A SHIFT IN HEALTHCARE: WHY DO PHYSICIANS CHOOSE HEALTH SYSTEM EMPLOYMENT OVER INDEPENDENT PRACTICE?

A Thesis
by
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Submitted to the Graduate School
Appalachian State University
in partial fulfillment of the requirements of the degree of
MASTER OF BUSINESS ADMINISTRATION

December 2012
Walker College of Business

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Foreword

The research detailed in this thesis is written in conformance to the strict APA manuscript requirements.

Abstract

A SHIFT IN HEALTHCARE: WHY DO PHYSICIANS CHOOSE HEALTH SYSTEM EMPLOYMENT OVER INDEPENDENT PRACTICE? (December 2012)

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This thesis analyzes the movement of physician employment from independent practice toward health system employment within the United States healthcare industry through a non-statistical meta-analysis of current literature. A set of factors that influence physicians' choice of employment type has been identified as: economic, industry, institutional, identity, family, generational, gender, scarcity, quality-of-life, power, and location. The findings of this thesis show that the current state of physician employment is a little-understood phenomenon. This lack of knowledge is noteworthy, considering for America to successfully reform healthcare, the state of physician employment must be thoroughly understood. If we can increase our understanding then we can hope for successful healthcare reform which is increased access and quality, while decreasing cost within the healthcare industry. It is clearly a matter of life or death for patients when the level of access, quality, and cost of healthcare are on the line.

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Introduction

> In 1933 Dr. Olds bought a saddle horse and began riding to house calls. At first the Directors were skeptical. Then a pregnant woman from North Side, about to miscarry, sent an urgent message. Dr. Olds saddled Jack, galloped directly across the frozen Harbour and was at her side in six and one-half minutes. After this, the Directors agreed to buy two more horses and he trained his assistants to the saddle. A "Hospital Horse" tethered to a fence meant things were being taken care of. It was a natural development. John knew and loved horses, and hated wasting time. House calls on foot took too long, as motor vehicles were scarce and roads few and rough. A telegram from Herring Neck easily ate up a day in the summer and not much less in the winter. Thus for a few years, until motorcycles and Jeeps came along, Dr. John Olds on horseback was a common sight around Twillingate, winter and summer. The image of him cantering along, black bag bouncing behind the saddle, curly hair whipping in the breeze, crackies yapping behind him, became the Bay's icon of mercy. (Saunders, 1997, p. 108)

Before the early 1900s, patient's homes were often the site at which medical care was received. During this time an independent physician could be found going from house to house (via horse or car) treating his or her patients. As the years progressed, the standardized site in which medical care was provided shifted to the medical provider's office or hospital. Years after this shift, the number of independent physicians started to decline.

This movement benefited both the patients and the physicians because more patients could be treated; the physicians did not waste time traveling; therefore, they were able to treat more patients each day.

As the years passed, more laws, regulations, and other changes were enforced in the healthcare industry creating significant challenges for physicians and health care professionals. According to a 2010 Accenture annual report entitled "Physician Employment Trends" physician employment apart from independent practice will continue to rise, especially as there has been a continual decline in privately-owned physician practices of 2% over each of the past 20 years. According to the annual report, in 2008 hospitals owned more medical practices than physicians. This obviously points to a new wave of physician employment within the healthcare industry. One key challenge hinges on local market dynamics (Francis, 2011).

The ever-changing healthcare industry presents many challenges to physicians, including healthcare reform, market share, work-life balance, financial security, call schedules, and other risks associated with working in the healthcare field. As a result, many independent physicians have joined a group of physicians or health system for employment. It is imperative to understand the reasoning and longevity behind this shifting state of physician employment if America will indeed become the leader in healthcare access, quality, and cost. There was a similar shift in the 1980s and 1990s (Dorschner, 2012), but it failed to stay in place. In turn, the healthcare industry experienced very few improvements in access, quality, and cost. If America can better understand the trends behind physician employment, then healthcare professionals and physicians can make more accurate and strategic decisions that directly impact the care that patients receive.

Background

An independent physician's practice is a site in which the physician is the owner of the medical practice. Henceforth, the terms "independent physician practice" and "solo-private practice" will be considered interchangeable terms for the purpose of this study. A "group practice" occurs when three or more physicians legally own the medical practice and provide medical care to patients (Havlicek, 1999). An "employed physician" is a physician that provides medical care at a medical practice, but the hospital or health system owns the practice. Physicians may have any combination of focus and specialty within any of the above mentioned practice settings.

Physicians predominately practiced medicine independently until the late 1980s and early 1990s. At that time, there was a shift from independent practice to group and system based practices due to the healthcare industry's goal to integrate healthcare delivery and more closely manage healthcare (Gerber, 2012). The reasoning for the shift was clear; during the 1980s and 1990s, physicians were told (and led to believe) by healthcare professionals, peers, and other parties with a stake in healthcare, that in order to continue practicing medicine, they needed to join a larger group or system (Cohen, 2011). Physicians were told this because health maintenance organizations (HMOs) were being rapidly created by health insurance companies, governmental insurance companies, and other healthcare professionals. During the 1980s and 1990s, it was thought that physicians who remained independent would not have any control or input in patient care (Cohen, 2011). This was because the goal of HMOs was to decrease medical costs and manage actual care. Thus, HMOs were larger than independent physicians, meaning the HMOs made the patient care decisions, not the independent physician (Blickstein, 2004).

However, the shift from independent practices to hospital employment did not last. It has been suggested, that a reason for the temporary trend was that hospital management did not do a sufficient job of supervising the acquired physicians (Dorschner, 2012). "Acquired physicians," for the purpose of this study, mean physicians who have chosen to leave the independent setting and become employed by a hospital. It is evident that hospital management did not create a mutually beneficial pay structure with acquired physicians, "unlike in the 1990s, hospitals now typically use productivity-based compensation instead of salaried arrangements" (O'Malley, Bond, & Berenson, 2011, para. 5). Others tend to think that the shift did not last because the HMO plan was insufficiently implemented (Elliott, 2012), or because "…decline was reflected in a decreased ability of managed care to restrain costs, a major reason for the increased use of this form by payor during the 1980s and 1990s. As a result of this development a major barrier to healthcare spending was removed, and per capita expenditures began to rise" (Lagoe, Aspling, & Westert, 2005, p. 4).The temporary trend during the 1980s and 1990s would not be the final physician employment shift. However, did America learn its lesson from the first employment shift?

Current State of Physician Employment

It appears that physicians are again now shifting from independent practice toward other forms of practice settings, such as group or even health system employment. According to King (2012, para. 9), "…although specific figures are hard to come by, health policy experts agree there has been a clear trend over the past few years for U.S. physicians to give up practicing solo or in small, independent offices." Some speculate regarding reasons for the shift, including, "shrinking insurance reimbursements, changing regulations, and the rising business and drug costs" (Kavilanz, 2012a, para. 5) and "fee constraints, the

formation of accountable care organizations (ACOs), and other delivery system forces" (Iglehart, 2011a, para. 1). As for physicians who desire to remain independent, the financial stressors are very heavy, "government-backed loans to doctors have surged more than 10-fold in the past decade" (Kavilanz, 2012b, para. 1). While the aforementioned factors may affect physicians' employment decisions, they are merely speculation. No factual research-based studies regarding physician employment between November 2008 and March 2012 have been found; thus, it is a poorly understood issue.

Other factors that may affect physicians' choice of practice setting include family, identity, institution, and industry. Family factors are elements such as working hour preference, spouse and children influences, and various other work-life balance factors (Iglehart, 2011a). Identity factors for physicians are items such as personal preference or being associated with a health system compared to being independent or in a group setting. Autonomy can potentially play a significant role in the physician identity and may ultimately be the end employment decision for a physician (Burling, 2012). Institutional factors are anything within the institution of healthcare that alters a physician's employment decision. This can be relative to the Hippocratic Oath (the physician's responsibility to provide ethical patient care), to ensuring optimum quality of care, access to healthcare, or even costs for healthcare as a whole (Francis, 2011). Industry factors include insurance companies, government intervention, market share, quality improvement metrics, and electronic medical records. (O'Malley et al., 2011).

Several governmental actions have affected the physician's choice of practice setting. On March 23, 2010 the Patient Protection and Affordable Care Act (The White House, 2012) was signed into law (Appendix A). The Patient Protection and Affordable Care Act is a healthcare law offering "clear choices for consumers and provides new ways to hold insurance companies accountable" (US Department of Health and Human Services, 2012a, para. 1). The act aims to ensure that all Americans have sufficient access to care, while also focusing on being a leader in quality and lowering cost. The Affordable Care Act will alter insurance reimbursements for physicians and focus more stringently on quality and outcomes of care. The Patient Protection and Affordable Care Act affects physicians' choice of practice setting because the act requires physicians to provide various quality, cost, and access statistics to the government and to the public. This is very costly for any health system but is more challenging for independent physicians. The costs can be spread out among multiple physicians if they are in a group or employed by a health system.

On February 17, 2009 the American Recovery and Reinvestment Act (Anderson, 2010) was signed into law. Included in this act is the Health Information Technology for Economic and Clinical Health (HITECH) Act (Appendix B). According to the U.S. Department of Health & Human Services, Health Information Technology, the HITECH act encourages healthcare entities to convert into more efficient health information technology, also known as electronic health records (EHR). The act is used to create an electronic flow of health information between the providers and the patient, ultimately increasing the quality of care, while also decreasing costs. According to the U.S. Department of Health and Human Services, Health Information Technology, the goal of using EHR is to decrease the costs

associated with paper medical records and to increase the quality of medical information among the entire healthcare institution.

Of the 22 billion dollars (devoted in 2009 to HITECH), 19.2 billion is allocated strictly to incentivize physicians and hospitals transition to approved EHR systems (U.S Department of Health and Human Services, (n.d.)). Physicians and hospitals across America are currently voluntarily adopting an EHR system. According to the article, "Hitech Act," until 2015 physicians and hospitals can receive larger Medicare reimbursements for the early transition to an approved EHR system. After 2015, healthcare entities will be financially penalized through Medicare reimbursement rates if they have not submitted the appropriate data supporting their EHR transition. EHR systems are very expensive, thus independent and small group healthcare providers are searching for cost sharing strategies. The HITECH act is a financial burden on independent physicians, thus some are creating larger physician groups or becoming an employee of a health system. This common strategy helps absorb the costs that an independent physician sometimes cannot afford.

In 1992, the Stark Law (Appendix C) was signed by legislation and became law. The Stark Law has had numerous revisions over the years, the most current being the Ancillary services exception change, signed March 23, 2010. The Stark Law protects patients by prohibiting physicians to self-refer patients for their own financial gain (Stark Law, 2010). The Stark Law removes the "potential conflicts of interest from physician decision making" (Stark Law, 2010, para. 5). Though the Stark Law has evolved since 1992, the main focuses have been to ensure appropriate use of services and to protect the patient. According to the GE healthcare article "The Stark Law and Diagnostic Imaging Services," it is important to note:

> The Stark Law prohibits physicians from making referrals for a "designated health service," payable by Medicare or Medicaid, to any entity with which the physicians have a financial relationship. A financial relationship means either an ownership interest or a compensation arrangement. The law is wide-ranging. For example, a physician's own practice or group practice may be an entity to which referrals are prohibited. Penalties for violating the Stark Law include denial of payment for the service, civil monetary penalties, or even the possibility of being excluded from the Medicare or Medicaid programs. (Stark Law, 2010, para. 2)

Stark Law affects independent physicians and small groups because it is expensive to ensure that they are continually meeting the requirements of the law. It is also a challenge to ensure that physicians do not have any inappropriate contracts with health systems or groups. This is challenging because contracts can often be structured in a way to incentivize the physician for more productivity (tests, services, etc.) and there is a fine line between appropriate and inappropriate referral patterns. It is becoming more common for physicians to join a health system and let their legal team ensure compliance, instead of the independent physician spending valuable resources on compliance assurance.

Previous Research

An extensive search was conducted for previous research that has examined how and why physicians choose different practice settings. The goal of this thesis was to locate all of the past research and build this research upon that, very similar to a traditional literature review. The two search engines utilized were all of the EBSCO databases and Google

Scholar. The total returned articles were 417,420. An exhaustive sampling of the results provided only three relevant previous research articles.

The first research article was "Why Physicians Choose Different Types of Practice Settings" by Fredric D. Wolinsky (1982). According to Wolinsky, physicians have three options for practice settings (a) solo practices, (b) small group practices, and (c) large group practices. Physicians' practice setting decisions are based on sociodemographic, environmental, and attitudinal characteristics (Wolinsky, 1982). The article concludes claiming attitudinal characteristics carry the most weight in physician practice setting decisions. Wolinsky's research (1982) fails to include health system employment as an option for physician practice setting decisions. Wolinsky does not include various economic, industrial, and institutional theoretical factors as components that may influence physicians' practice setting decisions. One important finding by Wolinsky is that the solo practice setting is unstable for physicians.

Another article, written by Burns and Thorpe in 1993, is "Trends and Models in Physician-Hospital Organization." According to Burns and Thorpe, there are various economic forces encourage new forms of hospital and physician relationships. In 1993, it was evident that these new organizational relationships were not being investigated or reported on in healthcare executive literature (Burns & Thorpe, 1993). Burns and Thorpe (1993) clearly insinuate that physicians chose health system employment due to insurance companies, reimbursement rates, administrative costs, tighter licensing or other regulatory restrictions, and the cost of operating practices. Burns and Thorpe (1993) do not include personal factors (i.e., work-life balance, family, and identity) that may influence physician practice setting choices. Burns and Thorpe (1993) do not include physician group

employment as an option for physician practice setting. These two gaps, including physician personal factors and the physician group employment outcome, in their research create an incomplete picture as to all the reasons why physicians choose health system employment.

The final article, written by Kletke, Emmons, and Gillis and entitled "Current Trends in Physicians' Practice Arrangements," was published in 1996 in The Journal of the American Medical Association. According to Kletke, Emmons, and Gillis, physicians were: employee physicians, self-employed independent physicians, or group physicians. The timeframe for the study was between 1983 and 1994. Over the 11 year study span, the studies 47,000 participants reported a 20% increase in health system employment (Kletke et al., 1996)." The only factors in the employment shift discussed were that a large segment of physicians were of a younger age and physicians followed increases in pay. This article fails to expand in detail on exactly why physicians chose health system employment between 1983 and 1994. It does conclude that there was a shift in employment, but it does not explain the reasoning for the shift or identify any of the factors associated with the shift.

The fact that only three out of 417,420 previously researched articles were relevant to physician employment trends clearly demonstrates that this is an under-researched area. To date, there is no current research on how and why physicians choose different practice settings, which proves there is a significant gap in the research. The presence of previous research in the 1980s and 1990s does show the continuing importance of this issue over time. However, there has been no published research in this area within the twenty-first century.

Purpose of Research

The purpose of this research is to address the following research question: Why do physicians choose health system employment over independent practice? Rational choice theory may help us understand why physicians choose one practice setting over another. During the employment decision period between independent or health system employment, physicians will take into account personal preferences and behaviors for the best personal outcome, which is what the premise of rational choice theory is built. The decisions that physicians make between independent practice and health system employment should be closely observed by healthcare providers, healthcare professionals, and all individuals that utilize the United States healthcare system.

It is important that healthcare providers pay attention to physicians' reasoning to choose health system employment over independent practice. The decision could ultimately affect the quality of care patients receive and even the financial viability of a medical practice. This research question is of particular interest to healthcare professionals because they are the individuals who are responsible for strategically ensuring that health systems are successful. This includes the recruiting and retention of physicians within the health system. Healthcare professionals understand that the US is on target for a vital shortage of physicians within the United States (Wilson, 2011). According to Wilson (2011), the President of the American Medical Association, every eight seconds a baby boomer turns 65, which means a continual increase in the utilization of Medicare. Dr. Wilson also points to the anticipated shortage of 125,000 physicians by 2025. If this shortage indeed materializes, no system wants to find that it is unable to provide optimum quality of care while meeting the access

needs of its community. Furthermore, if this shortage materializes, Americans might not be able to find efficient access to healthcare needs.

Individuals who use the healthcare system within America are considered patients. The reason that physicians' practice setting decisions should be closely monitored by patients is that it directly affects the quality, timing, location, resources, and cost of the care that they receive. Additionally, due to the fact that America is on target for a significant shortage of physicians (Wilson, 2011), individuals seeking medical care could be faced with access and quality challenges. Any patient who desires the highest level of quality healthcare, with the lowest possible cost, needs to stay current on this topic. It is currently unclear what effect physician employment versus independent practice has on quality, timing, location, resources, and cost of healthcare. This thesis will lay the foundation to better understand this issue. In order to sufficiently address my research question, a comprehensive meta-analysis of the literature was conducted.

Thesis Organization

First, I will present my Research Methodology, which is a qualitative meta-analysis of current literature. Then, I will present my Theoretical Foundation, which is built upon rational choice theory. Next, I will present my Data Collection, which is a road map depicting exactly how the information was collected and synthesized. Following Data Collection is Data Analysis, where the data collection methods are discussed and the various methods to ensure accuracy within data collection. Then I will present the Results, which provides extensive detail for each data point collected, including the top reasons why physicians choose health system employment over independent practice settings. Following

the Results section, is Future Research, which explains how this thesis will serve as a foundation and shows the varying types of future research needed to better understand the physicians' employment decision. The final section is Conclusions, which summarizes the main point(s) and revisits the overarching theme(s) of this thesis.

Research Methodology

I chose meta-analysis because the reasons why physicians' choose health system employment over independent practice is a poorly understood phenomenon and an under-researched area. There is some anecdotal information available behind the factors that sway physicians' employment decisions, yet whether there is any firm evidence remains unclear. Thus, I utilized meta-analysis to compile, track, and review current findings and factors to show the reasons that physicians choose health system employment over independent practice.

During my literature review process, I quickly realized that there was no up-to-date research investigating why physicians choose one employment model over another. A significant number of articles depicted stronger cases for certain factors affecting physician employment; however, the factors differed from one article to the next. Thus, it was determined that it was crucial to compile the most relevant articles that would allow me to identify factors behind physician employment. In addition, this selection of articles would provide the opportunity to track the physician employment outcome and to clearly show which employment model physicians are choosing (see Figure 1).

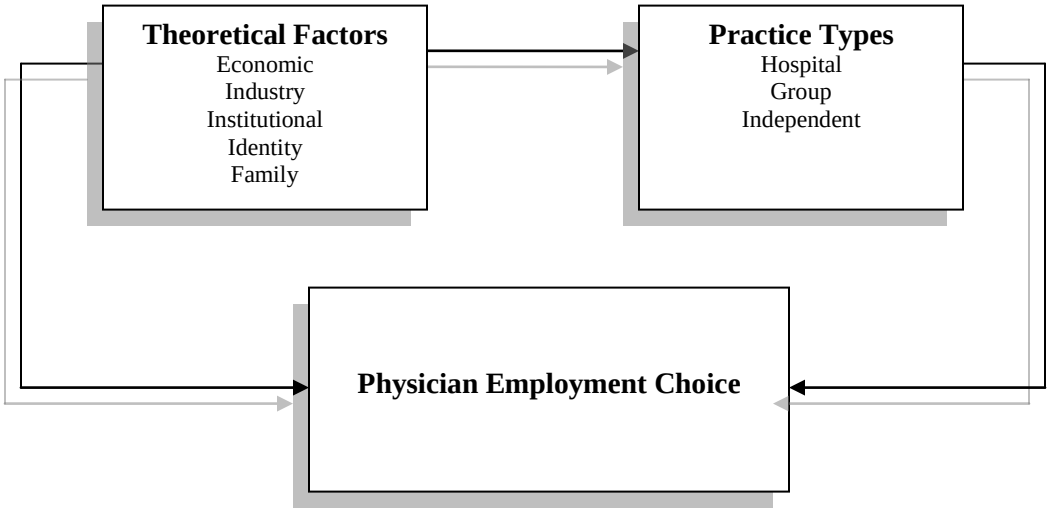

Figure 1. Conceptual model. The relationships between choice factors, practice types, and physician choice outcomes.

The physician employment research begins with certain a priori assumptions, depicted in Figure 1. This research assumes that there are discoverable relationships between the choice factors considered by physicians, the various types of physicians' practices, and the ultimate outcome in a physician's choice of employment. However, this study is exploratory in that the literature to date does not lend itself to the development of precise hypotheses concerning the specifics of these relationships. Thus, I begin my inquiry at a broad level of analysis and seek to analyze the literature to provide insights into the more specific nature of these relationships.

Theoretical Foundation

Rational choice theory is based on the premise that individuals are swayed by personal preferences when making their decisions (Green, 2002). Rational choice theory is founded on three main contributory concepts: First, people's behaviors are founded upon rational calculations; second, people utilize rationality during decision making; and third, these decisions or choices have a goal to ensure optimum benefit or gain (Rational choice theory, 2012). Physicians often unknowingly use rational choice theory when making their practice or employment decisions. For the purpose of this research, rational choice theory is a fitting foundation; it is through rational choice theory that physician's and healthcare professionals will clearly understand factors that influence physician's decisions between independent practices versus health system employment.

Rational choice theory suggests that there are certain factors that influence decisions such as the decision a physician makes between independent practice and health system employment. For the purpose of this research, some of the factors relative to rational choice theory and identified in the literature that can potentially influence the physician decision include: economic and industry (O'Malley, et al., 2011), institutional (Francis, 2011), identity (Burling, 2012), and family (Iglehart, 2011a).

Economic theory involves rational choice theory, which suggests that individuals frequently make decisions based on economic factors (Akbari, 2005). Transaction cost economics theory consists of transaction costs and production costs (Akbari, 2005). Transaction costs

are very important in decision making and consist of "all the information processing necessary to coordinate the work of people and machines that perform the primary processes" (Akbari, 2005, para. 4). Production costs are equally important as they include "the costs incurred from the physical or other primary processes necessary to create and distribute the goods or services being produced" (Akbari, 2005, para. 4). For physicians, economic factors are particularly important and include all financial expenses associated with running a medical practice (labor, medical supplies, utilities, support staff, and insurance).

Industry theory is based on the premise of industries being created by various elements such as laws, regulations, financial norms, and market shares. The healthcare industry in the United States is becoming more regulated due to government intervention. Rational choice theory suggests that physicians make employment decisions based upon government intervention, which includes mandates such as EHR, quality improvement metrics, and fluctuating reimbursement rates. It seems that the healthcare industry is becoming a few large health systems: "the health care industry is being transformed. Large firms are merging and acquiring other firms. Alliances and contractual relations between players in this market are shifting rapidly. Within the next few years, many markets are predicted to be dominated by a few large firms" (Gaynor & Haas-Wilson, 1998, p. 1). Physicians must choose between joining these systems and continuing to remain independent. Competition within the healthcare insurance industry continues to be controlled by a few main payers, "today many Americans have few choices when it comes to health insurance. This is because many insurance markets are dominated by only a handful of firms" (Furnas & Buckwalter-Poza, 2009, para. 1). Insurance companies control much of the healthcare industry because this is

the central source of reimbursements for physicians. Thus, physicians often seek employment where their reimbursement rates remain consistent or can be negotiated higher.

Institutional theory is based on the fact that institutions across the globe typically follow a certain set of normal practices and tendencies. Institutional theory is best explained as "the deeper and more resilient aspects of social structure. It considers the processes by which structures, including; schemas, rules, norms, and routines, become established as authoritative guidelines for social behavior" (Richard, 2004, para. 1). The institution of medicine is built upon a standard set of examinations (medical school and state boards) for practicing medicine. The Hippocratic Oath is the golden ethical standard for all physicians in the healthcare industry. The Hippocratic Oath ensures a standard level for practicing medicine. Reform is forcing physicians to report various quality metrics more frequently than in the past. Reform is altering the healthcare industry and creating extra work on all levels, not to mention significant costs. In reality, part of the increase in the quality initiative is to coordinate patient care across the entire spectrum of healthcare. Physicians are forced to carry greater financial burdens come up with these changes in the institution of healthcare. The physicians who do not have the financial resources sometimes look to health system employment. Maintaining the institution of medicines aim to increase quality, while decreasing cost, requires significant physician time and other resources to keep up with the changes and demands. Rational choice theory suggests that these alterations in the institution of medicine are forcing physicians to become more creative. Sometimes employment is one avenue to offset the stringent changes.

Identity theory is based on the premise that rational choice theory suggests that identity plays a vital role in our decisions because it is who we are. Identity theory explains identity

as, “the categorization of the self as an occupant of a role, and the incorporation, into the self, of the meanings and expectations associated with that role and its performance” (Stets & Burke, 2000, p. 225). Identity theory also incorporates “all the things (including self and others) that take on meaning in relation to our plans and activities” (Stets & Burke, 2000, p. 225). Identity theory also includes resources: “identity theorists have drawn on this meaningful relationship between persons and things to incorporate the concept of resources (things that sustain persons and interactions) as a central component in identity processes” (Stets & Burke, 2000, p. 225). Physicians’ identity plays an important role in many employment decisions as they are in front of the public daily, and they ensure the health of people. In addition, physicians have a significant amount of autonomy, thus their identity is very important.

Family implies that individuals with families consider the needs of their families before making a decision as “rational choice now is routinely applied to individuals’ family decisions” (Hechter & Kanazawa, 1997, p. 196). This is because, when there is a decision that can affect the family, an individual desires the most beneficial “family adaptive strategy” for his or her family (Hechter & Kanazawa, 1997, p. 196). The family factors for physician decisions are based on their spouses and children, work-hour preferences, and various other work-life balance factors. These are fundamental decisions made by the physician (or an entire family) for the best interest(s) of the complete familial unit.

It is possible that there could be other theoretical factors found during or in post-research. For this purpose, “other” under theoretical factors is for write-in factors located during or post research.

Data Collection

To structurally encompass relevant previous research, boundaries were set from the start of this study. The first was a date range. For the purpose of relevancy and accuracy, the articles selected were between November 2008 and March 2012. The main reason for this is the Patient Protection and Affordable Care Act which was signed into law in 2010, creating significant changes in America's healthcare system. In addition, toward the end of 2008, America experienced a shift in political party dominance, which created a wave of significant healthcare changes during the latter part of 2008. A final factor influencing the 2008 to 2012 boundary was that if I was to include research from before 2008, the findings could be skewed to portray an inaccurate picture of current physician employment shifts.

There are thousands of healthcare journals and research outlets within healthcare. In order to complete a thorough and accurate research of relevant journal articles, seven healthcare journals were selected. To ensure a balance of journals, three were practitioner journals, and four were healthcare professional journals. The practitioner journals were selected based on seniority and the percentage of documents cited. The percentage of documents cited is directly from Scimago Journal & Country Rank (Lab, 2012). The healthcare professional journals were selected based upon readership and popularity of journals.

The practitioner journals selected were: the *New England Journal of Medicine* (first published in 1812: number of cited documents in 2010: 46,310), the *Journal of the American Medical Association* (first published in 1883: number of cited documents in 2010: 44,350),

and the *American Journal of Public Health* (first published in 1912:number of cited documents in 2010: 68,250). The healthcare professional journals selected for research were: *Health Leaders* (40,000 monthly readers), *Hospitals and Health Networks* (no published readership), *Modern Healthcare* (no published readership), and *Healthcare Executive* (60,000 monthly readers). Healthcare professional journals do not compile the number of cited documents.

There were seven search engine databases utilized to compile research. The seven were: the New England Journal of Medicine database (NEJM), the Journal of the American Medical Association database (JAMA), the American Journal of Public Health database (AJPH), Health Leaders journal and article database (Health Leaders), Pro-Quest database for the Hospitals and Health Networks publication (Hospitals &), EBSCO Host database for the Modern Healthcare publication (Modern Healthcare), and EBSCO Host database for the Healthcare Executive publication (Healthcare).These particular search engines were selected because they provided the most comprehensive lists of all publications and journal volumes given the time frame being studied.

To ensure the most accurate and consistent searching patterns, the same search terms were used within each search engine. The ten search terms that were utilized were: physician employment, physician employment trends, physician employment factors, physician health system employment, health system employment, independent practice trends, independent physician practice trends, private practice trends, physician private practice trends, and hospital physician employment.

By using the ten search terms and seven databases, there were 5,369 total returned articles. Figure 2 provides details regarding the total returned articles.

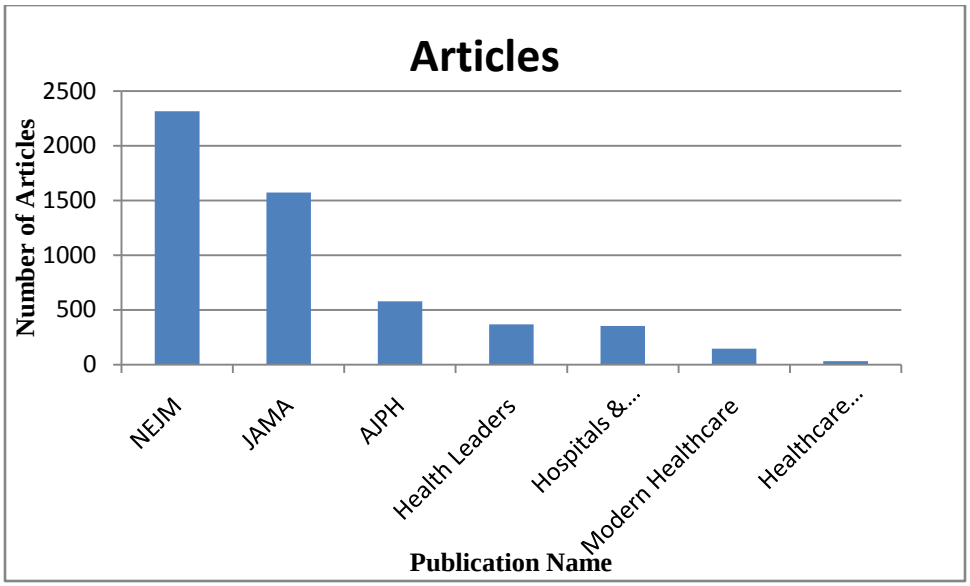

Figure 2. Returned articles. Articles returned from seven publications based upon search terms.

Thirty-six of the total returned journal articles were deemed relevant. For the articles to be utilized within this research, the article had to consist of physician employment and include the reasons associated with the decision. Relevancy was determined through first reading the abstract, then the article in its entirety was read and tracked through the coding schema. This process was used in each of the 36 articles. The allocation of the 36 articles is broken down in Figure 3.

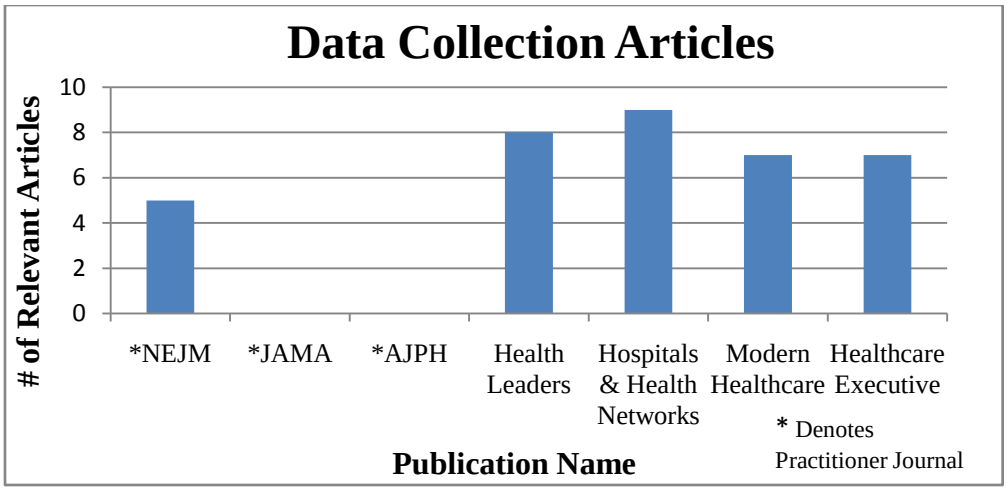

Figure 3. Data collection articles. Total articles useful for the purpose of this study.

Five articles were derived from the *New England Journal of Medicine* (NEJM). No articles were identified in either the *American Journal of Public Health* (AJPH) or the *Journal of the American Medical Association* (JAMA), based on the ten search terms. Thus, the gap in research appears to be widening as it relates to practitioner journals providing information on physician employment decisions. This is a significant omission, given that practitioner-based journals will be where certain individuals will garner information about physician employment trends. Eight articles were found within the *Health Leaders* publication, nine articles were found within *Hospitals and Health Networks*, seven articles were *Modern Healthcare*, and seven articles were *Healthcare Executive*. Obviously, healthcare professional journals provided significantly more information on physician employment decisions than practitioner journals.

Out of all of the articles initially located (5,369), there was a significantly lower number of articles (36) actually relevant to this study. Clearly, physician employment is not being examined by the top practitioner journals in America. Similarly, healthcare

professional journals are not yet fully investigating physician employment, indicating a serious void in current knowledge regarding this important issue.

Coding Schema

To thoroughly analyze the articles, a coding schema was formulated. This coding schema was based upon the coding schema created in "A Systematic Approach to Conducting a Non-statistical Meta-analysis of Research Literature" by Bland, Meurer, and Maldonado (1995) and from, "Determinants of Primary Care Specialty Choice: A Non-statistical Meta-analysis of Literature" by Bland, Meurer, and Maldonado(1995). The definitions of each category, within the coding schema, are located below.

The article information includes: article title, publication name, author, volume, page numbers, web address, and research question. It was imperative to track this information to guarantee that there was not duplication of article reporting, to create the ability to aggregate the articles, to track the specific research questions for the articles, and to ensure appropriate referencing for this research.

The publication type was another item collected. Publication type includes journal and "other." The reason for tracking publication type was to ensure that the articles were taken from an actual scholarly journal and was not a random entity's opinion.

The type of study was collected, which includes six potential study types. Experimental, which is a randomized controlled trial, involves random allocation to the study or control groups, and minimizes confounding variables. A survey study is when a questionnaire is sent to people to complete for purposes of data collection. The completed questionnaire is used for statistical analysis and reporting. An observational study is when a researcher actually conducts the study by observing some phenomenon. A case study is

when there are no comparison groups and the researcher focuses on one particular phenomenon. The end result is a report or stance on the phenomenon. A conceptual study is an opinion paper, in which no real study was conducted. The conceptual study is simply a particular person's opinion. The final category under type of study is "other." This is because there could also be less commonly used research methods.

The type of participants included in the study was collected. The study participants are the individuals involved in a particular study. Executives are strictly healthcare executives who work in administration within a hospital or healthcare setting and are typically a vice-president or higher. Providers, for this purpose, are actual physicians within a particular healthcare setting. "Other" was included as a category because there could potentially be other study participants revealed during this research.

Next on the coding schema is theoretical basis, in which there is either extensive, some, none, or hypotheses for the theoretical basis. It is extremely important to track the theoretical basis, as it allows for understanding of the depth and breadth of each article.

Sample size of the study was collected. Given the potential for surveys and opinions, it is extremely important to track sample sizes for the various articles. Sample sizes were recorded based on the following criteria: less than or equal to 50 participants, between 51 and 300 participants, 301to 500 participants, or greater than 500 participants. This is important, as certain findings or claims often carry more or less weight depending upon sample size.

The next item collected from the articles is theoretical factors. A priori factors based upon rational choice theory and identified in current literature that may influence a physician's employment decision include economic, industry, institutional, identity, family, and other. Each of these is defined and referenced within the theoretical foundation section

of this thesis. It is of vital importance to track these factors as one or more may be a common factor behind the rational choice that physicians make to ultimately be employed by a health system or remain independent.

The final item collected from the articles is outcome. Given that this research aims to discover why physicians choose health system employment over independent practice, the outcome will provide information regarding whether physicians are indeed choosing health system employment over independent practice. An outcome of "hospital" means that the physicians within that particular article chose hospital or health system employment. In a "group" outcome, the physicians are opting to join a group of two or more physicians. When an "independent" outcome is a result, the physicians have decided to either remain or become independent in their practice setting choice. An outcome of "other" is listed in the instance(s) where there are other forms of physician practice settings discovered during research.

Data Analysis

In order to accurately identify whether the above discussed elements existed within articles used in this research, binary coding was utilized. Binary coding allowed for the most accurate tracking method, given the various sections of the coding sheet, as discussed in the previous section. The number "1" was allocated when a coding schema element existed, while a "0" was given to those elements that did not exist.

The first step was to search the same set of search terms within each of the seven journal databases. Once the search term was entered into the database, all of the articles' abstracts (between 2008 and 2012) were read to identify relevancy for the purposes of this study. When an article was determined to include physician practice setting choice(s) or physician employment, it was appropriate for inclusion in the coding schema. This is when article title, publication name, author, volume, page numbers, and URL were entered. Following the completion of these sections, the article was read to determine the specific research question. For relevancy and accuracy, the research question concluded the article information category. The article was then thoroughly read through again, and the publication type, type of study, study participants, and sample size were collected.

The final two sections, theoretical factors and outcome, are two vital coding schema sections because they potentially hold the key as to why physicians choose one practice or employment setting over another. Definitions for each of the theoretical factors: economic, industry, institutional, identity, and family were derived from various reputable sources with

extensive research in each realm (see the theoretical foundation section beginning on page 16). When an article contained various theoretical factors it was tracked via binary coding. The "other" section was crucial to include given the possibility of other theoretical factors identified during research.

The articles coded had an outcome, or some combination of hospital, group, independent, or other, for the physicians' practice setting decision. Outcome will reveal if physicians are indeed choosing hospital employment over independent practice. At the conclusion of the research, the theoretical factors and outcome sections will provide crucial insight into reasons why physicians choose health system employment over independent practice.

Interrater reliability is a critical part of meta-analysis. When established properly, interrater reliability adds a necessary element of validity to the data and interpretations of the data. Kolbe and Burnett (1991) write that "inter judge reliability is often perceived as the standard measure of research quality," and Tinsley and Weiss (2000) suggest that interrater reliability measure "…the extent to which the different judges tend to assign exactly the same rating to each object" (p. 98).

Various indices have been established to gauge interrater reliability. Dewey (1983) has argued that Cohen's kappa (1960) should be "the measure of choice" and this index is commonly used. Thus, following Agrawal, Kishore, and Rao (2006) and Jarvenpaa and Ives (1990), Cohen's kappa was used as the interrater reliability index in the current study. The formula for Cohen's kappa is as follows, where

$$\kappa = \frac{\Pr(a) - \Pr(e)}{1 - \Pr(e)}$$

Pr(*a*) is the relative observed agreement among raters, and Pr(*e*) is the probability that agreement is due to chance (Cohen, 1960). A minimum of two coders should examine identical phenomena and then evaluate their agreement upon their individual interpretations of the phenomenon. In the current study, one of the coders, Robert Johnston, is a novice researcher, while the second coder, Dr. Sandra Vannoy, has more than ten years research experience and has engaged in multiple projects of a similar nature. Achieving adequate coding agreement by this combination of novice and experienced researchers should provide an added element of reliability to findings.

Following the practice established by Agrawal, Kishore, and Rao (2006), several steps were taken to prevent data coding from being influenced by researchers' subjective biases. Given the exploratory and explanatory nature of this study, a highly structured coding schema was developed in the context of the research question. Only specific variables of interest were included in the schema coded, resulting in a parsimonious data set. The coders each coded five articles from a range of journals used in the study. Following Jarvenpaa and Ives (1990), to assess agreement, results of coding were compiled into a matrix and Pr(*a*) and Pr(*e*) were calculated, yielding a kappa (κ) coefficient exceeding 0.95 for each article. These coefficients well exceed the minimum standards deemed acceptable by Jarvenpaa and Ives (1990) and Agrawal, Kishore, and Rao (2006). As a result of these precautions, the coding is expected to be highly reliable.

Results

Publication Type: All of the 36 articles were retrieved from a journal publication. The fact that they were not obtained from various other publication types ensures uniformity among the actual publication types collected.

Type of Study: There were no experimental studies from the 36 articles. Out of the studies, four of the 36 studies were surveys. The authors revealed the findings on physician employment decisions within their articles. There were no observational or case studies in the 36 articles. A total of 32 of the 36 articles, were conceptual studies, meaning that most of the articles identified had conclusions based upon the author's opinion. This is a significant finding, indicating that most evidence to date on physician employment trends is merely anecdotal.

Study Participants: Study participants were not evenly distributed between healthcare physicians and healthcare professionals. Figure 4 reveals the distribution of study participants.

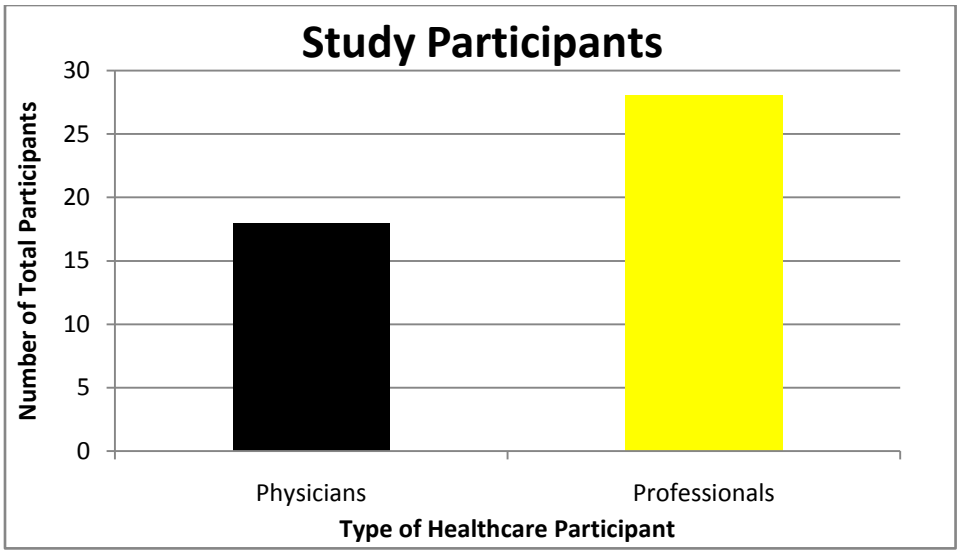

Figure 4. Study participants. The total number of physicians and professionals participating in articles utilized for this study.

Out of the 36 coded articles, 18 of the articles involved physician input on physician employment decisions. Twenty eight of the coded articles included healthcare professional's input on physician employment decisions. This finding points to the fact that some of the articles coded included both physician and professional input within the same article. Clearly more articles include input from healthcare professionals than from physicians.

Theoretical Basis: There was no theoretical basis, whatsoever, within the 36 coded articles. The absence of theoretical basis within these articles demonstrates the need for further theoretically based research on physician employment decisions, and again, emphasizes that most extant knowledge is based almost exclusively on opinion.

Sample Size: A total of six out of the 36 articles included a sample size (Figure 5).

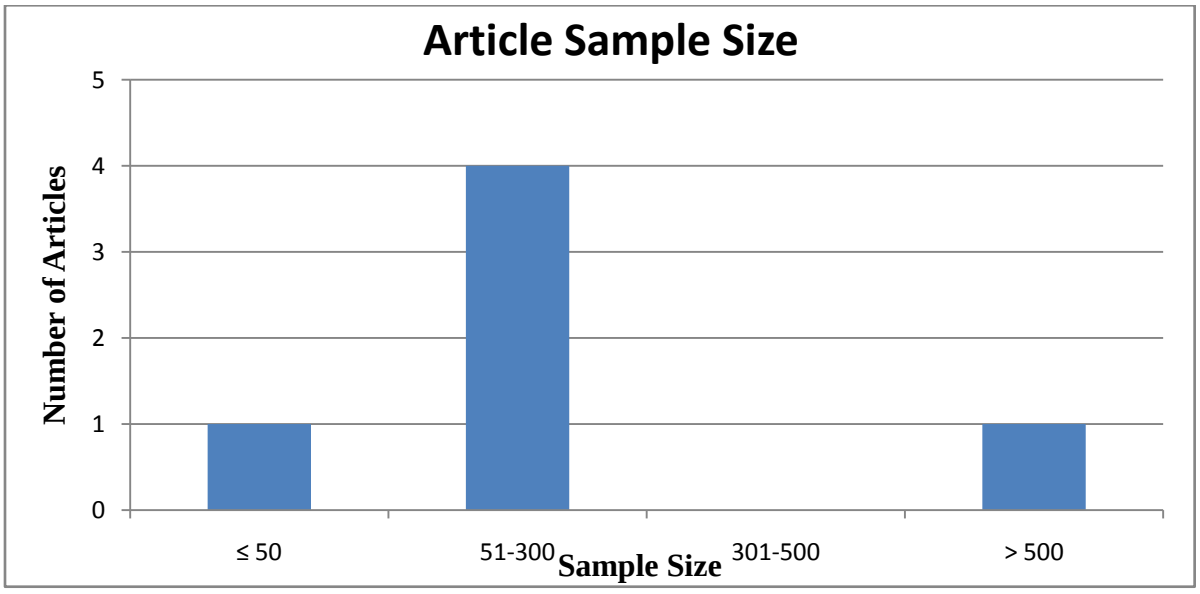

Figure 5. Article sample size. The sample size of physicians an professionals participating within studies of articles utilized for this research.

Inclusive of the sample sizes was physicians, healthcare professionals, or a combination of both. It can be assumed that the six articles that include sample sizes are currently the only articles that are not purely opinionated articles, as they include the actual data from the feedback of healthcare providers or healthcare professionals.

Theoretical Factors: As noted below in Table 1, 29 of the coding schema articles, 80.56% of all articles, emphasized the economic theoretical factor. The reasoning for the persistence of the economic factor is the fixed and variable costs associated with running an independent medical practice. Almost every industry in America is faced with the economic battles of ensuring top quality healthcare along with reduced costs. It is the same within healthcare, where independent physicians are challenged with financially supporting their practices. Based upon these 29 articles, one or some combination of labor, medical supplies, utilities,

support staff, and insurance are the economic related challenges independent physicians are facing.

Table 1. Theoretical Factors	
a priori Factors	
Number of Articles	
Economic	**29**
Industry	**32**
Institutional	**18**
Identity	**4**
Family	**17**
Additional Findings	
Number of Articles	
Gender	**2**
Power	**1**
Scarcity	**1**
Location	**1**
Quality of Life	**1**
Incentive	**1**
Generational	**3**

In total, 32 of the coding schema articles, 88.89% of all articles, emphasized the industry theoretical factor. The reasoning behind the industry factor being the most common recurring factor is extremely broad. Every article in which industry was present, insurance reimbursement fluctuations were identified as a primary reason for why physicians are moving away from independent practices. I believe that this is indeed the case because insurance companies do possess a lot of power. Thus, for independent and small group practices, it is more challenging to negotiate a beneficial insurance reimbursement rate. This is one of the reasons why physicians cannot bring in significant returns on the medical care that they provide. One solution to this dilemma is for the independent (or small group

practice) to join a health system for employment. In turn, the larger health system negotiates a higher insurance reimbursement rate return (power in numbers).

Overall, 18 of the coding schema articles, 50% of all articles, emphasized the institutional theoretical factor. All of the 18 articles discussed the changing nature of the healthcare institution as a whole. The common theme among the 18 articles was that physicians are focusing more stringently on the overall quality of care, while also attempting to decrease the cost of that care. Associated with these stringent changes was the challenge for physicians to be able to sufficiently pay for the institutional changes (i.e., increased quality and decreased cost). Many of these participant physicians joined a group or health system to help dissipate this hurdle, thus they could focus more on patient care.

Four of the articles, 11.11% of all articles, emphasized the identity theoretical factor. The fact that only four articles included identity as a factor associated with physician employment decisions boldly indicates the lack of research on this phenomenon. To sufficiently indicate whether or not identity is indeed a significant factor in physician employment decisions, further research is needed. The most telling research will be physician surveys that provide identity related questions and answers.

Seventeen of the coding schema articles, 47.22% of all articles, emphasized the family theoretical factor. Almost half of the articles included the family factor because many physicians have families, work-life balance preferences, or work-hour preferences. In fact, all of the coding schema "family" factor articles discussed the influence that work-hour preferences had on physician employment decisions. Another common theme was the reluctance for physicians to take significant call hours, thus they tended to opt for employment if it decreased their call hours.

The fact that the economic and industry theoretical factors were the two most cited factors clearly indicates that physicians are basing employment decisions predominantly on financial and evolving industry elements. As noted in the Theoretical Foundation section, the economic theoretical factor includes the financial expenses associated with running a medical practice such as: labor, medical supplies, utilities, support staff, and insurance. The industry theoretical factor includes elements such as government intervention, mergers and acquisitions, condensed health insurance markets, and fluctuating reimbursement rates. As long as health systems can continue to financially support the acquisition of physicians (employing physicians), the economic and industry factors will continue to force physicians towards health system employment.

Factors Identified a posteriori

As noted in Table 1, there were various theoretical factors that evolved during research. This was the purpose in including "other" under the theoretical factor section. To clearly understand the factors on which physicians' base employment decisions, further research is needed on the following additional theoretical factors.

Gender was mentioned in two articles, and the authors pointed out the key differences between male and female physicians. These differences between male and female were that women prefer stable income with shorter and more predictable hours. Both authors also discussed how gender was relevant for younger male physicians as well. There could be a significant difference between male and female physician decision making. Gender has the potential to be an important theoretical factor, and future research should examine physician employment differences between genders.

Power was another factor in physician employment decisions. According to the article "Accountable Care Organizations – The Fork in the Road" (Greaney, 2011),

physicians may make their employment decisions based on the amount of power that they will possess. In this circumstance, the physician would like to know the amount of decisive control or input he or she has to fulfill their need of power.

Scarcity was identified as a theoretical factor in "The Disappearing Primary Care Physician" by Harris Meyer (2008). In this article, rural versus urban health systems were discussed at length. Meyer (2008) showed that small, rural hospitals do not always have the substantial resources that larger, more urban hospitals have. One of these resources was the referral sources larger health systems control, also known as strength in numbers (Meyer, 2008), when they acquire primary care providers. A second element associated with scarcity was the lack of expendable income. The premise behind this is that the smaller the amount of income that a health systems control, the less the influence they have physician employment decisions because the physicians do not want to worry about finances but instead focus more on their patients. Thus, it is common for physicians to go where hospitals have more money to spend. Scarcity is an important factor and obviously has had very little research attention.

Location was a theoretical factor in the article, "Residents Hold the Cards in Job Search" (Howell, 2011).This article detailed the key importance that geographical location has in resident physician employment decisions. At the core of the article many resident physicians prefer to live and work in larger cities, while others may prefer more rural locations. This preference is a decisive factor in where a physician decides to work. This survey shows a new wave of resident physicians having more selective preferences as to the location in which they practice medicine.

Quality of life was identified as a theoretical factor in the article, "For Stressed Docs, Where to Turn" by Cantlupe (2012a). Cantlupe discusses how physicians make their employment decisions based on their quality of life preference. The main emphasis on quality of life was the fact that many physicians are more stressed now than ever. The high amount of stress endured by physicians may bleed into family life, and, thus, affect their quality of life. It is insinuated that physicians will make employment decisions based on where the stress is lower; therefore, many organizations actually attempt to help reduce the stress of being a physician.

Another theoretical factor was incentive, which was identified in the article entitled "Physician Alignment in an Era of Change" (Cantlupe, 2010). This article described the influence that financial, employment safety, team care for patients, and various other incentives have for physicians joining hospitals for employment. The article concluded with one physician's opinion that physicians need to ensure that they are fixtures in the community, thus incentives for employment decisions may or may not be worth it. Incentive is another theoretical factor that needs to be thoroughly researched. Additional research may help to reveal what impact varying types of incentives have on physician employment decisions. More research would also reveal various incentives that carry more weight and persuasion than others.

The final theoretical factor discovered was generational. The generational factor was identified three times and was the most common among all of the a posteriori factors (see Table 1). These articles suggested that the older generation of physicians prefer independent practice. On the contrary, the younger generations of physicians prefer health system employment. It was noted that older generations of physicians traditionally have more

autonomy and self-employment preferences, but that some are deciding to become health system employed. The articles also discussed, to varying degrees, the absolute importance of ensuring clear communication between the various generations of physicians. It is possible that the generational factor could be very important in the theoretical factors. This is because younger generations of physicians appear to have more varying preferences/tendencies than that of older generations. Further research is needed to clearly define the variations in physician employment decisions based on generational factors.

Outcome: Figure 6 details physician employment decisions based on the 36 coding schema articles.

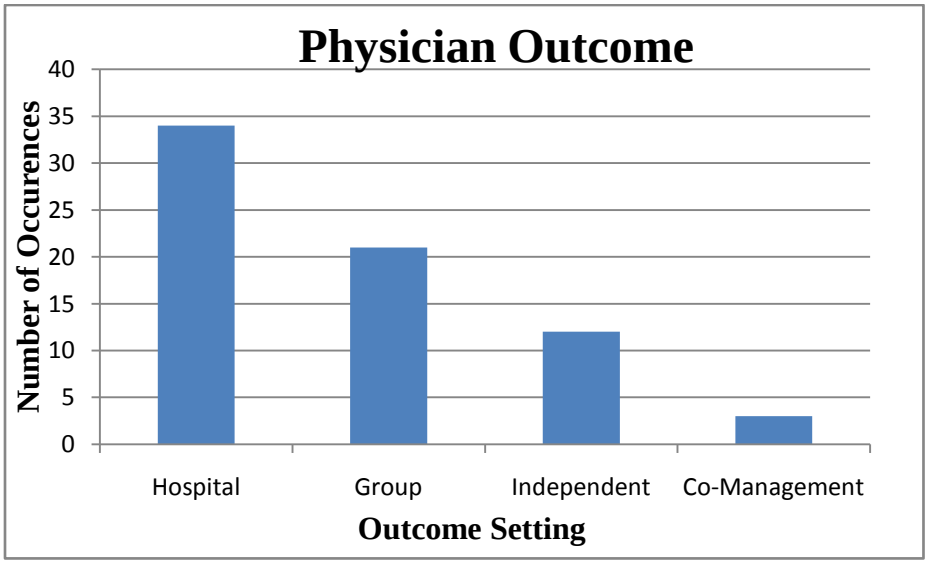

Figure 6. Employment outcome. Physician employment outcome based upon the articles utilized for this research.

In total, 34 of the coding schema articles, 94.44% of all articles, revealed hospital employment as the final outcome. Based upon the coded articles, it appears that physicians predominantly opt for hospital employment over group or independent practice settings. It is interesting to note that every time hospital employment was the outcome, economic,

institutional, and industry, theoretical factors (or a combination of them) were involved in the employment decision-making process. Obviously, all of the theoretical factors have some degree of influence on the hospital outcome, but how much? This thesis has laid the foundation to answer this question; however, further research is needed to determine the level of influence that the theoretical factors have on the hospital employment outcome.

The key in understanding physicians' decisions to become employed by a hospital or health system is found within the theoretical factors. This is because the list of factors encompasses virtually all of the current reasoning behind why physicians select a certain type of employment.

The economic theoretical factor influences the employment outcome because this factor includes financial elements such as labor, medical supplies, utilities, support staff, and insurance. It is also clear that the industry factor influences the employment outcome. Industry influences the physician outcome, because it includes elements such as government intervention, EHR, the insurance market, and reimbursement rates. The institution of healthcare is another theoretical factor that obviously influences physician outcome. The healthcare institution is influential in swaying employment decisions because it includes increased quality of care, healthcare reform, decreased costs, and access to care. Identity is the forth factor and influences the physician outcome because it pertains to the actual identity of each physician. Inclusive of identity are autonomy, self image, and the fact that physicians are in front of the public every day. The family theoretical factor influences the physician outcome because many physicians have families and must make the best decision for their entire family. In addition to actual family structures, work-hour preferences and various other work-life balance factors are included within the family theoretical factor.

Gender is influential on the outcome because of the different preferences and tendencies between males and females. There is not enough current research on the difference between outcomes based on gender influences. The level of power that physicians have also influences the employment outcome. Dependent upon personal preference, the amount of power that physician control can directly determine the employment outcome decision. Scarcity influences the outcome because physicians may prefer more rural or more urban hospitals. Scarcity is linked to personal preference. If physicians prefer to reside and work in a less populated environment then scarcity is at hand. Scarcity also influences the physician outcome by the amount of expendable income a particular hospital or group of physicians has. Location is influential on the physician outcome because physicians have varying preferences on the physical location in which they practice medicine. The more perks or location elements that meet the physician's preferences, the more likely a physician is to opt for that particular outcome. Quality of life is influential on physician employment outcome because some physicians prefer less stressful environments, while for other physicians stress may not be as important. Give the specific physician's desired level of quality-of- life their outcome will be swayed by the quality of life offered by each outcome. Incentives influence physician outcomes because they provide more (or less) benefits with regards to a particular employment decision. Personal preferences mean that certain incentives will carry varying degrees of weight. With the right incentives in place, a physician may be more likely to select a particular employment outcome. The generational factor is influential on physician outcome, because each generation of physicians has different tendencies or traits. This means that dependent upon the generation of the physician, if an outcome meets a particular physician's generational preferences, then the

physician is more likely to choose that outcome. Further research is required and could potentially explain various sub-types of hospital employment for physicians.

At the beginning of this research, the only outcomes for physicians were hospital or independent employment. However, group employment for physicians was an outcome that evolved during this research. Overall, 21 of the coding schema articles, 58.33% of all articles, proved group employment as the final employment outcome. It is clear that group employment is the second most commonly selected outcome for participant physicians. The prevalence of this outcome may be because physicians prefer to be employed with each other, as they are more alike than compared with other healthcare employment outcomes. In addition, there are still two generations of physicians that predominantly view hospital employment as giving up (Betbeze, 2012). However, the prevalence of hospital employment throughout the articles may be an indication that smaller group employment outcomes will decrease over the coming years. This is because small physician groups may experience similar struggles as independent physicians are facing today. These struggles are the inability to secure financial resources to operate, challenges associated with insurance contract negotiations, and significant hurdles to ensure the same level of quality, cost, and access to care set by larger hospitals. By using this thesis as a foundation, future research can be used to learn more about the factors that influence the decision to join a group over others and on potential employment outcomes. This research is necessary because there is no current research portraying these particular physician employment outcomes.

In total, 12 of the coding schema articles, 33.33% of all articles, revealed independent practice setting as the outcome. Throughout the articles, the independent outcome was mainly due to the fact that older physicians preferred to control their own practices and

business related decisions. Another interesting note is that a significant portion of the independent employment outcomes were related to specific specialties within healthcare (i.e., cardiology, orthopedic, and gastroentology). Similar to the other outcomes, there is a lack of current information on whether the independent outcome is more related to physician specialty, generation, or some other theoretical factor(s). However, based on these articles, this study shows that the independent physician is indeed on the decline due to the changing healthcare industry.

A new outcome that evolved through this research was co-management. Three of the articles, 8.33% of all articles, had an outcome of co-management. According to the three articles, co-management is established when a hospital (or health system) forms a collaborative relationship with an independent or group practice. Co-management allows the hospital to provide the particular practice with guidance and support, in conjunction with the practice leaders providing their own guidance and support. Collectively the two entities run the practice, aiming for optimum levels of efficiencies and patient care. A common example within all three articles was administration at a hospital to help guide or support a select practice (i.e., aid in financial guidance or even increase quality of care outcomes). Another example was when a group practice has a physician sit on the medical executive board of a hospital and, in turn, the hospital provides strategic support to that specific group practice. The physicians in each outcome preferred co management because they felt like they still controlled their practices. The occurrence of co-management in three different articles points to a potentially little understood phenomenon. Further research is needed in order to reveal how frequently this outcome is occurring and to find the reasoning behind it.

Two or more outcomes (group employment and hospital employment, or independent practice and group employment, or independent practice and hospital employment) occurred within the same article 26 times or 72.22% of the time. It is unclear why multiple outcomes are common in these articles. It is revealing that only 10 of the articles, or 27.78% of the time, resulted in only one physician outcome. This can be interpreted that there is indeed a change happening in the physician employment and practice setting realm. Future research will help healthcare professionals, physicians, and patients to understand the reasoning behind this shift. Once this research is complete, we will all have a better understanding of the positive, or negative, effect physician employment has on the level of healthcare within America.

Figure 7 is an expansion of the Figure 1 a priori assumptions model. It was assumed at the start of this research that there were discoverable relationships between certain factors attributable to rational choice theory, the various types of physicians' practices, and the ultimate outcome in a physician's choice of employment. Figure 7 provides insight into the specific nature of the relationships between the physician employment factors and the decisions associated with the factors.

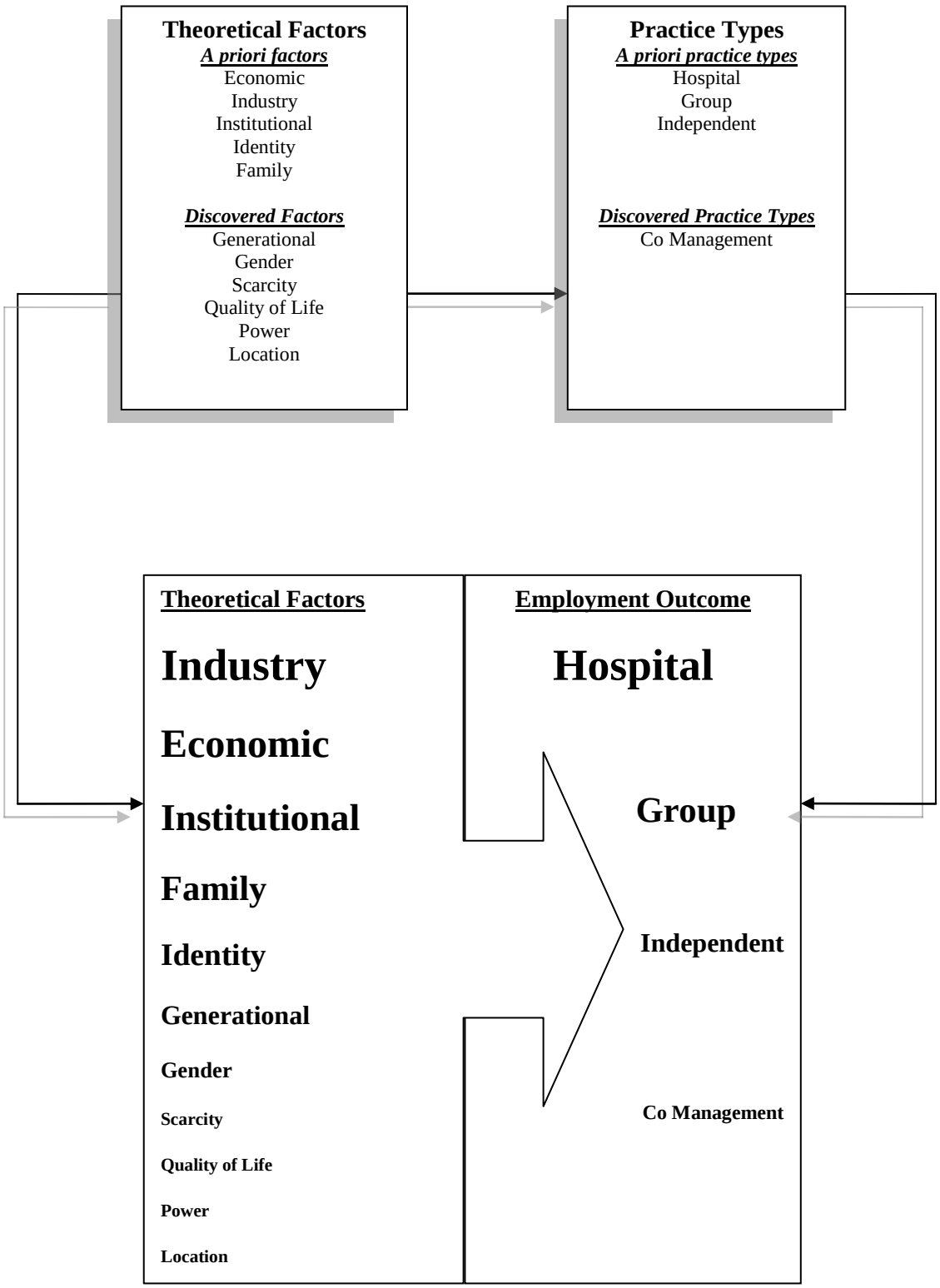

*Figure 7.*Expanded conceptual model. The relationships between choice factors, practice types, and physician choice outcomes.

Under the top theoretical factors section is the addition of discovered factors. As discussed, the discovered factors were found during research of pertinent articles. The right practice type's box has the addition of co-management, which was also discovered during research. In the bottom box on the left are all of the theoretical factors. The larger the theoretical factor font, the more frequently the factor occurred in the articles. The arrow points towards the final stage, employment outcome. The larger the font, the more popular, or most commonly selected employment outcome. Figure 7 encompasses all of the theoretical factors that affect a physician during the employment outcome decision. These factors, dependent upon the various weights for the particular physician, determine the end employment outcome.

Achieving a better understanding of physician employment trends may be key to understanding how to broaden healthcare access, increase quality, while also decrease cost. It is possible that the physician shift could propel America to be known as an innovator in healthcare, or it could easily prove that America is still lacking in quality, access, and cost. This thesis lays a foundation towards a better understanding of this phenomenon.

Future Research

This thesis lays a firm foundation towards understanding why physicians choose health system employment over independent practice. Using the findings of this study, more research should be conducted, as discussed previously. This research compiled the existing factors cited in the 36 coded articles to show the reasoning physicians choose health system employment over independent practice. We can begin to better understand why physicians decide employment versus non-employment. Future research may include large-scale studies of physicians and healthcare professionals. Large-scale studies were not available within the seven healthcare journals that were examined, nor were such studies found through extensive searches of the EBSCO databases or Google Scholar. Studies of information regarding the factors associated with employment decisions should offer vital insights that could benefit the future of the healthcare industry. Understanding physicians' employment choices may help meet the challenges related to quality and access of care while also decreasing cost.

In the near future, I plan to construct a survey and send it to thousands of physicians and healthcare professionals. The goal will be to collect and compile data associated with why physicians choose health system employment over independent practice. Another question my research will address is do physicians have a choice or are they compelled toward health system employment by forces outside of their control? These results will allow for the evolution and expansion of my current findings and a clearer understanding of the future of healthcare in America.

Conclusions

The central goal of this work is to help people understand the physician employment trend as it currently unfolds. To date there is no evidence to support such understanding of the impact of employment trends upon the healthcare system. The main objective is to help people understand the employment trend by identifying the factors that may be involved in physicians' employment decisions. Considering this study and the small amount of research in the physician employment area, there is a little known phenomenon currently unfolding before our eyes, within the healthcare industry. Anecdotal evidence suggests that more physicians are becoming employed by hospitals, which could alter patient care and the healthcare institution as a whole. Thus, a meta-analysis was selected as the research methodology in this study to determine past studies and research. The coding schema and meta-analysis boundaries were set, in part, following the article "Meta-Analysis Notes" by DeCoster (2004).

A substantial search, through seven of the most reputable healthcare journals, revealed that the current physician shift is a little known and under researched phenomenon. Between 2008 and 2012, the seven publications produced a mere 36 coding schema articles relative to why physicians choose health system employment over independent practice. The coding schema did provide an informative insight into the state of current research and factors that may affect the employment shift.

Industry was the most common theoretical factor among the coded articles. This finding was not surprising because America is in the middle of a reform in the healthcare

industry. What is interesting about this finding is the fact that physicians are opting to become employed for the financial reasons associated with industry changes. This helps explain why the economic factor was the second most common reason that physicians chose health system employment over independent practice. Almost all of the articles that incorporated the economic theoretical factor involved the financial challenges physicians face when remaining in independent practice. The institution of healthcare was the next factor. It is interesting that this factor was not more prevalent because it is associated with healthcare reform and is the aim to reshape the healthcare institution, which would reform American healthcare. It is important to note that the family was the fourth most common factor. This factor may be important because the family factor included work-life balance, spouse and children influences, and schedule preferences. Future research may show that the family factor will rise in importance associated with the physician employment decision. The remaining factors of identity, generational, incentive, gender, quality of life, scarcity, and location occurred only four or fewer times. Thus, future research is needed. The list of theoretical factors identified by this research may indirectly influence the future of healthcare in America in that physicians may be using these factors to decide between new forms of employment models. Individual theoretical factor(s) may cause physicians to move quickly, or take their time in making the employment decision. Either way, the results of this study indicate that physicians will be changing employment status in upcoming years. In addition, along with the shift is a changing healthcare environment for the United States of America.

Results of this study show that physicians are more frequently employed by health systems than remaining independent or joining a group of physicians. The theoretical factors help to explain the physicians' reasoning in choosing health system employment over

independent practice or group settings. Based upon the results of this study, physicians choose health system employment for varying reasons such as financially supporting their practices, adopting healthcare reform, and mandates such as EHR, ensuring a satisfactory work-life balance, and to devote the majority of their focus on their patients. Most importantly, the physician employment outcome may very well determine the quality, access, and cost of healthcare received in America in the years to come.

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Appendix A

Patient Protection & Affordable care Act (The White House, 2012):

On March 23, 2010, President Obama signed the Affordable Care Act into law, putting in place comprehensive reforms that improve access to affordable health coverage for everyone and protect consumers from abusive insurance company practices. The law allows all Americans to make health insurance choices that work for them while guaranteeing access to care for our most vulnerable, and provides new ways to bring down costs and improve quality of care.

Understanding the Reforms

Here are the key facts about the Affordable Care Act.

- Stronger Consumer Rights and Protections
- More Affordable Coverage
- Better Access to Care
- Stronger Medicare

Consumer Rights and Protections

In the past, insurance companies could take advantage of you. They could deny coverage to children who had asthma or were born with a heart defect, put a lifetime cap on the amount of care they would pay for, or cancel your coverage when you got sick just by finding an accidental mistake in your paperwork. The Affordable Care Act creates a new Patient's Bill of Rights that protects you from these and other abusive practices.

End to Pre-Existing Condition Discrimination: Insurance companies can no longer deny coverage to children because of a pre-existing condition like asthma and diabetes, providing piece of mind for parents of the more than 17.6 million children with pre-existing conditions. Starting in 2014, no American can be discriminated against due to a pre-existing condition.

End to Limits on Care: In the past, some people with cancer or other chronic illnesses ran out of insurance coverage because their health care expenses reached a dollar limit imposed by their insurance company. Under the health care law, insurers can no longer impose lifetime dollar limits on essential health benefits and annual limits are being phased out by 2014. More than 105 million Americans no longer have lifetime limits thanks to the new law.

End to Coverage Cancellations: Insurance companies can no longer drop your coverage when you get sick due to a mistake you made on your application.

More Affordable Coverage

The law helps you by bringing down health care costs and making sure your health care dollars are spent wisely. Insurance companies will now be accountable to their customers for how they are spending premium dollars, and how much they are raising rates. Plus, the new law will help lower costs through new tax credits and new marketplaces where insurers will have to compete for your business.

Value for Your Premium Dollar: Thanks to the Affordable Care Act's 80/20 rule, if insurance companies don't spend at least 80 percent of your premium dollar on medical care and quality improvements rather than advertising, overhead and bonuses for executives, they will have to provide you a rebate. The first rebates will be made in the summer of 2012.

Stopping Unreasonable Rate Increases: In every State and for the first time ever, insurance companies are required to publicly justify their actions if they want to raise rates by 10 percent or more.

Small Business Tax Credits: Small businesses have long paid a premium price for health insurance – often 18 percent more than larger employers. The tax credit will benefit an estimated two million workers who get their insurance from an estimated 360,000 small employers who will receive the credit in 2011 alone.

Better Access to Care

The health care law builds on what works in our health care system. And it fixes what's broken by providing you with more health insurance choices and better access to care.

Free Prevention Benefits: Insurers are now required to cover a number of recommended preventive services, such as cancer, diabetes and blood pressure screenings, without additional cost sharing such as copays or deductibles. Already, 54 million Americans with private health coverage have gotten better preventive services coverage as a result.

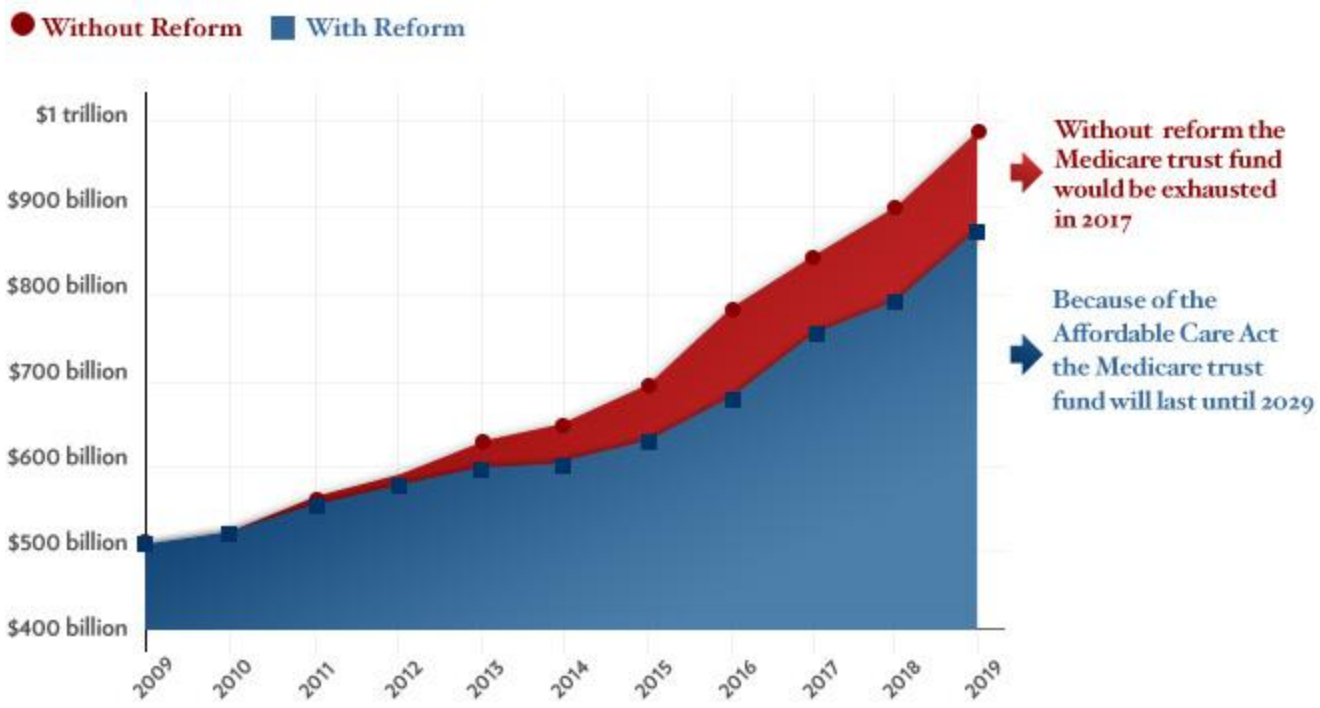
Coverage for Young Adults: Under the law, most young adults who can't get coverage through their jobs can stay on their parents' plans until age 26 – a change that has already allowed 2.5 million young adults to get health coverage and given their families peace of mind.

Coverage for Americans with Pre-Existing Conditions: Before the law, many Americans with pre-existing conditions were locked or priced out of the health insurance market. More than 50,000 Americans with pre-existing conditions have gained coverage through the new Pre-Existing Condition Insurance Plan. This temporary program makes health coverage available and more affordable for individuals who are uninsured and have been denied health insurance because of a pre-existing condition. In 2014, insurance discriminating against anyone with a pre-existing condition will be illegal.

Affordable Insurance Exchanges: Affordable Insurance Exchanges are one-stop marketplaces where consumers can choose a private health insurance plan that fits their health needs. Starting in 2014, they will offer to the public the same kinds of insurance choices members of Congress will have. Exchanges will select health plans qualified to offer coverage; facilitate consumer assistance, shopping and enrollment; and coordinate eligibility for the Exchange and potential premium assistance. Already, 33 States and the District of Columbia are on their way to building Exchanges, having received at total of nearly $670 million in Exchange Establishment Grants.

Strengthening Medicare

Nearly 50 million older Americans and Americans with disabilities rely on Medicare each year, and the new health care law makes Medicare stronger by adding new benefits, fighting fraud, and improving care for patients. The life of the Medicare Trust Fund will be extended to at least 2024 as a result of reducing waste, fraud, and abuse, and slowing cost growth in Medicare. And, over the next ten years, the law will save the average person in Medicare $4,200. People with Medicare who have the prescription drug costs that hit the so-called donut hole will save an average of over $16,000.



Lower Cost Prescription Drugs: In the past, as many as one in four seniors went without a prescription every year because they couldn't afford it. To help these seniors, the law provides relief for people in the donut hole – the ones with the highest prescription drug costs. As a first step, in 2010, nearly four million people in the donut hole received a $250 check to help with their costs. In 2011, 3.6 million people with Medicare received a 50 percent discount worth a total of $2.1 billion, or an average of $604 per person, on their brand name prescription drugs when they hit the donut hole. Seniors will see additional savings on covered brand-name and generic drugs while in the coverage gap until the gap is closed in 2020.

Free Preventive Services: Under the new law, seniors can receive recommended preventive services such as flu shots, diabetes screenings, as well as a new Annual Wellness Visit, free of charge. So far, more than 32.5 million seniors have already received one or more free preventive services, including the new Annual Wellness Visit.

Fighting Fraud: The health care law helps stop fraud with tougher screening procedures, stronger penalties, and new technology. Thanks in part to these efforts, we recovered $4.1 billion in taxpayer dollars in 2011, the second year recoveries hit this record-breaking level. Total recoveries over the last three years were $10.7 billion. Prosecutions are way up, too: the number of individuals charged with fraud increased from 821 in fiscal year 2008 to 1,430 in fiscal year 2011 – nearly a 75 percent increase.

Improving Care Coordination and Quality: Through the newly established Center for Medicare and Medicaid Innovation, this Administration is testing and supporting innovative new health care models that can reduce costs and strengthen the quality of health care. So far,

it has introduced 16 initiatives involving over 50,000 health care providers that will touch the lives of Medicare and Medicaid beneficiaries in all 50 states.

Providing Choices while Lowering Costs: The number of seniors who joined Medicare Advantage plans increased by 17 percent between 2010 and 2012 while the premiums for such plans dropped by 16 percent – and seniors across the nation have a choice of health plans.

Appendix B

HITECH Act (Anderson, 2010):

Some call it HIPAA on Steroids. Others simply call it HIPAA II. Technically, it's the Health Information Technology for Economic and Clinical Health Act. But however you label it, the **HITECH Act** spells out tougher data security requirements for all health care organizations as well as their business associates.

Although the **Health Insurance Portability and Accountability Act of 1996** led to the creation of federal healthcare information privacy and security rules, the penalties for violations were relatively mild, and the enforcement was nearly nonexistent. But that's all changing thanks to the HITECH Act. The Act was one of dozens of provisions tucked into the economic stimulus package, known as the American Recovery and Reinvestment Act, in February 2009. It's also known as Title XIII of ARRA.

Congress included the beefed-up security provisions in tandem with incentive funds from Medicare and Medicaid to help pay for adoption of electronic health records at hospitals and physician group practices. The intent was to help ensure that as more information is digitized it will remain secure.

Enforcement of perhaps the most significant security provision of HITECH, the security breach notification rule, is slated to kick in on Feb. 22, 2010. An Aug. 24, 2009, Interim Final **Rule** from the U.S. Department of Health and Human Services spells out security breach notification requirements in more detail.

Following is a summary of the major data security components of the HITECH Act:

Business associates

The HIPAA privacy and security rules, and penalties, now apply directly to business associates, such as banks, claims clearinghouses, billing firms, health information exchanges and software companies, as though they were healthcare organizations. Previously, the rules only applied to "covered entities," including such healthcare organizations as hospitals, physician group practices and health insurers. Now, the rules apply to any organization that has access to "protected health information."

Breach notification rule

The major provisions include:

- 60 days notice

  Covered entities, as well as their business associates, must notify individuals within 60 days if protected health information is breached. They also must notify the Department of Health and Human Services and local news media if the breach involves more than 500 individuals.

- Annual report

  Covered entities must maintain a log of all data security breaches and annually submit it to HHS.

- Who reports to whom?

  Business associates experiencing a breach must notify the covered entity, which then must notify the individuals. Companies that sell personal health records, however, must comply with a similar breach notification rule from the Federal Trade Commission.

- Defining "breach"

  According to HITECH, the term "breach" means "the unauthorized acquisition, access, use or disclosure of protected health information which compromises the security or privacy of such information, except where the unauthorized person to whom such information is disclosed would not reasonably have been able to retain such information."

- Snail mail requirement

  A healthcare organization would have to send out a first-class letter to any patients who might have been affected by a breach. (Electronic mail can be used "provided the individual agrees to receive electronic notice and such agreement has not been withdrawn," according to the Interim Final Rule.) If 10 of those first-class letters are returned for a bad address, the hospital must then post notification of the breach on its home page and offer a toll-free breach information number for 90 days, the Interim Final Rule points out. Instead of the Web site posting, an organization could publish a notice of breach in the local news media.

- Important exceptions

  Notification of a breach is not required if the information was unintentionally disclosed to an authorized recipient and not further disclosed.

  Breaches also do not have to be reported if the data involved is rendered unreadable via encryption. Data encryption, however, must be NIST Federal Information

Processing 140-2 Standard validated, according to the Interim Final Rule that further spelled out breach notification requirements.

"Covered entities and business associates should keep encryption keys on a separate device from the data that they encrypt or decrypt," the Interim Final Rule states.

- Harm threshold
- In addition, the Interim Final Rule instituted a "harm threshold" that would dictate when an organization has to notify individuals of a breach. Under this provision, organizations much conduct a risk assessment "to determine if there is a significant risk of harm to the individual as a result of the impermissable use or disclosure." That means federal regulators are largely leaving it up to healthcare organizations to determine if they need to give notification. The provision has been criticized by many privacy advocates and hailed by some healthcare associations.
- **More audits**
- Although healthcare organizations can determine on their own whether a breach should be reported, HITECH provides funding for periodic audits by federal regulators of both healthcare organizations and their business associates to ensure they are, in fact, complying with all privacy and security rules.
- **Enforcement**
- The Office of Civil Rights within the U.S. Department of Health and Human Services has enforcement authority for the breach notification rule. State attorneys general can bring a civil action in federal court for violations of healthcare security and privacy rules. Victims can receive compensation from fines levied against individuals and organizations.
- **Tougher fines**
- Penalties now can be levied against individuals within a healthcare organization as well as the organization itself. Penalties for breaches of personal healthcare information or other HIPAA violations range up to $1.5 million per violation. This is separate from any criminal penalties that might apply.
- **Accountability**
- Individuals can request that healthcare organizations account for all disclosures of their protected health information from electronic health records systems. This includes information used for treatment, payment and operations. A covered entity may impose a fee for such accounting that's no greater than its cost. The effective date is dependent on when the EHR system was installed.
- **Copies of records**
- Individuals now have the right to receive an electronic copy of their personal health information that's stored in an electronic health record. Healthcare organizations can charge a fee that covers their labor costs for producing the copy.
- **"Minimum necessary" disclosures**
- The HITECH Act specifies that covered entities should limit uses and disclosures of personal health information to the "minimum necessary" to conduct a particular function. The U.S. Department of Health and Human Services is expected to issue regulations this year governing the "minimum necessary" provisions.
- **Marketing restrictions**

- Under the HIPAA privacy rule, when healthcare organizations were paid by companies to send communications to patients about new products and services, they were considered part of the organization's operations, and, thus, were permissible. Under the HITECH Act, these are considered marketing activities and are subject to regulations that will be issued later this year. An exception is permitted if the communication is about a currently prescribed drug and the company's payment to the healthcare organization is "reasonable."

Appendix C

Stark Law (Burgess, N.D.):

Physician Self-Referral (Stark Law)

In the original *Compliance Program Guidance for Nursing Facilities,* the Department of Health and Human Services Office of Inspector General (OIG) instructed nursing facilities to have policies and procedures in place to ensure compliance with the federal physician self-referral law, commonly referred to as a the "Stark" law. Among the risk areas the OIG identified in the original compliance guidance was financial arrangements with physicians, including a facility's medical director.

Consistent with the OIG's growing interest in protecting federal health care programs from fraud and abuse, the OIG included an expanded discussion of the Stark law in the 2008 *Supplemental Compliance Program Guidance for Nursing Facilities*. In the Supplemental Guidance, OIG describes the Stark law, the penalties imposed on violations and how to identify potential physician self-referral situations. The following paragraphs will expand on the OIG's effort to explain the Stark law, describe the importance of compliance and provide guidance on how to address particular compliance issues.

STARK LAW BASICS

A. Prohibition on Physician Self-Referrals

Stark law is intended to address the concern that financial incentives have a tendency to corrupt the medical decision-making of those providing care. As such, the government wants to ensure that medical decisions are made in the best interests of patients.

The Stark Law prohibits a physician from **referring** Medicare or Medicaid program patients for certain "**designated health services**" (DHS) to an entity with which the physician or an immediate family member has a "**financial relationship**."

The entity furnishing DHS (e.g. a nursing facility) is prohibited from presenting a claim to Medicare or Medicaid for DHS furnished pursuant to a prohibited referral.

B. Referral

The Stark Law definition of "referral" is much broader than the usual definition in the physician-patient relationship. Under the Stark Law, a "referral" can include:

- a physician's request for, ordering of, or certifying/recertifying the need for, any DHS reimbursable under Medicare, including a request for a consultation with another physician and any test or procedure ordered by or to be performed by that other physician or under the physician's supervision; or
- a physician's request that includes the provision of any designated health service, the establishment of a plan of care that includes the provision of a DHS, or the certifying/recertifying of the need for such a DHS.

However, a "referral" does not include services personally performed or provided by the referring physician.

C. Designated Health Services

The "designated health services" covered by the Stark Law include:

1. clinical laboratory services
2. physical therapy, occupational therapy, and speech language pathology services
3. radiology and certain other imaging services
4. radiation therapy services and supplies
5. durable medical equipment and supplies
6. parenteral and enteral nutrients, equipment, and supplies
7. prosthetics, orthotics, and prosthetic devices and supplies
8. home health services
9. outpatient prescription drugs
10. inpatient and outpatient hospital services
11. nuclear medicine

D. Financial Relationship

Under the Stark Law, a "financial relationship" can be either:

1. A direct or indirect "ownership or investment interest" in the entity that furnishes DHS, or
2. A "compensation arrangement" between the physician and the entity.

Unless a Stark exception is fully satisfied, a physician who is part owner of a nursing facility may not refer a Medicare or Medicaid patient to the nursing facility for DHS (e.g. therapy, clinical lab tests) and the nursing facility may not bill for those services.

Furthermore, if a physician is compensated as a medical director by a nursing facility, the nursing facility may not bill the Medicare or Medicaid program for DHS referred by that physician unless the medical director arrangement meets a Stark exception (see "Exceptions" section).

If there are a number of "financial relationships" between a physician and an entity, each relationship must meet a Stark exception in order for the physician to appropriately refer patients to that facility for designated health services.

COMMONLY USED EXCEPTIONS

Stark Law contains approximately 35 exceptions that describe acceptable financial relationships that allow a physician to refer to an entity for the provision of designated health services. The first group of exceptions can be applied to either "ownership or investment interests" or "compensation arrangements." The second group of exceptions applies only to "ownership or investment interests." The third group of exceptions applies only to "compensation arrangements."

Some commonly applied exceptions to the Stark Law include the exceptions for: personal services, bona fide employment relationships, physician recruitment, and physicians practicing in rural areas and locations designated as Health Professional Shortage Areas.

Still, these exceptions only apply in limited circumstances. For example, the Stark Law exception that covers a medical director agreement with an SNF would not cover the medical director's ownership of that facility. A separate Stark law exception would need to be satisfied.

When a potential self-referral situation is identified it is advisable to speak with a Stark Law expert or an attorney to help determine which exception fits a proposed financial relationship.

Exceptions commonly relied upon by nursing facilities in their relationships with referring physicians include the following:

A. Personal Services Exception

To satisfy the personal services exception, an agreement for a physician's services must:

- Be in writing, be signed by the parties to the agreement, and specify the services covered by the agreement;
- Cover *all* of the services to be furnished by the physician under the arrangement;
- Cover aggregate services that do not exceed those that are reasonable and necessary for the legitimate purposes of the arrangement;
- Be for a term of at least one year;
- Provide for compensation to be set in advance, not to exceed fair market value, and not be determined by the volume or value of any referrals or other business generated between the parties; and
- Not involve counseling or promotion of a business arrangement or other activity that violates any state or federal law, such as the federal anti-kickback statute.

B. Non-Monetary Compensation

The non-monetary compensation exception permits compensation from a nursing facility in the form of items or services (not including cash or cash equivalents) that does not exceed an aggregate of $355 in calendar year 2009, if all of the following conditions are satisfied:

- The compensation is not determined in any manner that takes into account the volume or value of referrals or other business generated by the referring physician;

- The compensation may not be solicited by the physician or the physician's practice (including employees and staff members); and
- The compensation arrangement does not violate the anti-kickback statute or any federal or state law or regulation governing billing or claims submission.

The annual aggregate nonmonetary compensation is adjusted each calendar year to the nearest whole dollar by the increase in the Consumer Price Index. CMS publishes the new nonmonetary compensation limit on the physician self-referral Web site: http://www.cms.hhs.gov/PhysicianSelfReferral/10_CPI-U_Updates.asp

C. Bona Fide Employment

Any amount paid by an employer to a physician (or immediate family member) that has a *bona fide* employment relationship with the employer for the provision of services is permissible if the following conditions are met:

- The employment is for identifiable services;
- The amount of the remuneration under the employment is consistent with the fair market value of the services; and is not determined in a manner that takes into account (directly or indirectly) the volume or value of any referrals by the referring physician; and
- The remuneration is provided under an agreement that would be commercially reasonable even if no referrals were made to the employer.

D. Compliance Training

A nursing facility may sponsor compliance training for a physician or to the physician's immediate family member or office staff if the following conditions are met:

- Physician practices in the entity's local community or service area; and
- Training is held in the local community or service area.

For purposes of this exception, “compliance training” means training regarding the (1) basic elements of a compliance program (e.g., establishing policies and procedures, training of staff, internal monitoring, or reporting); (2) specific training regarding the requirements of

federal and state health care programs (for example, billing, coding, reasonable and necessary services, documentation, or unlawful referral arrangements); or (3) training regarding other federal, state, or local laws, regulations, or rules governing the conduct of the party for whom the training is provided.

The compliance training may include programs that offer CME credit, provided that the compliance training is the primary purpose of the program.

E. Temporary Non-Compliance

Despite failing to comply with an exception, payment may be made to a nursing facility that submits a claim or bill for a DHS if:

- The financial relationship between the entity and the referring physician fully complied with an applicable ownership or compensation exception for at least 180 consecutive calendar days immediately preceding the date on which the financial relationship became noncompliant with the exception;
- The financial relationship has fallen out of compliance with the exception for reasons beyond the control of the entity, and the entity promptly takes steps to rectify the noncompliance;
- The financial relationship does not violate the federal anti-kickback statute, and the claim or bill otherwise complies with all applicable federal and state laws, rules, and regulations;
- The entity rectifies the noncompliance within 90 consecutive calendar days following the date on which the financial relationship became noncompliant with an exception;
- An entity may rely upon the temporary non-compliance exception only once every 3 years with respect to the same referring physician; and
- The non-compliant financial relationship cannot be the result of failing to comply with the exception for non-monetary compensation or medical staff incidental benefits.

Vita

Robert Davidson Johnston was born in Durham, North Carolina, on April 19th. He grew up in the small town of Blowing Rock, North Carolina, where he attended Watauga High School. Upon graduating from high school in 2005, Robert attended Gardner-Webb University and then transferred to Appalachian State University. At Appalachian State University, Robert obtained his Bachelor of Science Business Administration in Health Care Management with a minor in Health Promotion in 2010. Following graduation, Robert married his high school sweetheart, Chelsea.

Robert was accepted into the graduate program at Appalachian State University where he attended and obtained his Masters of Business Administration in General Management in December 2012. Since 2010 Robert has worked for the Sanger Heart & Vascular Institute of Carolinas Healthcare System, where he became the practice manager. On January 1, 2012 Robert transitioned to Appalachian Regional Healthcare System and is currently the business manager of Hospital Based Centers for Appalachian Regional Healthcare System. Robert hopes to remain within the healthcare industry in a capacity that he can ensure innovative and optimum access, quality, and cost of healthcare for all. Robert and Chelsea plan to travel in the years ahead and then start their own family.