Holl, J., Forman, J., Damschroder, L., and Krein, S. (2010). The importance of leadership in preventing healthcare-associated infection: Results of a multisite qualitative study. *Infection Control and Hospital Epidemiology, 31,* 901-907. Retrieved from http://www.jstor.org/stable/10.1086/655459

Schultz, F. C., Pal, S., & Swan, D. A. (2004). Who should lead a healthcare organization: MDs or MBAs? *Journal of Healthcare Management, 49*(2), 103-16; discussion 116-7. Retrieved from http://search.proquest.com/docview/206735940?accountid=13158

Shamir, B., House, R. and Arthur, M. (1993). The motivational effects of charismatic leadership: A self-concept based theory. *Organization Science, 4*, 577-594.

Stoller, J. (2009). Developing physician-leaders: A call to action. *Journal of General Internal Medicine, 24(7),* 876–878. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2695517/

Storch, J. L., & Northcott, H. C. (1989). Hospital administrators as professionals: A study of

occupa. *Hospital & Health Services Administration, 34(4),* 507.

Thornton, P. (2002). The rise of the corporation in a craft industry: Conflict and conformity in institutional logics. *Academy of Management Journal, 45,* 81-101.

Thornton, P. and Ocasio, W. (2008). Institutional logics. *The Sage handbook of organizational institutionalism.*

Weber, D. O. (2001). Physicians lead the way at America's top hospitals. *Physician Executive, 27(3),* 24. Retrieved from Business Source Premier, EBSCOhost.

Weil, T. P. (1997). Physician executives: Additional factors impinging on their future success. *Frontiers of Health Services Management, 13(3),* 33.

ACADEMIC VITA

Lauren McManemin

99 Lurline Drive, Basking Ridge, NJ 07920
(C) (908)210-6093
lauren.mcmanemin@gmail.com

HEALTHCARE EXPERIENCE

The Pennsylvania State University December 2014 - Present
Health Policy and Administration Research Assistant

- Working on two patient safety research projects under a grant from the Center for Health Organization Transformation (CHOT)
- Conducting literature reviews and analyzing sample data from our clinical partner within SPSS

Cleveland Clinic May 2014 - August 2014
Transplant Center Graduate Student Intern

- Developed a staffing model and budget dashboard utilizing comparisons to national metrics that disproved the executive team's original belief of staffing inefficiencies within the department and forced the team to reevaluate the proposed budget cuts
- Assisted in the creation of a new Quality Assessment and Process Improvement (QAPI) dashboard in compliance with recent UNOS and CMS initiatives, which was launched throughout the entire department
- Generated a financial proforma for the potential adoption of an Ex-Vivo service line that was included in the project proposal currently under review
- Programmed a new Transplant Center Data Request Log with a survey application in order to track the dissemination of patient information, which was under test trials by the end of August

JFK Medical Center June 2013 - August 2013
Process Management and Operations Intern

- Created a database that evaluated the efficiency of the Emergency Department utilizing a multitude of collected throughput times for various activities, which discovered process inefficiencies in regards to patient transportation
- Conducted process improvement projects including a "transport turnover" analysis that resulted in the discovery of an inefficient employee
- Presented results and suggestions for improved efficiency to executives

QualCare Inc. May 2012 - August 2012
Client Services Intern

- Created the company's new client satisfaction survey that collected helpful suggestions from top clients, which fueled several initiatives
- Officiated meetings and interviews with various directors and program leaders about client satisfaction

LEADERSHIP EXPERIENCE

President August 2013 – May 2014
Health Policy and Administration Club

Dining Commons Crew Leader August 2012 – October 2013
Penn State Food Services

THON Chair August 2012 – May 2013
Health Policy and Administration Club

Executive Chair August 2011 – May 2013
Alumni Association's Blue and White Society

EDUCATION

The Pennsylvania State University, University Park PA

Master of Health Administration (Expected 2015)
Bachelor of Science – Health Policy and Administration (Expected 2015)
Minor in Industrial/Organizational Psychology

HONORS

- Finalist in the Ohio State Case Competition, 2014
- Accepted into the MHA Integrated Undergraduate-Graduate Program, 2013
- The Pennsylvania State University's Schreyer Honors College, 2012 - Present
- Health and Human Development Honors Society, 2010 - Present
- Dean's List, 2010 - Present
- Awarded Six Sigma Yellow Belt, 2013

SKILLS

- Proficient in Microsoft Office including PowerPoint, Word, Excel, and Access 2010
- Studied SAS, STATA, SPSS, Photoshop CS6, and REDcap