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Collaborative Strategies Used to Reduce Billing Administrative Cost

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This is to certify that the doctoral study by

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Walden University
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Abstract

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Abstract

Billing inefficiencies represent 80% of wasteful healthcare administrative costs that are projected to reach $45 billion by 2018. Potentially, a reduced billing administrative cost is estimated to yield an annual savings of $60 billion that could fund other societal needs such as jobs, wage increases, and education. Through the conceptual framework of iceberg change management model, this single case study explored collaborative strategies 3 healthcare billing managers in Dallas, Texas successfully used to reduce billing administrative costs. Data were collected through semistructured interviews and the review of company documents. Using Yin's procedure of examining, comparing, categorizing, and coding data, the thematic analysis exposed 5 themes: task coordination, communication, stakeholder involvement, relationship management, and performance indicators. The findings indicated that collaborative strategies might serve as a guideline for billing managers to identify and manage behaviors, attitudes, and processes that hinders the reduction of wasteful billing administrative costs. The implication for positive social change is the potential to reduce the number of individuals who forgo care due to medical billing complexities and disputes. The study may also contribute to social change by providing other billing managers and administrators with strategies for reducing healthcare billing administrative costs. Potential cost savings derived from improved billing administrative costs could fund healthcare for the uninsured and underinsured. The implementation of these collaborative strategies may improve fragmented billing processes, resulting in reduction of wasteful healthcare spending.

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Dedication

I dedicate this accomplishment to my Lord and Savior Jesus Christ, who never forsook me even when all odds were against me. My husband believed in me and encouraged me daily with endless love and sacrifice. My beloved children recognized the principle of working hard and not giving up at a very young age and understood why I had to spend uncountable hours in my study closet. My parents whose uncountable sacrifices propelled me to accomplish my goals.

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Section 1: Foundation of the Study

The Congressional Budget Office (CBO, 2013) projected healthcare spending in the United States will rise to 22% of total gross domestic product (GDP) by 2038. When compared to other developed countries such as the United Kingdom, Canada, France, Germany, Netherlands, New Zealand, Norway, Sweden, and Switzerland, Schoen, Osborn, Squires, and Doty (2013) revealed that costs of health care and billing complexity are reasons Americans forgo care. To manage billing inefficiencies in the health system, the United States Government enacted the Patient Protection and Affordable Care Act (PPACA) also known as Affordable Care Act (ACA) reform in 2010 with the impetus to gain efficiency in managing healthcare cost, quality, and accessibility (Antos, 2014). However, Jiwani, Himmelstein, Woolhandler, and Kahn (2014) projected billing administrative costs will rise from $24 to $45 billion in 2018 as the number of insured Americans increases under the ACA reform.

Background of the Problem

The increase of billing compliance requirements and management of various billing regulations from multiple payors increases healthcare billing administrative costs (Schoen et al., 2013). Consequently, lack of collaboration created inefficient billing processes among departments (Craghead & Liston, 2014). Additionally, lack of collaboration among key departments such as billing, clinical, and health information management increased noncompliance with payor regulations (Harris & Kelly, 2015). The fragmented multipayer health system in the United States increased healthcare administrative costs from 23% to 25% (Himmelstein et al., 2014). Fragmented billing

processes represented 18% of the United States' healthcare cost (Jiwani et al., 2014). However, Culter, Wikler, and Basch (2012) estimated improved billing processes could result in annual savings of $60 billion for healthcare providers and stakeholders.

Problem Statement

Compared to other developed nations such as England, Canada, Scotland, France, and Germany, the United States recorded the highest healthcare administrative cost due to fragmented billing policies and regulations from multiple payors (Himmelstein et al., 2014). Out of $471 billion reported as the healthcare administrative cost, multipayer billing and insurance complexities represented 80% of wasteful spending (Jiwani et al., 2014). The general business problem is fragmented billing processes contribute to wasteful healthcare spending. The specific business problem is some healthcare billing managers lack collaborative strategies to reduce billing administrative costs.

Purpose Statement

The purpose of this qualitative single case study was to describe collaborative strategies healthcare billing managers used to reduce billing administrative costs. The specific population group was healthcare billing managers working in a healthcare organization in Dallas, Texas. The billing managers demonstrated success at using collaborative strategies to reduce billing administrative costs. The research findings may contribute to social change by reducing wasteful spending and advancing healthcare accessibility and affordability (Schoen et al., 2013). Potential savings may fund health coverage for the uninsured and underinsured (Jiwani et al., 2014). Also, cost savings may be used to improve other societal needs such as jobs, wage increase, education, housing,

transportation, research and development, and homeland security (Blumenthal, Stremikis, & Cutler, 2013). Healthcare professionals and patients may benefit from an efficient and innovative billing administrative processes that may reduce medical bill disputes, out of network bills, and claims denials (Schoen et al., 2013).

Nature of the Study

The selected research method for the study was a qualitative methodology. I chose qualitative methodology with the intent to describe collaborative strategies healthcare billing managers used to reduce billing administrative costs. Researchers use qualitative methods to explore and describe how processes work (Willig, 2013). A qualitative methodology applies to developing strategies and cultivating frameworks that may improve sustainability, profitability, business processes, and management performance (Turkson & Coffie, 2013).

A quantitative researcher identifies or describes cause and effect relationships and observes correlations among variables (Arghode, 2012). My intention was not to test hypotheses or provide statistical analysis on collaborative strategies that reduced billing administrative costs. A mixed methods studies require combining qualitative and quantitative methods to collect answers to research questions (Mertens, 2014). In this regard, since quantitative strategies did not fit the scope of this study, a mixed methods studies was not appropriate either. The qualitative method was best for the study because of the opportunity to probe participants with open ended questions that revealed an in depth knowledge on what collaborative strategies were used to reduce billing administrative costs.

I chose a case study design among other available qualitative research designs. A case study provides an opportunity to investigate, compare, and describe participants' viewpoints on a phenomenon (Crowe et al., 2011; Johansen, Andersen, Mikkelsen, & Lynge, 2011). Researchers use case study design to explore and describe a phenomenon within its context (Yin, 2014). Consideration to adopt ethnographic and phenomenological designs was not appropriate to reveal the research findings. The ethnographic design allows researchers to interpret patterns and behaviors of shared culture among individuals or groups (O'Reilly, 2012). However, the focus of the research was not to reveal cultural behavior patterns; for this reason, an ethnographic design was not appropriate. Researchers interested in providing a deep understanding of human experiences about situations such as earthquakes conducts a phenomenological design (Merriam, 2014; Yin, 2014). The focus of the research was not to describe real life experiences participants had in common but to provide an in depth description of collaborative strategies healthcare billing managers used to reduce billing administrative costs. Thus, the phenomenological design was not appropriate for this research study.

Research Question

The research question for the research was the following: What collaborative strategies did healthcare billing managers used to reduce billing administrative costs? The following interview questions explored strategies participants used to reduce billing administrative costs in their organizations.

Interview Questions

1. What billing administrative cost did you reduce?

2. Who are the stakeholders involved in the collaborative process that led to a reduction in billing administrative cost?
3. What collaborative strategies did you use to reduce billing administrative cost?
4. What barriers to change did you encounter?
5. What strategies did you use to alter barriers to change?
6. What impact did the changes have on billing administrative cost?
7. How did you measure the improvement of billing administrative cost?
8. What other insights can you share on improving billing administrative cost?

Conceptual Framework

The iceberg change management model served as the conceptual framework that was adopted to interpret how healthcare billing managers reduced billing administrative costs. Kruger (2009) developed the iceberg change management model in 1996 as a framework for identifying and solving barriers to organizational changes that could improve efficiency and growth. The iceberg concept indicated that managers focus mainly on the tip of the ice issues such as cost, quality, and time. Consequently, managers do not pay attention to underlining challenges such as behaviors and attitudes below the waterline that hinders achievement of change. Furthermore, change resistance created by managers and staff members affects group cohesiveness. However, group cohesiveness is necessary to achieve a collaborative change (Kruger, 2009).

As described by Kruger (2009), before managers identifies the strategies to use for change management, people involved in the change process should be classified as either change opponents, hidden opponents, potential promoters, or promoters of change.

Following the classification, the two strategies that can be used to alter change rivals are: (a) power and politics management strategy and (b) management of perceptions and belief strategy. For instance, an organization or manager may use power and politics to limit resources needed to support a change due to personal perceptions and beliefs. The management of power and politics could alter behaviors affecting change when management creates policies to prevent certain behaviors or reward behaviors that produces desired results. The use of perceptions and belief management could alter attitudes obstructing change through the use of organization culture or tone from top management (Kruger, 2009). Therefore, the two dimensions of change strategies presented by the iceberg change management model are appropriate to understand the application of strategies billing managers used to reduce billing administrative costs.

Operational Definitions

Agents: Managers acting in the interest of the principals such as stakeholders and shareholders (Mitchell & Meacheam, 2011).

Interdisciplinary: A collaborative process of professionals with similar disciplines working together cohesively and collectively to achieve the same goal (Real & Poole, 2016).

Multidisciplinary group: A collaborative process of professionals from a diverse background or disciplines working independently and then sharing information with each other (Real & Poole, 2016).

Multipayer system: A health system where providers bargain payment rates with multiple private and government payers (Himmelstein et al., 2014).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions are statements that appears factual but not verifiable (Willig, 2013). The two assumptions in the research study seemed valid but were not verifiable. The first assumption was perspectives of purposive selected participants would represent effective collaborative strategies that reduce billing administrative costs. The second assumption was participants would answer all questions honestly without bias.

Limitations

Limitations are circumstances beyond the researcher's control that limit validity and transferability of the research findings (Shipman, 2014). The established criteria to select healthcare billing managers who had successfully reduced billing administrative costs may create a lack of diversity in participants. The perspectives of purposive selected participants may not apply to other healthcare settings. Additionally, my novice experience as a researcher may create limitations for the transferability of the research findings to other settings.

Delimitations

Delimitations are choices made by researchers to guide the parameters of a study (Denzin & Lincoln, 2011). The parameters are selection of two data collection instruments, semistructured interviews and document review, represented sets of parameters I established for this study. Another parameter is the requirement to select only healthcare billing managers who had successfully reduced billing administrative costs using collaborative strategies.

Significance of the Study

Contribution to Business Practice

The study contributes awareness of applying collaborative change management strategies to business practice. VanVactor (2012) noted collaborative management is a change catalyst that promotes growth throughout the healthcare industry. Berwick and Hackbarth (2012) revealed that the implementation of collaborative strategies will promote changes that would improve efficiencies in a complex system. Therefore, healthcare billing managers may use the research findings to develop a collaborative change management that could reduce wasteful spending on billing administrative costs. Gordon et al. (2014) explained that collaboration increases innovation, knowledge sharing, networking, and evidence based practices. The research findings may be of significant value to healthcare billing managers, healthcare administrators, the United States government, and consultants who seek to reduce healthcare billing administrative costs.

Implications for Social Change

The United States is the highest healthcare spender worldwide as its GDP spending on healthcare increased from 4.4% in 1950 to 17.9% in 2011 and is projected to reach 26% by 2040 (Fuchs, 2013). One of the drivers of rising healthcare cost is the redundant and misguided billing administrative procedures (Berwick and Hackbarth, 2012; Semigran, Mehrotra, and Hwang, 2016). The research findings may contribute to social change as reduced billing administrative costs may lessen the percentage of health spending on GDP and potential savings could fund a sustainable health system and other

societal needs such as education, jobs, wage increase, transportation, and homeland security, as well as provide health coverage for the uninsured and underinsured.

A Review of the Professional and Academic Literature

The literature review section consisted of relevant information extracted from published journals and textbooks on billing administrative costs, change management, and collaborative billing practices in the healthcare industry. When discussing collaboration, I am referring to healthcare professionals with similar or diverse disciplines working together to make decisions that would eventually benefit a common goal. The discussion of change management is necessary for stakeholders to join forces and improve inefficient processes to a more desirable result.

Organization of Literature Review

The literature review section was organized into seven sections. Strategies adopted to search literature reviewed was presented in the first section. An overview of the iceberg change management model was presented in the second section. Syntheses of collaboration and its relation to change management was presented in the third section. Explanations of various collaborative change management theories was presented in the fourth section. Insights on how collaborative management affects the achievement of efficiency was presented in the fifth section. The complexity and challenges of a multiplayer healthcare billing system was presented in the sixth section revealed. The association of inefficient billing processes with increase of healthcare administrative costs was presented in the seventh section.

I adopted five strategies to aid the search for literature on the phenomenon under study. First, I used Google Scholar and Research Gate web search engines. Secondly, I retrieved literature from Walden's library, specifically from business management databases such as Thoreau Multiple database search, ProQuest, Science Direct, ABI Inform Global, and EBSCO. As a third search strategy, I used the Ulrich database accessible through Walden's library to verify peer reviewed journals. For the fourth strategy, I selected related journals from my search results to identify literature with similar topics. Fifth, I used advanced search criteria to retrieve journals that were peer reviewed and within 5 years of the graduation date. There are 125 total sources in the literature review section with 113 (90%) peer reviewed and 108 (86%) published within 5 years of the expected graduation date. The keywords used for searching the literature were *billing administrative cost*, *multipayer health system*, *billing denial rate*, *healthcare billing*, *collaborative healthcare strategy*, *healthcare collaboration*, *healthcare change management*, *interprofessional*, *interdisciplinary*, *multidisciplinary*, *transdisciplinary*, *interdepartmental*, *process improvement*, *teamwork in healthcare*, *sustainable healthcare strategy*, *organizational culture*, *healthcare leadership style*, and *healthcare cost management*.

Iceberg Change Management Model

In this section, I explained the components of the iceberg change management model in order to describe its connection to the research question. Using an iceberg diagram, Kruger (2010) illustrated that the iceberg change management model could strategically be used to alter barriers affecting necessary changes and could promote

efficiency in an organization. The top of the iceberg diagram showed the common and obvious issues most management struggle with as cost, quality, and time. Below the iceberg are behaviors and attitudes that hinders the achievement of changes that are not obvious and easily identified by managers. The strategy to manage barriers associated with attitudes that impedes change is the management of perceptions and belief. The strategy to manage behaviors that impedes change is the power and politics management (Kruger, 2010). In agreement with Kruger (2010), Langley, Smallman, Tsoukas, and Van de Ven (2013) as well as Ramanathan and Gunasekaran (2014) argued that change management is a transformation process that breaches the gap between a current state and a desired future state. Thus, for billing managers to move from an undesired billing administrative cost to a more desirable result, change must occur.

Kruger (2010) classified behaviors and attitudes of people involved in the change process into five change levels of opponents, hidden opponents, potential promoters, and promoters. Ultimately, a successful change process would have more promoters than opponents. Change levels right below the iceberg waterline indicates most people involved in the change process are promoters. Often, when a change brings personal gains, people take advantage and support the change for their personal benefits. However, change levels far below the iceberg waterline, at the midpoint or bottom of the water, indicates most people are opponents with hidden oppositions. A hidden opponent who depicts negative attitudes and superficial behaviors could have hidden opposition towards the change. If a hidden opponent speaks negatively about a change but eventually followed the change, they are portrayed as team players. Unlike hidden opponents,

potential promoters not yet convinced of a change could portray positive attitudes but would not display supportive behaviors. Contrarily, opponents have both negative attitudes and negative behaviors towards change (Kruger, 2010).

To implement a succesful change that is capable of managing change obstruction, Kruger (2010) recommended the application of change dimensions of (a) power and politics management, or (b) perceptions and belief management to sway change opponents and hidden opponents. The power and politics management strategy influences behaviors while management of perceptions and belief alters attitudes of people involved in the change process. The application of the iceberg change management strategies seemed appropriate to evaluate and understand what strategies billing managers used to make necessary changes that reduced billing administrative costs.

Collaboration and Change Management

This section reviews the concept of collaboration and its relation to change management. The administrative healthcare cost estimated at $389 billion per year shows wasteful spending and lack of coordination among key players (Berwick & Hackbarth, 2012; Emanuel et al., 2012). Ramanathan and Gunasekaran (2014) said collaboration is an enabler of change because the reason why people come together is for an action to follow. Likewse, VanVactor (2012) defined collaboration as coordination of tasks among multidisciplinary departments that sharesa common goal and mutual benefits to achieve necessary changes. For instance, Aldhizer and Juras (2015) noted that lack of coordination among healthcare multidisciplinary staffs creates redundancy in administrative tasks and increases cost of providing care, which eventually increases the

scrutiny of healthcare payors. Rebuge and Ferriera (2012) said that healthcare processes are highly dependent on stakeholder collaboration due to its dynamic, complex, and multidisciplinary functions. Thus, the increasing demand for cost control creates an initiative for healthcare payors, providers, and health practitioners to collaborate and achieve necessary changes that would promote efficiency and sustainability (Froimson et al., 2013).

In support of Rebuge and Ferriera (2012), Atun (2012) pointed out that the demand for cost efficiency in the United States' health system is not easily achievable due to complexity of interconnection and woven elements within the system. Phillips, Stalter, Dolansky, and Lopez (2015) advised managers to explore the complexity within the healthcare system by adopting collaborative strategies to improve and change processes within the system. However, Redpath et al. (2013) noted that change is difficult to accomplish due to group dynamics, lack of trust, organizational structure and culture. Bennett and Gadlin (2012) along with Deady (2012) explained that collaboration is an effective strategy that solves perplexing questions and resolves complex problems that are beneficial to interdisciplinary, multidisciplinary, or transdisciplinary teams. Fawcett, Jones, and Fawcett (2012) explained that collaborating for change is beyond teamwork as the focus is not only for people to simply work together, but to establish trust and sacrifice personal gains by communicating, cooperating, and making decisions that are beneficial to the overall goal.

Bedwell et al. (2012) pointed out that some people who are part of a team did not cooperate or support the common goal due to hidden agendas and apathy towards the

team goal. In this regard, effective change management requires the application of strategies to manage barriers hindering cooperation from stakeholders (Bedwell et al., 2012). Furthermore, achieving a high performing organization requires collaboration that would lead to accumulation of meaningful information needed for change implementation and management (De Brucker, Macharis, & Verbeke, 2013). Mohrman and Lawler (2012) emphasized that changes needed to drive productivity and efficiency in organizations are inevitable. Therefore, managers must acquire necessary knowledge required to collaborate in a cross functional and cross organizational setting; thus, it is important for researchers to work collaboratively with organizations to reveal innovative solutions for complex management issues (Mohrman & Lawler 2012).

Collaborative Change Management Theories

This section provided syntheses and comparisons of various collaborative change management theories. Kotter (1998) developed eight steps to implementing collaborative changes that would promote efficiency. The first step is to establish a sense of urgency, whereby individuals within the organization need to cooperate and understand the need for change. Contrary to Kruger (2009)'s advice for managers to use power to influence change, Kotter (1998) explained that the use of power alone would not encourage people to cooperate, but the use of an outside consultant who can reinforce the change message is a better strategy because employees often perceive the use of power as forceful.

The second step to managing change identified by Kotter (1998) is to create a guidance coalition; a notion that cohesiveness and joint efforts leads to effective change. Thus, change is not achievable by the leader alone but through collaboration. In the third

step, managers should develop a vision and strategy to ensure the change objective is clear and concise to lessen confusions. The vision would be documented and easily understood by all parties involved. To implement change on a collaborative team, it is necessary to assign individuals to positions of power, expertise, and leadership as a strategy to promote change. The focus of such individuals is not to drive the change but to serve as role models who will communicate the positive impact and benefit to people involved. Often, middle managers drive the change requirement and track change performances because staff perceives managers to have more trustworthy information compared to executives (Kotter, 1998).

The fifth step of the model is the empowerment of broad base actions, which is a strategy to empower change by empowering people to embrace challenges in the implementation process (Kotter, 1998). In conjunction with Kruger (2009), Kotter (1998) noted that managers could increase the acceptance of change by communicating opportunities for personal gains. Specifically, Kruger (2009) explained that individuals' attitude and behaviors create change barriers; thus, the empowerment process requires addressing change barriers impacted by organizational structure and culture. The sixth step of the model is to generate short term wins by recognizing achievements and behaviors that embrace change, in turn creating positive momentum for people to accept change (Kotter, 1998). Leaders should set high expectation, monitor performance, and reward positive behaviors and attitudes. The seventh step of the model requires consolidating gains to produce a change acceptance culture. Management should identify the behaviors and attitudes that promote change and capitalize on those that would

increase momentum. The eighth and last step of the change management model is to develop a corporate culture that links change acceptance to performance improvement because the purpose of change is to improve performance (Kotter, 1998).

Hart (2011) used the phrase "elephant in the room" to express the challenge professionals experience with the struggle for power and status during collaboration. When a power imbalance exists among interdisciplinary groups, Hart (2011) suggested using emotion management as a strategy to encourage collaborative decision making. Schroder et al. (2011) developed a collaborative practice assessment tool (CPAT) for interdisciplinary healthcare teams to assess the level of collaborative practices among process stakeholders. CPAT provided an avenue for diverse interdisciplinary teams to present viewpoints on specific issues, analyze results, and make decisions for improvements. CPAT reviewed the degree of collaborative group practices in the areas of mission and shared goals, relationships and mutual trust, responsibility and role awareness, communication and information exchange, shared decision making and conflict management, coordination, and team potency (Schroder et al., 2011).

While Hansen (2013) defined the process of collaborating for change management as a means to an end, and the end is to achieve exceptional performance. In other words, the only reason people collaborate is for better outcomes. Hansen introduced the concept of disciplined collaboration as an effective change management strategy. Disciplined collaboration is a process of striking a balance between decentralized and centralized decision making structures. Managers should not desire either extreme end. The proper balance is for managers to maintain a decentralized decision making

structure, having the autonomy to make an independent decision that produces the best results, and without being forced, willingly collaborate when opportunities arise (Hansen, 2013).

The four barriers that disrupts collaboration mentioned by Hansen (2013) are the following: (a) the not invented barrier indicates people are not willing to reach out to others; (b) the hoarding barrier indicates people are not willing to provide help to others; (c) the search barrier indicates people are not able to find what they need; and (d) the transfer barrier indicates people are not able to work with new team members. However, to achieve a disciplined collaboration, opportunities to collaborate must be evaluated, barriers to collaborate must be identified, and a collaborative decision model must be adopted (Hansen, 2013).

Furthermore, Hansen (2013) presented the T shaped dual management approach to encourage collaboration. The horizontal part of the T represents a management style that shares knowledge freely across the organization, and the vertical part of the T represents individuals' commitment to their business unit. Some managers are willing to change and adapt the T management style to combat hidden hindrances that disrupt collaboration. However, collaboration is costly, so it is important to make sure there are derived benefits after opportunity cost and actual collaboration costs are realized. The decision whether to collaborate should depend on the derived value. Collaboration is costlier and less efficient if the reward structure is unit based or if there is no established reward to encourage collaboration. In this regard, organizations with high collaborative

barriers will experience high collaboration cost. Thus, managing obstacles affecting collaboration would reduce the cost of collaboration tremendously (Hansen, 2013).

Similar to Kruger (2010), Hansen's (2013) approach to managing barriers to change is to identify change obstacles and then tailor an appropriate lever strategy. Implementation of the unification lever strategy requires managers to mandate common goals across the organization. Implementation of the people lever strategy requires unit managers to collaborate with other departments as needed. Implementation of the network lever encourages employees to develop relationships across the organization without a mandate from management to do so (Hansen, 2013). Dammeyer et al. (2012) recognized that change management and organizational culture is necessary to motivate staff across discrete units to participate in innovative and collaborative knowledge sharing opportunities. In their study of multidisciplinary collaboration, the leaders that collaborated and encouraged their staff members to embrace change are medical directors, nurse managers, clinical nurse specialists, staff nurses, pharmacists, and respiratory therapy supervisors. The four E strategies adopted by interdisciplinary teams to implement an innovative performance improvement were engaging, educating, executing, and evaluating (Dammeyer et al., 2012).

Blanchet and James (2012) revealed that healthcare systems are multi scaled with regions, districts, and subdistricts categorized into catchment areas for management and delivery of care. The different groups within the catchment areas tasked with administrative or jurisdictional duties often make decisions that affects one another. The adoption of an effective social network analysis method aided the development of

relationships between the staff members, patients, community groups, and organizations within the catchment areas. Collaboration between the catchment areas encouraged innovation, relationship building, shared beliefs, and values. However, unlike the iceberg change management model, the social network analysis method lacks implementation strategies needed to manage resistance to collaborative change (Blanchet & James, 2012). Nigam, Huising, and Golden (2014) used the concept of framing problems to manage barriers to implementing collaborative changes. For instance, understanding an issue is subjective depending on how the presenter framed the problem. Strategic and contested frames are suitable for either blocking or neutralizing opposition to change (Nigam et al., 2014).

Collaborative Change Management Style

This section reviews the impact of collaborative change management style on operational efficiency. Giniat, Benton, Biegansky, and Grossman (2012) explained that system limitations, unrealistic expectations, lack of cross functional teams, executive commitment, and technology are reasons why change management fails. To effectively manage change that would increase efficiency, Giniat et al. (2012) suggested that managers should review their organizational structure, culture, and ensure their employees and leaders shares the same vision, creates a culture that embraces change, monitors performance, and reassess recruitment of talents that are vital for organizational growth.

According to MacMillan (2012), organizational structures that are hierarchical and do not conform to equality would not encourage collaboration for change. However,

Quaschning, Korner, and Wirtz (2013) explained that a shared decision making structure will encourage collaboration and improve inefficiencies. Therefore, Eccles, Perkins, and Serfeim (2012) explained that managers should not base their decisions only on the perspectives of top executives and shareholders but should consider stakeholders' involvement. Swanson et al. (2012) explained that a healthcare system is constantly changing, unpredictable, unstable, complex, and requires consistent interactions with stakeholders such as patients and their family members, communities, providers, staff members, policy makers, and payors. In support, Helm-Murtagh (2014) explained that high performing healthcare organizations need to integrate, interact, and communicate with stakeholders to make shared decisions.

According to Chen et al. (2011), behaviors of employees within an organization could affect the organization's ability to efficiently manage its operations and performance. Biron and Hanuka (2015) explained that an organizational culture must support and reward knowledge sharing to foster a collaborative culture. Tsai and Hsu (2014) elaborated that collaboration among staff members and management enables strong development of values and beliefs that could improve productivity and reduce cost. Additionally, Wachter (2013) emphasized that a culture of accountability across the organization and among paraprofessionals is necessary to maximize intuition and reduce cost. Furthermore, Bedwell et al. (2012) noted that inefficiency in the healthcare system is manageable by implementing collaborative structure among the clinical, operational, and financial leadership team with the aim to reduce waste and streamline coordination of tasks.

VanVactor (2012) elaborated that collaborative management style would encourage growth throughout an organization as well as (a) inspire a transformational leadership style, (b) enhance organizational culture, (c) improve communication style, (d) increase stakeholder approach in decision making, and (e) create a feedback system necessary for continuous performance improvement. The increase of patient centered medical homes under the accountable care organization impacted the challenge of balancing multiple stakeholder billing and payment system (VanVactor, 2012). Conrad et al. (2014) suggested adopting a flexible management style to gain collation and continuous improvement would add valuable initiatives.

The research of Swanson et al. (2012) revealed there is a need for a transformational leadership style, which would encourage necessary changes to gain efficiency. Garcia-Morales, Jimenez-Barrionuevo, and Gutierrez-Gutierrez (2012) explained that transformational leaders continually review processes for efficiency while embracing an organizational culture that supports intuitive, innovative, and collaborative learning. Moynihan, Pandey, and Wright (2012) suggested that transformational leadership style encourages staff empowerment, creativity, and motivation which improves inefficiencies and performance results. As noted by Manafi (2012), transformational leadership style sets the foundation necessary to encourage a stakeholder approach among staff members who need to achieve common goals. In addition, when healthcare managers embrace transformation leadership style, employee turnover rate reduces (Manafi., 2012). Kislov, Walshe, and Harvey (2012) described community of practice as an approach used in analyzing the level of collaboration among healthcare

professionals. Community of practice encourages collaborative culture among people with different passions and objectives to join forces on an ongoing basis, interact, share knowledge, develop relationships, and negotiate solutions that will achieve common goals. Community of practice members are individuals or groups that are either novice or experts in their respective fields (Kislov et al., 2012).

McCaffrey et al. (2012) stressed the importance of collaborative practice among multidisciplinary healthcare professionals is critical to reducing waste. Bedwell et al. (2012) concluded that collaborating sub processes is necessary to reduce cost. Reeves, Perrier, Goldman, Freeth, and Zwarenstein (2013) revealed how healthcare managers used professional education and collaboration to promote skills and behaviors that led to cost reduction. For instance, Bosque and Catlin (2015) revealed how neotologists and neotology nurse practitioners used collaborative management style as a strategy to streamline their billing process and increased reimbursement rates by determining when neotologists should bill for services performed by the neotology nurse practitioners. Susskind, Camacho, and Schenk (2012) discussed the importance of collaborative adaptive management strategy, which involves sharing knowledge, ensuring mutual gains, and overcoming barriers to change among stakeholder groups. The objective of collaborative adaptive management is to reduce conflict, set clear expectations, measurable goals, and establish incentives that will foster collaboration. Also, collaborative adaptive management is an effective management style for managing scarce resources and complex situations (Susskind et al., 2012).

Lack of trust in an organization affects the ability to communicate, collaborate, and improve performances in areas of cost management (Korner, Ehrhardt, & Steger, 2013). A sustainable organization must continually develop positive relationships, communicate with stakeholders, and work with other agencies to make improvements (McCullough, 2012). Leon-Perez, Notelaers, and Leon-Rubio (2015) asserted that conflict management training is scarce in healthcare but necessary to promote collaboration and efficiency. Conflict management plays a significant role in complex systems such as healthcare. Conflict management can also improve job satisfaction and performance, reduce staff absenteeism, and reduce unnecessary cost. Strategies to manage conflicts are (a) addressing behaviors and the system problem separately, (b) managing conflict through assertive communication style, and (c) instead of focusing on power position, using joint resolutions that would meet the interest of all parties involved (Leon-Perez et al., 2015). De Wit, Greer, and Jehn (2012) noted that the existence of conflict might encourage innovation and stimulate process improvements among multidisciplinary groups. Contrary, the lack of conflict reduces relationship development and collaboration. Particularly, unresolved conflicts affects organization performance (De Wit et al., 2012).

Delen and Demirkan (2013) explained that managers have challenges in selecting relevant decision support tools with the vast data available to select. The impact of IT and managerial control is imperative for surviving a competitive healthcare industry, where managers are consistently looking for valuable information to make adequate decisions (Granlund, 2011). Therefore, it is important to note that lack of system controls can lead

to invalid and inaccurate information, which can negatively influence management decisions (Dees et al., 2013). For example, Reitz, Common, Fifield, and Stiasny (2012) revealed that patient experience with medical billing satisfaction increased when management implemented an electronic health record system. Although, Chen, Chiang, and Storey (2012) noted the implementation and integration of IT systems are suitable for the organization to collect prompt and accurate data. The implementation of electronic health record can lead to managerial constraints and inadequate performance (Chen et al., 2012). Li, Peters, Richardson, and Watson (2012) explained that the flow of information could be limited when key players do not collaborate. In addition, access to information could be restricted if not relevant to the decision (Li et al., 2012). As an example of the effect of lack of collaboration with stakeholders, top management is unlikely to criticize the implementation of an ineffective enterprise resource planning (ERP) because of their sole decision to acquire the particular software (Teittienen, Pellinen, & Jarvenpaa, 2013).

Slinger and Morrison (2014) explained that without availability of timely and useful data, managers rely on personal experience to make decisions based on the highest paid person's opinion (HIPPO). Johnson et al. (2012) argued that availability of data alone does not automatically lead to a better decision but the statistical knowledge of data interpretation and collaboration of stakeholders who understand the problems are imperative to avoid mistakes. Haste decisions that are not beneficial to the organization, shareholders, or stakeholders could lead to costly transactions and legal ramifications or decrease the organizational value (Nogueira & Bataglia, 2012). Therefore, managers are encouraged to identify relevant performance measurements such as benchmarks to

monitor costly transactions in their operations (Tate, Dooley, & Ellram, 2011). Performance evaluation methods are useful for monitoring whether employees are making the right decisions or managing contractual obligations in manners that increases shareholders and stakeholders' value (Nixon & Burns, 2012). Balanced scorecard is a metric used by management to review their organizational performance and to ensure adopted strategies are meeting short term and long term goals (Grigoroudis, Orfanoudaki, & Zopounidis, 2012). Apart from measuring performance within an organization, the need to adopt inter organizational collaborative performance measurements would promote efficiency in the healthcare management system (Yap & Tan, 2012).

Multipayer Healthcare Billing System

In the 1980s, the solution adopted by the United States government to control the rising healthcare cost is to standardize Medicare reimbursements by adopting a performance measurement of case mix through the application of diagnostic related groups (DRG) (Tummers & Van de Walle, 2012). Other managed care payors and other countries such as Australia and United Kingdom adopted DRG performance measure reimbursement model as well (O'Reilly et al., 2012). Kangovi et al. (2012) explained that DRG reimbursement methods pays hospitals on acuity, patient age, complexity of the procedure, and the average length of stay. Hospital management focuses on making a profit by ensuring the actual patient hospital length of stay is below the required Medicare's average length of stay. Consequently, hospitals discharge patients early and then readmit under a new DRG code for continuation of care. Similar to the DRG cost

control measures, the Resource Based Relative Value Scale (RBRVS) is used for determining the physicians efficiency and cost to reimburse (Kangovi et al., 2012).

After the enactment of Affordable Care Act in 2010, the United States government, still concerned with improving healthcare effectiveness in the areas of quality, cost, and accessibility, allocated $10 billion to study reimbursement and delivery of quality care methods from fiscal years 2011 to 2019 (Silberman, 2013). In the next 10 years, at least 75% of Center of Medicare and Medicaid's payments will be impacted by the reimbursement methods other than fee for service (Emanuel et al., 2012). Alongside with Medicare, other private insurances such as Blue Cross Blue Shield of Massachusetts are now adopting alternative quality contracts (Song et al., 2012). Payors and providers are collaborating through the establishment of accountable care organizations to coordinate care, invest in infrastructures that would enable data sharing, perform care outcome measurements, assess and manage risks, and promote preventive care (Goldsmith, 2011). The increase of accountable care organizations and alternative quality contracts influences the reduction of Medicare and Blue Cross Blue Shield's reimbursements to providers and savings to healthcare payors and patients (McWilliams, Landon, & Chernew, 2013).

The implementation of the pay for performance reimbursement method is one of the ways the United States government made an enormous impact on healthcare billing (Baicker & Goldman, 2011). The pay for performance reimbursement method requires healthcare payors to weight on quality and evidence base care (Holahan & McMorrow, 2014). In addition, the physician quality reporting system and the meaningful use of

electronic health record system have been implemented to measure physician quality care performances (Cassel & Jain, 2012). Furthermore, the Hospital Consumer Assessment of Healthcare Providers and Systems Quality Scores affects providers' reimbursements and results are publicly available to healthcare payors and patients for scrutiny (Holahan & McMorrow, 2014). Consequently, hospitals are facing a reduction in reimbursements due to lack of task integration among multidisciplinary healthcare professionals (Kocher & Adashi, 2013).

O'Brien, Kumar, and Metersky (2013) noted insurance payors such as Medicare and Medicaid are moving away from fee for service and moving towards bundled payments. Bundled payment is a quality based reimbursement method also known as value based purchasing (O'Brien et al., 2013). Through value base payment modifier programs, Medicare requires hospitals to adhere to the transparent Hospital Consumer Assessment of Healthcare Providers and Systems scores (HCAHPS) while, physician practices must adhere to Physician Quality Reporting Initiative System (PQRS) (Federman & Keyhani, 2011; Junewicz & Youngner, 2015). In 2013, Medicare started withholding 1% of hospital reimbursement to fund the incentives related to high HCAHPS scores (Kennedy, Craig, Wetsel, Reimels, & Wright, 2013). Petrullo, Lamar, Nwankwo-Otti, Alexander-Mills, and Viola (2013) noted hospitals are strategically adopting guidelines to improve communication between patients and caregivers to avoid 1% deduction by Medicare. Petrullo et al. (2013) suggested frequent education and reinforcement of expectations are necessary to ensure staff members are adhering to requirements of HCAHPS and PQRS.

Primary care specialists who prospered under the fee for service reimbursement method challenged the value driven reimbursement methods that holds providers accountable for not initiating preventable care, but performing unnecessary procedures, and test (Goroll, Stephen, & Schoenbaum, 2012). James, Gellad, and Primac (2014) noted that physicians are wary of servicing patients with complex health issues that might not adhere to recommended treatments, thus reducing their quality scores and in turn, affecting their reimbursements and profitability. Young, Bayles, Hill, Kumar, and Burge (2014) research on coding and billing revealed the complexities and unclear rules set by the Center of Medicaid and Medicare Service for billing and coding requirements. For example, Young et al. (2014) explained that primary care physicians are challenged with adequately coding services rendered while trying to focus on documenting patient continuation of care. Some providers under code patient diagnosis by not documenting all health issues in the medical record due to the fear of payor billing audit (Young et al., 2014). Department of Justice (2003) reported the intent to make a profit led Hospital Corporation of America (HCA), a hospital chain, to code procedures for higher paid DRGs erroneously. The court indicted HCA for fraud, which led to $1.7 billion in civil and criminal penalties (Department of Justice, 2003).

Healthcare managers faced with contradicting challenges of efficiency must collaborate to reconcile complexity of interrelationships that exist among key stakeholders (Blackmore, Mecklenburg, & Kaplan, 2011; Kitto et al., 2015; Swanson et al., 2012). Understanding the interconnection, dynamic, and complexity of the healthcare industry requires a system thinking and a collaborative approach to recognize policies

and processes within the system that needs to change in order to meet the efficiency demand (Atun, 2012; Phillips et al., 2015). Mutale, Balabanova, Chintu, Mwanamwenge, and Ayles (2014) claimed system thinking provided an avenue to understand the interrelationships of complex situations that is constantly changing. In addition, healthcare system thinking analysis helps managers prepare for emerging challenges that are detrimental to the current and future sustainability of their organization. The application of system thinking analysis in healthcare enables managers to review and address positive and negative feedback. Adam and De Savigny, 2012 and Bigdeli et al., 2012 used system thinking to review the accessibility of healthcare and its interconnections to health financing, human resources, information technology, health information, service delivery, and governance.

To close the gap in knowledge on evidence based practice and establish effective strategies, Ammerman, Smith, and Calancie (2014) suggested the use of system thinking analysis helped managers understand how variables interacts and changed over time. Furthermore, Swanson et al. (2012) emphasized that system thinking encourages collaborative mindset required to establish strategic changes that will transform the healthcare system across disciplines. According to Rice and Harris (2014), healthcare billing processes requires multidisciplinary professionals such as various specialists and insurance payors to work together in a complex system. In the United States, insured patients do not directly control the release of funds, instead insurance companies and healthcare providers control reimbursement for services (Rice & Harris, 2014). The research of Jiwani et al. (2014) on billing and insurance administrative costs revealed the

costliest impact is providers' requirement to adhere to diverse documentation and billing compliances for reimbursement.

Berwick and Hackbarth (2012) explained that healthcare billing administrative costs are results of misguided rules from the Government and payors. McGinnis and Newman (2014) noted that variation in payors' performance measurements tied to reimbursements increases billing administrative costs. Vukadin (2013) explained that claim denials created rework for both healthcare providers and payors and thus increases billing administrative costs. Consequently, Woolhandler and Himmelstein (2014) noted physicians are experiencing career dissatisfaction due to the increase of administrative paperwork required by healthcare payors in the United States. Fineberg (2012) claimed the existence of multiple billing reimbursement requirements results to inefficiencies in the United States health system. Cutler, Wikler, and Basch (2012) suggested applying the strategy of task coordination and integration to reduce inefficiencies surrounding healthcare administrative costs. Nixon and Burns (2012) explained that cost management is becoming everyone's responsibility. Unsustainable healthcare spending in the United States is on the rise as the Federal health spending will increase to 40% by 2037 and administrative costs is estimated as $389 billion per year (Emanuel et al., 2012).

Berwick and Hackbarth (2012) noted that $248 billion of the estimated healthcare waste is related to billing administrative inefficiencies. Controlling costs to eliminate waste and increase profit is one of the main functions of managers (Marius, Denisa, & Florina, 2012). Healthcare leaders must understand cost behaviors before implementing strategies to reduce the cost that might potentially jeopardize quality service (Hussey,

Wertheimer & Mehrotra, 2013). Rauh, Wadsworth, Weeks, and Weinstein (2011) discussed how cost layers might help healthcare managers achieve balance between cost and quality. Therefore, familiarity with activity based costing method empowers managers to identify, monitor, and control appropriate costs (Carr, 2012). For example, labor administrative costs are not alterable in the short run but manageable in the next operating cycle (Rauh et al., 2011).

A time driven activity based costing (TDABC) method would enable healthcare managers to track both clinical and administrative costs associated with each patient care (Kocher & Sahni, 2011). The calculation of TDABC is complex and information systems are necessary to help capture adequate cost details (Kaplan & Witkowski, 2014). Furthermore, Emanuel et al. (2012) argued that billing administrative costs increases when providers negotiate payment with multiple payors and engage in time driven activities related to price transparency, contract management, denial management, insurance verification, authorization processing, and completion of paperwork for healthcare payor's credentialing application. To lessen time consuming activities surrounding billing, payers and providers should simplify the billing system processes along with integrate electronic health records' clinical and administrative billing functions for system wide savings (Emanuel et al., 2012).

Billing Administrative Costs

Parry, Kent, Forsythe, Alfano, and Rowland (2013) noted that shared understanding of organizational goals is necessary to improve unstandardized and fragmented processes. In agreement, Chassin and Loeb (2013) explained the importance

of managers establishing continuous process improvement plans to monitor goals, results, and objectives necessary to manage resources efficiently while striving to reduce operational cost. For example, Siruta et al. (2014) launched a dental care program for underserved children and lost $17,000 due to inefficient billing methods and manual collection of patient insurance information. The office staff members failed to transfer patient account information needed for billing to the appropriate department in a timely manner (Siruta et al., 2014).

vom Brocke et al. (2014) advised managers to adopt process management tools to achieve alignment with its governance, information technology, organizational culture, resources, and staff competencies. Rebuge and Ferriera (2012) also suggested managers can use process analysis tools to input and review activities, understand the order of events, identify users who need to perform the events and detect key performance indicators. However, it is important to note that the use of process analysis tools is time consuming and difficult to gain accurate picture of inefficient processes as stakeholders' perspective of efficiency differs (Rebuge & Ferriera, 2012). In conjunction, Siriram (2012) recommended analyzing events associated with processes to close the gaps of stakeholders' perspective on performance and efficiency.

When revamping processes, Hanley Brown, Kani, and KraMern (2012) advised stakeholders who understands the system issues to engage in the project. Brandrud et al. (2011) suggested continuous training and education are necessary when system processes are changing. An ongoing quality improvement relies on three success factors of (1) reliable information and measurement of past and current practices, (2) stakeholder

engagement in process improvement, and (3) knowledge based culture with continuous training and coaching (Brandrud et al., 2011).

Timely and accurate charge capture is the bread and butter of critical care providers as the acuity level of a patient impacts reimbursement amount (Kim et al., 2015). As suggested by Butler, Calabrese, Tandon, and Kirton (2011), acute care providers should develop standardized billing template forms that would help improve compliance and enhance billable coding and reimbursable care. Accurate charge capture resulted to an increase of 40% in net revenue after implementation of standardized templates coding forms (Butler et al., 2011).

Malonis (2013) changed his charge capture process from traditional note cards to mobile charge capture app that resulted in 13% increase in charges and 350 more patients. Manual capturing of charges on note cards resulted in late billing, billing errors, data entry errors, lost charges, and payment delays. However, mobile charge capture enabled the physician to document patient encounters at the bedside, resulting in timely revenue capture, increased revenue, reduced denial rate, increased billing efficiency, lessened overtime labor cost, and lowered billing administrative costs. The mobile charge capture app included crosswalk for international classification disease code 9 to 10 to ensure accurate coding, the health insurance portability and accountability act compliance standards, and relative value units for services provided. Implementation of the mobile charge capture app led to accurate and timely charge capture and increase in collection (Malonis, 2013).

Appropriately charging for supplies is a major challenge for healthcare providers who do not understand when to bundle or itemize supply charges (Delisle, 2013). Niedzwiecki (2012) suggested that providers should use the Centers for Medicare and Medicaid Services guidelines to assign indicators such as H or N to know when to bill supplies separately. H represents pass through charges for new technology devices used in providing additional outpatient bill. N stands for supply items consumed in the procedures. Supplies for implants are billed separately based on the facility's charge practices (Niedzwiecki, 2012).

Slater (2015) noted Medicare collaborates with independent contract auditors that exposes billing frauds related to charge capture, up coding, billing mistakes, inadequate chart documentation, missing signatures, and unnecessary services. The independent contract auditors of Medicare identified by Grams (2012) are as follows (a) The Recovery Audit Contractor (RAC), (b) Medicaid Integrity Contractor (MIC), (c) Zone Program Integrity Contractor (ZPIC), (d) Healthcare Fraud Prevention and Enforcement Action Team (HEAT), (e) Medicare Administration Contractor (MAC), (f) Comprehensive Error Rate Testing (CERT), and (g) Payment Error Rate Testing (PERM). The audit groups recuperated close to $2.5 billion dollars in 2010, their findings initiated not only financial consequences, but also legal and jail time for offenders (Grams, 2012).

Freundlich et al. (2013) described how the usage of electronic time based reminders for anesthesia services increased billing compliance from 41% to 87%. Anesthesiologists' unit base charge is 15 minutes of service starting in the preoperative

area and ending when the patient transfers to the operating room. Once a patient is in the room, providers must enter their start time in the anesthesia information management system (AIMS) equipment. If a start time begins 30 minutes before patient was present in the OR room, billing staff would flag for an explanation. To reduce billing errors and adhere to healthcare payor' billing compliances, AIMS monitors the time patient enters the room versus time recorded by anesthesiologists. To ensure accurate billing, the AIMS system automatically reminds providers to key an end time after 30 minutes of start time. The automated reminders allowed physicians to capture their start and end time promptly and accurately in other to reduce overage billing reimbursement and compliance issues (Freundlich et al., 2013).

Identifying and collaborating with appropriate multi or transdisciplinary staff members from the central billing office, nursing unit, finance department, and clinical teams would encourage continuous communication and monitoring of improved claim denials and charge capture processes (Plonien, 2013). Schoonhoven, Lubbers, and Does (2013) used Gantt chart and Critical Path analysis to improve the average time spent in validating accurate billing charges from 55 days to 40 days, a potential yearly cost saving of 390 euros. The improved process incorporated daily reporting and monitoring of unresolved price corrections for prompt resolution (Schoonhoven et al, 2013). Chu and Huang (2013) used Deming Cycle, a Six Sigma process improvement model to reduce the wait time that front office staff members used in processing cash payment for out of office patient bills. A smartcard bill payment service that was implemented proved to be more convenient for patients to make payments rather than waiting in line to make cash

payment. As a result, the clerks saved three minutes per each cash payments that was processed and the hospital experienced a reduction of $29,633 per month in labor administrative cost (Chu & Huang, 2015).

Six Sigma was first established and mainly used in the auto manufacturing industry to solve problems, eliminate rework, mistakes, and waste before adopted by healthcare organizations in 2000 (Plonien, 2013; Schoonhoven, Lubbers, & Does, 2013). Plonien (2013) noted Six Sigma tools enabled improvement that enhanced financial performance for the future sustainability of healthcare. The application of Six Sigma helped identify missing clinical documentation of specific services required for reimbursement. The 5 steps of Six Sigma are defining the problem, measuring the frequency of the problem, analyzing the cause of the problem, improving the inefficiencies in the cause, and controlling the improvement by monitoring and evaluating performance.

Levtzow and Willis (2013) used Critical to Quality Six Sigma model to evaluate $1.9 million unbilled Medicare lab tests due to the inadequate documentation of medical necessity and invalid CPT codes. To combat the challenge, management deployed training for physicians and clinical managers on utilizing the appropriate international classification disease codes and understanding of Medicare's requirement of medical necessity documentation. As a result, unbilled claims for incomplete medical necessity documentation reduced from 25% to 3%, incorrect documentation of medical necessity decreased from 22 days to 5 days, and the amount of labs billed monthly increased by $6,000 (Levtzow & Willis, 2013).

Transition

Section 1 included literature review on change management, collaboration, and the multipayer billing system in the United States. The iceberg change management model was selected as the framework to conceptualize the research findings. The synthesis of literature revealed the interconnection between collaboration, change management, and efficiency. The research design and constructs that aided the collection, organization, and analysis of this study were described in Section 2. After gaining approval from Walden's University Institutional Review Board (IRB) to conduct the research, I interviewed three purposively selected participants, reviewed relevant company documents, analyzed the data collected, reviewed recent literature, and described the research findings in Section 3.

Section 2: The Project

In Section 2, I discussed the role of the researcher and elaborated on the plans to mitigate bias, protect privacy of participants, justify the population and sampling method, as well as identified the data collection and analysis techniques that guided the interpretation and compilation of the research findings in Section 3. I chose purposeful sampling method and the snowballing technique to gain access to participants. I adopted reflexivity and bracketing techniques to reduce bias in research. I reviewed relevant company documents, conducted initial and follow up interviews with participants in other to perform member checking that validated the accuracy of my interpreted responses, in addition to probing participants for clarity that led to saturated revelation.

Purpose Statement

The purpose of this qualitative single case study was to describe collaborative strategies healthcare billing managers used to reduce billing administrative costs. The specific population group was healthcare billing managers who worked in a healthcare organization in Dallas, Texas. The billing managers demonstrated success at using collaborative strategies that reduced billing administrative costs in their organization. The research findings may contribute to social change by reducing wasteful spending and advancing healthcare accessibility and affordability (Schoen et al., 2013). Potential savings may fund health coverage for the uninsured and underinsured (Jiwani et al., 2014). In addition, cost savings may be used to improve other societal needs such as jobs, wage increase, education, housing, transportation, research and development, and homeland security (Blumenthal, Stremikis, & Cutler, 2013). Healthcare professionals and

patients may benefit from efficient billing administrative processes that may reduce medical bill disputes, out of network bills, and claims denials (Schoen et al., 2013).

Role of the Researcher

The role of the researcher is to design the study, conduct ethical research, and provide an accurate interpretation of the research findings (Hofmeyer, Scott, & Lagendyk, 2012). Erlingsson and Brysiewicz (2013) stated the main instrument of a qualitative study is the researcher. Therefore, as the main instrument of the research, I constructed the research questions and selected the research method, design, data collection, and data analysis techniques.

Although my familiarity with billing administrative costs stemmed from my work experience, I did not hold a position of authority over the participants or within their organization. Berger (2015) encouraged qualitative researchers to have substantial knowledge about the research topic for ease of identifying emerging themes when analyzing data and argued that familiarity with the problem statement might influence the adequacy of criteria to qualify participants, choice of data collection, analysis methods, and interpretation of findings. Likewise, Unluer (2012) pointed out that familiarity with the research question and understanding of the industry are advantages of being an inside researcher, whereas a disadvantage is the possibility of bias when participants assume the researcher already knows the information.

To mitigate bias from this research study, I used bracketing, reflexivity, and member checking techniques. Sorsa, Kiikkala, and Astedt-Kurki (2015) described bracketing as a process of acting nonjudgmentally to responses that may seem odd but

revealed new ideas and insights on the research question. Furthermore, Fitzpatrick and Olson (2015) advised researchers to engage the technique of reflexivity by identifying preexisting thoughts surrounding the study that could lead to bias. Ridner, Bonner, Deng, and Sinclair (2012) explained that member checking provides participants the opportunity to clarify the correctness of interpreted responses.

During the interview process, I was mindful of my body language, facial expression, and comments to ensure my actions and words were not judgmental to the responses provided by the participants. During the data analysis process, I employed the reflexivity technique to monitor my personal preconceptions and attitudes towards the thematic findings to avoid bias in interpretation. I engaged in member checking, which enabled the participants to review and validate my interpretations, thus ensuring only the viewpoints of the participants were interpreted. I also conducted follow up phone conversations with participants to gain clarity and probe further information relating to the research questions and documents reviewed to ensure data collected were saturated.

I followed the ethical principles retrieved from Belmont report of 1987 (National Commission on the Protection of Human Subjects of Biomedical and Behavioral Research) as a guide for the data collection process. The three main principles of The Belmont Report of 1987 that I adopted were (a) set boundaries between practice and the research, (b) implement basic ethical principles, and (c) ensure the research applications are relevant to the study. The ethical guidelines I noted in the consent form were (a) respect for participants' viewpoints, (b) protection of participants' privacy, (c) written

consent of the phenomenon and scope of study, (d) written explanation of volunteerism, and (e) explanation of possible risks and anticipated benefits.

Additionally, I used the interview protocol in Appendix C to remain focused on acquiring relevant knowledge from participants. Qualitative researchers used interview protocol in order to follow the same method of inquiry and ensure reliability of research findings (Foley & O'Conner, 2013). I engaged all participants in a semistructured interview process and asked the same predrafted open ended questions. A semistructured interview provides each participant the opportunity to share viewpoints on the same interview questions (McIntosh & Morse, 2015).

Participants

I used purposeful sampling to narrow down the population of healthcare billing managers who demonstrated success at using collaborative strategies to reduce billing administrative costs in Dallas, Texas. Similar to Suri (2011), Knudsen et al. (2012) noted that purposive sampling helps researchers gain broad insights on the phenomenon under study when participants selected have detailed knowledge about the research question. To gain access to participants, I emailed the request to participate letter in Appendix A to colleagues of healthcare managers that I routinely have interactions with in my course of business. Mason and Ide (2014) agreed with Hunter, Corcoran, Leeder, and Phelps (2013) that the use of email is convenient for gaining access to potential participants. Also, Valkenburg and Peter (2011) used email to ease the process of gaining access to potential participants.

I used the snowballing technique to gain referral to qualified participants. Squires and Juarez (2012) asked potential participants to refer colleagues with similar work experience. Wahyuni (2012) as well as Elnasr, Sobaih, Ritchie, and Jones (2012) encouraged qualitative researchers to use the snowballing technique to gain access to potential participants. To establish a good relationship with participants, I adopted Doody and Noonan (2013) and Rubin and Rubin (2012)'s suggestions to boost rapport and trust with participants during the interview process by showing empathy, willingness to listen, and an attitude of openness. In addition, I employed the suggestion of Jacob and Furgerson (2012) and provided participants with my background at the beginning of each initial interview to increase rapport.

Research Method and Design

Research Method

I chose qualitative methodology for this research study because it provided the opportunity to explore, compare, and describe different collaborative strategies healthcare billing managers used to reduce billing administrative costs. Historically, qualitative research methodology have been used to conduct leadership and strategic management research (Parry, Mumford, Bower, & Watts, 2014). It is said that qualitative researchers hunt for the existence of multiple facts, knowledge, and explanations that contribute towards understanding complex phenomena (Arghode, 2012). Erlingsson and Brysiewicz (2013) used qualitative research to reveal multiple perspectives on complex research. Turkson and Coffie (2013) noted qualitative research methods are useful in developing

strategies and cultivating frameworks that could improve sustainability, profitability, business processes, and management performance.

A quantitative research method did not fit well for this research because the construct of the research question was not to test hypotheses, theories, or present the research findings through statistical interpretations. Lillegaard, Overby, and Andersen (2012) described quantitative study as variable oriented and ideal for researchers who want to describe relationships between each variable while Arghode (2012) explained that researchers who focus on quantitative research test theories. Larson-Hall and Plonsky (2015) noted quantitative researchers use statistical analysis such as graphs, effect size, confidence intervals, coefficients, and alpha levels to interpret and support their research findings.

A mixed methods studies was not appropriate for this research study due to the requirement of constructing and interpreting findings using both quantitative and qualitative methods. Harrison (2013) clarified that a mixed methods studies requires integrating both qualitative and quantitative methodology either concurrently or sequentially to interpret research findings. To ensure accurate research findings, Aarons et al. (2014) cautioned mixed methods researchers about the challenge of integrating and analyzing qualitative and quantitative data adequately. Agerfalk (2013) mentioned that researchers using a mixed methods studies might have challenges finding a compatible framework to support the combined quantitative and qualitative methods.

Research Design

I used a descriptive single case design to explore collaborative strategies healthcare billing managers used to reduce billing administrative costs with the aim to collect saturated information on a particular phenomenon. Researchers who conduct case studies can explore knowledge of individuals as it relates to a specific topic (Yin, 2014). For example, Ioannidis et al. (2013) adopted a case study design to explore a complex phenomenon with an uncertain set of outcomes. Likewise, Wahyuni (2012) pointed out that researchers using a case study design can reveal contemporary rather than historical results applicable to the research problem. Verner and Abdullah (2012) noted a good reason for selecting a case study is to acquire broad views from purposively selected participants.

The focus of the research study was not to explore historical events, personal experiences, or cultural patterns among individuals or groups. Thus other qualitative designs such as narrative, phenomenology, and ethnography were considered but deemed not situable to describe collaborative strategies healthcare billing managers used to reduce billing administrative costs. A narrative research design describes historical stories of individuals (Marshall & Rossman, 2016; Petty, Thomson, & Stew, 2012; Yin, 2014). Phenomenology design describes personal lived experiences of individuals (Moustakas, 1994; Patton, 2015; Tung & Ritchie, 2011). An ethnographic design seeks to analyze and interpret patterns of culture among individuals or groups (Patton, 2015; Scarduzio, Giannini, & Geist-Martin, 2011; Yin, 2014).

I stopped collecting data from participants at the point of data saturation, when the responses from each participant became repetitive and no new information was forthcoming from follow up interviews. It is imperative to achieve data saturation in a qualitative case study as Knudsen et al. (2012) indicated that data saturation reveals the complete revelation of information surrounding the phenomenon under investigation. However, O'Cathain et al. (2015) emphasized that identifying the point of data saturation is a struggle for some qualitative researchers. Therefore, Francis et al. (2010) advised qualitative researchers not to recruit additional participants with the aim to achieve saturation. Instead, O'Reilly and Parker (2012) advised qualitative researchers to continuously ask the same purposefully selected participants to clarify their responses for the same set of questions until the information received becomes redundant and no new emerging evidence transpires.

Population and Sampling

I sought five participants and interviewed three healthcare billing managers who had successfully used collaborative strategies to reduce billing administrative costs in Dallas, Texas. Marshall, Cardon, Poddar, and Fontenot (2013) explained that qualitative research methods does not require a specific sample size to justify its dependability. Aliu, Pannucci, and Chung (2013) explained the goal of a qualitative researcher is to expose saturated answers from selected participants. Hence, a small sample size of participant was appropriate for a qualitative single case study where the researcher used a purposive sampling technique to identify subject matter experts whose knowledge about the

problem being investigated is capable of revealing saturated answers to the research questions (O'Reilly & Parker, 2012).

Sampling Method

Elo et al. (2014) advised researchers to describe the sampling methods that was used in selecting the participants who provided insights on the phenomenon. Therefore, I used both the purposeful sampling and the snowball technique to identify participants who had successfully reduced billing administrative costs. The rationale for using a purposive sampling method was to select participants with adequate knowledge and experience on the research question. Marshall et al. (2013) encouraged a subjective selection of participants who meets specific criteria. In addition, Mueller et al. (2015) noted that purposeful sampling helps researchers gain broader insight to the research question.

I used the snowball technique to gain referral and access to healthcare billing managers in Dallas, Texas who met the participant eligibility criteria. Wahyuni (2012) defined snowball as a technique to gain access to potential participants with similar experience and knowledge. For example, to obtain access to nurses that shared similar work experience, Squires and Juarez (2012) used the snowball sampling method to gain referrals to nurse colleagues. Elnasr et al. (2012) also used the snowball sampling technique to find experts with relevant experience to their research question.

Participant Eligibility Criteria

Lee and Rhim (2014) argued that researchers should establish specific criteria for selecting participants whose expertise aligns with the research question. Therefore, the

participant eligibility criteria for the study was healthcare billing managers in Dallas, Texas who demonstrated success at using collaborative strategies to reduce billing administrative costs. In addition, Miller, Druss, and Rohrbaugh (2014) noted that eligibility criteria help researchers ensure the participants have direct experience in the research question. For example, Marshall et al. (2013) selected subject matter experts for their research study.

Interview Process

I asked each participant the same semistrucured open ended questions listed in Appendix D. The initial interviews were audio recorded and held in a quiet room away from participants work area, distractions, and noises. Vaismoradi, Turunen, and Bondas (2013) advised qualitative researchers to interview participants in an environment that fosters open dialogue and interactions. After the initial interviews, I transcribed each audio recorded interview conversations and information from reviewed company documents received from each participant. To check the accuracy of my transcribed notes, I scheduled a second interview with each participant. Checking the accuracy of transcribed interview responses is a process known as member checking. According to Houghton, Casey, Shaw, and Murphy (2013), member checking could occur during follow up interviews to confirm the correctness of interpretation data. Ridner et al. (2012) requested follow up interviews to engage participants in reviewing the accuracy of the interpreted responses. I probed participants for in depth explanations to gain additional insights. According to Morse (2015), member checking allows the researcher to ask for clarifications and participants to confirm the accuracy of my interpretations.

I also contacted each participant at least twice on the phone to ask clarifying follow up questions to ensured data saturation. I concluded that data collected was saturated when the responses became repetitive and no new information were evolving. Trotter (2012) explained the focus of qualitative researchers is to achieve data saturation from purposeful selected participants rather than collecting a large quantity of sample size. Schmidt, James, Curran, Peipert, and Madden (2015) emphasized that the sample size in a qualitative study cannot be predetermined. However probing of selected participants must continue until no new information is evolving. Walker (2011) also revealed that data saturation occurs when responses from selected participants becomes redundant and no new information about the phenomenon under study is emerging.

Ethical Research

Prior to identifying participants and collecting data, the Walden University IRB reviewed the ethical standards for the study and provided an approval number 11-29-16-0437276. The ethical principles that guided this research was autonomy, confidentiality, and respect for participants. I used the bracketing technique to adopt a mindset of respect for participants as their viewpoints might differ significantly from my preconceptions. As indicated by Mitchell and Wellings (2013), ethics in research is a central issue that researchers must consider before engaging in the data collection process Rubin and Rubin (2012) noted that ethics in research addresses human rights. Therefore, researchers must acknowledge bias, build rapport, respect participant's autonomy, avoid exploitation, and maintain confidentiality during and after the research (Graor & Knapik, 2013).

MacKenzie, Meltzer, Kitsis, and Mancuso (2013) emphasized the importance of respecting the rights and opinions of each participant.

Consent Form

Each participant was provided a consent form to read and sign before engaging in the interview process. The following information were noted on consent form (a) the name of the researcher, (b) the name of the researcher's university, (c) the purpose of the research, (d) the estimated time for the required interviews, (e) participant qualifying criteria, (f) risks and benefits of the research, (g) participant privacy, (h) researcher contacts, and (i) statement of consent. The consent form described the role of the participants as volunteers who had the autonomy to withdraw from the study at any time. None of the participants withdrew from the study so there was no need to acknowledge a request to withdraw. Other than a thank you note that was provided to each participant and a promise to provide a two page summary of the research findings, there were no tangible gifts or monetary incentives provided to the participants.

To establish a relationship of trust, I explained the potential risks and benefits of the research study to each participant at the beginning of each interview. Arnold et al. (2013) explained that a qualitative study has little risk of distress and in fact, could serve as a value for participants to share their knowledge. Morton et al. (2013) noted the research process would be harmless to participants as the interview process involves the use of communication techniques to inquire, gather, notate, interpret, and code responses from participants. As indicated by Player et al. (2015), other than potential discomfort

and nervousness during the probing and audio recording of conversations, the interview process should not pose a physical, mental, or emotional risk to participants' health.

Privacy of Participants

All the information obtained from participants were kept anonimous and confidential as specified in the confidentiality agreement located in the consent form. To maintain the privacy of each participant, I used the same naming technique of P1, P2, P3 that was adopted by Mitchell and Wellings (2013) to describe participants' responses in Section 3. Tabor et al. (2012) in their study referred to participants as family A and B. Halse and Honey (2014) protected the privacy of their participants by using numbers to describe their particpants. Furthermore, since population of healthcare billing managers for the research study was working adults over the age of 18, there was no need for parental consent as required in the study of Halse and Honey (2014).

Denison and Stillman (2012) stated that the Institute Research Board (IRB) of a university establishes the requirement for data retention. Thus, the IRB of Walden University requires their students maintain the data collected in a safe place for 5 years. For this reason, I locked all manual data in a password protected fireproof safe and saved all electronic data on a password protected encrypted firewall computer. When 5 years elapses, I will shred the manual documents and permanently delete the electronic data from the hard drive of my computer. Kaye (2012) explained the privacy of participants is necessary to ensure an ethical protection of all information used during and after the research process. As noted by Qu and Dumay (2011), researchers' diligence in maintaining privacy is imperative as information received could be damaging to

participants, their peers, or organization. Reardon, Basin, and Capkun (2014) emphasized the importance of saving collected data in a secure and encrypt system where others cannot retrieve it.

Data Collection Instruments

I was the primary data collection instrument for this qualitative study. Haahr, Norlyk, and Hall (2013) advised researchers to identify themselves as the main instrument because of their sole responsibility of designing, collecting, and interpreting the research data. The other instruments used for data collection were semistructured interviews and review of company related documents. Data collection instruments are series of tools researchers use for gathering relevant information on the phenomenon (Sangster-Gormley, 2013). Qualitative researchers must select their data collection instruments carefully to ensure dependability and reliability of the research findings (Sandelowski & Leeman, 2012).

I used a semistructured open ended interview process to present participants predrafted open ended interview questions listed on Appendix D. Irvine, Drew, and Sainsbury (2013) emphazised that researchers using semistructured interview must draft the interview questions before interviewing each participant. A semistructured interview encourages participants to elaborate on their responses by providing in depth explanations, examples and raise new issues (Wahyuni, 2012). Open ended questions encourages feedback necessary to assimilate the complexity of the phenomenon under investigation (Huntington et al., 2011; Tong et al., 2012).

Data Collection Technique

I used emails, audio recorded face to face interviews, phone interviews, and document review as techniques to collect data for the research. The initial face to face interview took an average of 50 minutes with each participant. The second interview for member checking took an average of 20 minutes each. Each participant was contacted no more than three times and no longer than 10 minutes for additional follow up questions. I received copies of documents to review during the initial and second interview meetings.

Starks and Trinidad (2007) reported an advantage of a face to face interview is observing body languages and facial expressions of participants as they react to the interview questions. Mason and Ide (2014) suggested using the telephone as an interview option verus face to face interview increases timely access to participants. Hunter et al. (2013) noted a disadvantage of the face to face interview as creating a barrier to thought out answers which affects participants judgments. Yin (2014) noted that participants' limited access to relevant documents to support their perspective can pose a disadvantage. Verner and Abdullah (2012) along with Wahyuni (2012) mentioned an advantage of document review is the opportunity to acquire detail description and support that are relevant to the research question.

After the approval of Walden University's IRB, I sent potential participants the invitation to participate letter located in Appendix A via email. I also sent the letter of cooperation to participants who indicated interest. Once the letter of cooperation was signed, I emailed the consent form to potential participants. The use of email is adequate for timely communication and feedback (Mason & Ide, 2014). Valkenburg and Peter

(2011) used email to ease the process of finding participants for their study. However, a disadvantage of using email to communicate with participants is a possible breach of email privacy (Hunter et al., 2013).

After receiving the signed consent forms and prior to the interviews, I emailed the interview questions to each participant, filed the signed consent form in a manila folder with a numeric naming convention for each participant, and locked the files in a fireproof safe. I then proceeded to schedule the initial face to face interview with each participant. During the interviews, I audio recorded the conversation and noted nonverbal gestures. Clausen (2012) and Snyder (2012) advised researchers to note nonverbal data that cannot be captured via audio recording. Valkenburg and Peter (2011) stated an advantage of an audio recorded interview is the benefit of replaying the conversation to ensure correct interpretation. However, the disadvantage of audio recording an interview is participants' consciousness of being audio recorded (Valkenburg & Peter, 2011).

At the end of the first inteview, I thanked each participant for their time, I asked for relevant documents to support their perspectives and a convenient time to schedule a follow up interview. I reviewed relevant documents such as charge reports, procedure manuals, memos, and newsletter as evidence of collaborative strategies healthcare billing managers used to reduced billing administrative costs. According to Verner and Abdullah (2012) participants could provide documents available to the pubic such as financial data, media reports and newspaper relevant to the research question. Yin (2014) and Wahyuni (2012) suggested the review of documents would increase knowledge of researchers when the data supports the research question.

After interpreting the interviews and reviewing all documents collected in a Microsoft Word document, I conducted follow up interviews to engage participants in member checking. Member checking allowed each participant to verify the accuracy of the interpreted data in order to enhance the reliability and validity of the research findings. As noted by Jacob and Furgerson (2012) and agreed by Harper and Cole (2012), member checking technique is a form of quality control that allows participants to confirm the correctness of the interpreted data. Also, Petty, Thomson, and Stew (2012) emphasized that member checking helps to reduce bias in research findings to the extent that findings are true reflections of answers derived from participants and not from the researcher.

After the follow up interviews, I updated the additional interpretations with information received. I continued to analyze the data received and engaged participants with follow up questions via phone. I asked clarifying follow up questions to gain additional knowledge on the research questions until information received was reduntant and no new themes were emerging. In conjunction with Jacob and Furgerson (2012), Petty et al. (2012) acknowledged that follow up questions provides an avenue for participants to provide additional information that might leads to data saturation. In their qualitative research, (Daivadanam, Wahlstrom, Ravindran, Thankappan and Ramanathan (2014) performed follow up interviews to ensure data saturation.

The following protocol outlined the data collection steps.

1. I asked my colleagues to refer potential participants. Interested prospective participants gave my colleague permission for me to contact them.

2. I emailed invitation to participate and letter of cooperation to prospective participant.
3. I performed one follow up reminder request using the letter in Appendix B. When potential participant did not respond, I ceased from follow up to avoid unwanted solicitation.
4. I received signed letter of cooperation from interested parties.
5. I emailed consent form to potential participants who indicated an interest to participate.
6. I received signed consent form from participants.
7. I created a manila folder for each participant with a numeric naming convention and filed the signed consent form in a locked fireproof safe.
8. I emailed the interview questions to participants that signed the consent form.
9. I scheduled a face to face initial interview with each participant.
10. I conducted the interview in a private location that was offsite from participant work location and free from noise that could interfere with the audio recording.
11. I audio recorded the interview conversation after verbal consent from participant.
12. I wrote down key points and body languages during the interview process.
13. I asked participants for copies of relevant documents to support their notions.

14. At the end of the initial interview, I thanked the participant for their time and asked for a convenient time to schedule a follow up interview to validate correctness of interpreted conversations.
15. After the initial interview, I transcribed participants' responses and noted supporting evidences from the documents reviewed in a paragraph synthesis after each interview question using a Microsoft Word document.
16. During the follow up interviews, I engaged in member checking by asking participants to clarify my interpretations of their responses and understanding of the documents reviewed.
17. I made necessary adjustments to the transcript as suggested by each participant.
18. To ensure no new information was evolving, I requested additional follow up interviews to ask questions via phone calls.

Data Organization Technique

I organized the collected data in a thematic manner. The thematic method is a process of searching for disparities, related patterns, and assigning a specific code or label to collected data (Gale, Heath, Cameron, Rashid, & Redwood, 2013). Likewise, Prayag and Ryan (2011) emphasized that organizing data by similarities and differences helps researchers compare existing knowledge acquired from the literature reviewed to the research findings. Also, Engkasan, Ng, and Low (2014) suggested organizing data into themes creates ease for researchers to analyze and interpret the data. I uploaded a PDF version of the interpreted data collected from interviews and document review in

ATLAS.ti software for the benefit of coding, locating patterns in a set of words, and understanding the revelations received from each participant (Fiedler, Giddens, & North, 2014). Knudsen et al. (2012) conducted an efficient data management using ATLAS.ti software to document, sort, find, organize, and code the data collected into subtopic themes.

I stored all manual data in a manila folder with an alphanumeric naming label of the first initial of participants' first name and a number before filing them in a fireproof safe. The manilla folder contained manual data such as the signed consent form, interview notes, and other supporting documents presented by the participant. The electronic files and ATLAS.ti 7 software were stored on an encrypted password protected computer. Luo (2011) advised researchers to maintain privacy as information received could be damaging to participants, their peers, or an organization. The privacy of participant is essential to ensure the ethical protection of all information collected during and after the research process (Kaye, 2012). Reardon et al. (2014) advised researchers to secure all data collected are in a place where others cannot retrieve.

Data Analysis

I analyzed the responses from the interviews and reviewed documents provided by each participant to achieve methodological data triangulation that revealed the research findings. Fielding (2012) defined methodological triangulation as a data analysis strategy that requires the review of more than one sources of information to enhance credibility of the research findings. Yin (2014) advised case study researchers to use multiple sources of data to explore complex phenomenon. Bekhet and Zauszniewski

(2012) used interviews and examination of documents to achieve methodological triangulation for their study. To achieve data validity for a qualitative research, researchers uses methodological data triangulation to addresses bias (Marshall & Rossman, 2016). In addition, Patton (2015) noted incorporating more than one procedure to analyze data collected ensures the research findings are credible.

I adopted the data analysis process established by Yin (2014), which entails a sequential order as follows (a) review all data collected, (b) observe for plausible rival interpretations, (c) remain focused and not divert attention from the interview questions, and (d) use knowledge gained from literature review, interviews, and documentation review to analyze the data. As indicated by Yin (2014), the data analysis process involves examining, comparing, categorizing, and coding the evidence collected into themes that revealed the research findings. To identify key themes from data collected, I compared the similarities and differences of interpreted interview conversations, documents review, recent literature findings, and iceberg change management model. The interconnections between all data collected from participants, literature review, and the iceberg change management model were described in Section 3.

To analyze all information gathered from participants, I used ATLAS.ti 7 software to organize and code the data using quotations in a thematic format. Woods, Paulus, Atkins, and Macklin (2015) noted ATLAS.ti as one of the most frequently used qualitative data analysis software. De Gregorio (2011) testified loading audio recorded files directly into ATLAS.ti. assigning codes to the data by using quotations and running a quotation report that displayed data with the same quotations. Similar to Curry, Taylor,

Chen, and Bradley (2012), I compared old and new coded data by running the quotation report to examine patterns and trends in the data. To narrow down the broad codes, I adopted O'Halloran (2011) strategy by using the co-occurrence feature in ATLAS.ti to compare the relationships between all codes and linked quotations that had similar patterns. Also, the ATLAS.ti network view served as an effective tool to understand the relationship between iceberg change management model and the identified themes (Woods et al., 2015).

Reliability and Validity

Reliability

Thomas and Magilvy (2011) referred to dependability as the ability to achieve comparable results under similar conditions. As noted by Poortman and Schildkamp (2012), dependability in a qualitative study ensures that the same results from the study are achievable if repeated over time and under similar conditions. Thus, dependability in qualitative research enhances reliability of the research findings when using the same instruments to collect and interpret data (Rubin & Rubin, 2012). To ensure reliability of the research findings, I followed a consistent data collection process by using the same interview protocol in Appendix C until data saturation was achieved from each participant. All participants answered the same number of open ended interview questions listed in Appendix D. All participants engaged in follow up interviews to ensure member checking and data saturation was achieved.

Validity

Lincoln and Guba (1985) identified credibility, confirmability, and transferability as common measures to enhance validity in qualitative research methods. Qualitative research is valid if free of bias and uses multiple sources of methodological data triangulation to gain knowledge about the research question (Morse, 2015). To ensure credibility, I engaged methodological data triangulation of interview and document review. Triangulating multiple sources of data enhanced quality findings by minimizing possible bias that can occur with the use of one data source (Polsa, 2013). Credibility in a qualitative research ensured the descriptions of the research results were comprehensive and convincing to the readers (Yilmaz, 2013).

It is imperative for readers of this study to understand that qualitative researchers describe the viewpoints of participants and only the participants can judge the credibility of the findings base on their perspectives of how well the researcher interpreted the data collected (Kaczynski, Salmona, & Smith, 2014). Thus, I engaged in member checking to allow participants to validate the correctness of the interpreted conversations. Cope (2014) explained that additional information gained during member checking could lead to data saturation when participants have the opportunity to elaborate and clarify their responses. After engaging in member checking with participants, data saturation occurred when I was no longer hearing or receiving new information from each participant (Morse, 2015).

Confirmability ensures the research findings accurately represents the perspectives of the participants, not the researcher (Houghton et al., 2013). I provided a

systematic step for data collection process and enabled confirmability through member checking technique. I used bracketing and reflexivity to mitigate bias when analysis data collected. While member checking technique allows participants to confirm the correctness of the interpreted data (Ridner et al., 2012), bracketing ensures researchers remained objective during the interview process and maintained openness to the responses of participants (Tufford & Newman, 2012). Hoover and Morrow (2015) adopted reflexivity in their study to reduce researchers' emotional connection and preconception to the phenomenon under study during the data collection and analysis process. Thus, confirmability is researchers' objectivity, neutrality, and accuracy of data collection (Petty et al., 2012).

Transferability is an external validation process that assesses whether the research findings is applicable to other contexts (Petty et al., 2012). It is important to note that qualitative researchers do not expect their findings to be transferable to all other settings (Cope, 2014). The degree in which the results of the study correlates to other contexts makes it transferable (Houghton et al., 2013). Any audience of this research that wants to transfer the results to other contexts is responsible for judging the transferability by assessing the similarities and differences in context (Sandelowski & Leeman, 2012).

I provided a detailed description of the research findings in Section 3 to enable audiences of the research study to decide if the results are transferable to desired contexts. When reviewing transferability of a study, Yin (2014) emphasized the need to connect the case under study to a conceptual theory while using the research findings to explain the gaps and weaknesses in literature. Therefore, readers should assess the

possibility of applying the research findings to other settings, groups or organizations (Lipscomb, 2012).

Data Saturation

Data saturation in a qualitative study occurs when information from participants becomes redundant, and no new information are emerging regardless of the number of sample size (Dworkin, 2012). According to Isaacs (2014), there is no predefined method to test the appropriateness of sample size or to test achievement of data saturation in qualitative studies. The use of purposive sampling technique to select participants, along with continuous probing for additional information ensured achievement of data saturation for this study. O'Reilly and Parker (2012) pointed out that achievement of data saturation is dependent on many factors that are not always under the researcher's control. Factors that can affect data saturation are participants' availability, level of participants' knowledge, and the researcher's ability to recognize emerging findings (O'Reilly & Parker, 2012).

I engaged in member checking and follow up questions to probe for clarity and to discover additional knowledge on the phenomenon under study. Boesch, Schwaninger, Weber, and Scholz (2013) emphasized the benefits of member checking is to confirm the correctness of the research findings and to gain saturated result. After engaging participants with follow up questions and I was no longer hearing, seeing, or receiving new information from participants, data saturation occurred.

Transition and Summary

The purpose of this qualitative single case study was to describe collaborative strategies healthcare billing managers used to reduce billing administrative costs. In Section 1, I presented the research question and interview questions, selected the iceberg change management model as the conceptual framework, and provided synthesis of literature related to the phenomenon. In Section 2, I stood in the role of the researcher and selected the eligibility criteria for participants, the research method and design, the population and sampling methods, as well as describe the data collection instruments, techniques, analysis, reliability, and validity of the study. After gaining approval from Walden's IRB, I proceeded to collect and analyze data from participants. In Section 3, I discussed the relationships between the research findings, iceberg change management model, and recent literature reviews. Furthermore, I provided descriptive explanations on how collaborative strategies could be used to manage change in professional practice, explained the implications for societal impact, and provided recommendations for future study.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this descriptive single case qualitative study was to explore collaborative strategies used to reduce healthcare billing administrative costs. Participants of the study were three healthcare billing managers who successfully reduced billing administrative costs in their organization in Dallas, TX. I conducted semistructured interviews and reviewed relevant company documents provided by each participant. The participants were given pseudonyms and they each described their perspectives. In addition, a copy of the transliterated audio recorded interviews and documents reviewed was provided to each participant to validate the accuracy of my data interpretation. Through the use of follow up interviews, each participant provided additional information on the interview questions until no new information was revealed and data saturation was achieved. I made adjustments to the interpreted data as recommended by each participant and a final PDF version was uploaded into Atlasti 7 software for further analysis. The research findings revealed that the three billing managers who participated in the study used task coordination, communication, stakeholder involvement, relationship management, and analysis of performance indicators as collaborative strategies to reduce billing administrative costs.

Presentation of the Research Findings

The overaraching research question was: What collaborative strategies did healthcare managers used to reduce billing administrative costs? Through the use of

methodological data triangulation of interviews and review of company documents provided by the participants, the data analysis revealed that coordination of interrelated tasks, communication, stakeholder involvement, relationship management, and analysis of performance indicators were the five collaborative strategies that reduced billing administrative costs. I explored the iceberg change management model to explain the research findings in order to reveal how each participant identified and managed change barrierrs that eventually led to the reduction of billing administrative costs in their organization.

Coordination of Interrelated Tasks

Singh, Mindel, and Mathiassen (2016) acknowledged that the coordination of interrelated processes among healthcare teams are challenging due to fragmented departmental goals. Uddin, Kelaher, and Srinivasan (2016) asserted that healthcare billing processes, which are simultaneous and interrelated to patient care requires collaboration and coordination among multidisciplinary professionals. However, Terra and Byrne (2016) suggested that fragmented interdepartmental tasks can be managed when individuals are assigned specific and clear responsibilities. Furthermore, Harris and Kelly (2015) cautioned that the lack of task coordination in healthcare increases noncompliance with healthcare payors' requirements while Aldhizer and Juras (2015) admitted that lack of task coordination increases healthcare billing inefficiencies.

In relation to the research findings, P1, P2, and P3 noted the lack of task coordination around billing processes such as registration, medical records, and clinical documentation increased their billing administrative costs due to an increase in labor

hours spent researching payor requirements prior to billing, ensuring claims for payments were processed according to the payors' guidelines and deadline, resolving billing disputes from patients, and reprocessing denied claims for payments. To reduce the inefficient time spent on appealing claims denied for payment, P1, P2, and P3 held monthly payment denial meetings with other department staff members such as nurse case managers, registration staff members, and medical records staff members in order to coordinate interdepartmental tasks required for billing, which includes timely and accurate completion of clinical documentation, timely and accurate patient demographic information, and a signed and dated physician plan of care. I reviewed a copy of an old billing procedure manual, compared it to the new procedure, and learned that improved processes were documented and tasks were clearly assigned across the departments. Unlike the old billing procedure, the new procedure specified the job titles responsible for a particular task and the required deadline for completion. It was stated in the new procedure manual that

> Patient documentation must be completed by the nursing staff members within 24 hours of encounter with patient and reviewed by the case managers within 48 hours prior to submitting documented services for billing. Case managers must ensure clinical documentation accurately shows the treatments received by the patient. The medical record staff members must verify that patient plan of care is approved and signed by the physician prior to scanning into the patient's medical electronic record. The medical record staff members must also ensure all paper documents needed for billing are scanned into patient's electronic medical record

upon receipt. The registration staff members must verify patient insurance, ensure patient demographic is complete and prove of insurance is scanned into the billing system. The billing department must perform self-audit on claims prior to processing for payment. If claim is denied, billing staff will follow up with case managers, registration staff, or medical record staff to resolve the issues.

P1 explained that previously, the patients' date of birth were either left blank or were typed incorrectly in the electronic medical records by the registration staff members and the billing staff members had to contact patients for correct information in order to rebill the unpaid claims. P1 stated "There were several payment denials related to the patient demographic information that we had to correct and rebill." To provide an avenue for the billing staff members to validate the accuracy of patient's date of birth, the registration staff members were tasked with scanning the patient identification card and insurance card into the billing system. However, when the registration staff members forgot to scan the required patient information, the claims denied for payments would need be researched, corrected, and rebilled by the billing staff members. Because of the implemented changes noted in the new billing procedure, P1 noted that after the tasks were coordinated, payment denials for incorrect or missing date of birth reduced by 35%.

P2 described how claims for payments were denied because the physician plan of care documentation were missing the signed dates. I reviewed copies of the physician plan of care that showed the dates of signature were missing. P2 stated "The medical record staff members were not paying attention to the date or did not think it was important." Due to delayed responses from the physicians to enter a date, claims for

payments were not rebilled by the filing deadline established by the healthcare payors. To make changes for improvement, the medical record staff members were tasked with faxing the plan of care back to the physician office for the signed date prior to scanning the plan of care into the patient electronic medical record. After the changes were implemented, the payment denials for missing physician signed dates reduced by 23%.

Furthermore, to comply with multiple healthcare payor requirements for providers to report patient hospitalization status, P2 described how the tasks were deviated among interdepartmental staff members. Since the clinical staff members are the first to be notified by family members when a patient is hospitalized, the case managers were tasked with inputting the patient hospitalization status in the billing system. The medical record staff members were tasked with monitoring the hospitalization report weekly to ensure the accuracy of hospitalization dates. Prior to processing claims for payment, the billing staff members reviewed the hospitalization report to ensure patient hospitalization status were reported accurately to healthcare payors. When hospitalization status was missing, the billing staff members collaborated with both the case managers and the medical record staff members to reduce future reoccurrence. After changes were implemented, P2 indicated that the payment denials for inaccurate date of services reduced by 25%.

I reviewed a copy of the payment denied report that was provided by P3, which revealed that improper and lack of clinical documentation was the primary reason for partial or zero payment for claims billed. P3 stated “The nurses did not know which services were covered by the payors, so we had claims that were provided and billed but payment was denied for lack of medical necessity documentation.” P3 claimed “At

times, we were unable to identify that the medical notes were incorrect because we don't have the clinical expertise and it is also difficult to know which services to bill when the clinical documentation is incomplete." Selby and Edwards (2016) emphasized that although clinicians were overwhelmed with documentation, it is necessary to justify services provided for reimbursement. Conversely, Lee, Abbey, Heim, and Abbey (2016) argued that quality time is taken away from patient care when too much detailed documentation is needed to justify reimbursement for services provided. However, Lindeke (2017) stressed that delegating clinical documentation to support staff that did not perform the service is fraudulent.

Due to the clinical technicality of documenting medical services, the clinical case managers agreed to divide the case load amongst themselves to review the accuracy of the clinical documentations prior to submitting for billing. Since the clinical case managers were not knowledgeable on the various billing codes required for billing, the billing staff members were tasked with reviewing the alignment of diagnosis codes with services which were documented prior to submitting the claims for payment. Because of these coordinated tasks, P3 explained that "The average time spent on rebilling corrected claims reduced from 25 hours to 15 hours a week and claims denied for improper or lack of documentation reduced by 30%." The copies of emails I reviewed evidenced that P3 communicated with the Chief Financial Officer (CFO) that the billing staff members were spending an average of 25 hours a week researching and following up on emails sent to various clinical case managers. Nelson and Staggers (2017) emphasized that reprocessing claim denied for payment increases labor costs.

Communication

Poor communication among individuals involved in the billing process leads to inefficiencies (Lee et al., 2016). For instance, lack of communication between clinicians and billing staff members led to incorrect interpretation of clinical note, which increased the number of clinical coding errors and incorrect billings (Heywood, Gill, Charlwood, Brindle, & Kirwan, 2016). If communication between patients and care providers are not properly documented, the cost of billing will increase as claims denied for payment will need to be rebilled (Nelson & Staggers, 2017). Also, Spatz, Bricker, and Gabbay (2014) revealed that timely communication between primary care physicians and specialists expedited the handling of referrals, authorization requests, and timely billing. Thus, to manage the complexity of complying with multiple healthcare payors requirements, P1, P2, and P3 created a monthly newsletter called "What's New in the World of Billing" to increase the awareness and communication of regulatory billing requirements with everyone involved in the billing process across the organizational departments.

I reviewed a copy of the monthly newsletters provided by P2 that included sections for billing requirements, billing improvements within the organization, opportunity for improvements, and tips from payors. The tips from payors section showed that the billing managers collaborated with various healthcare insurance payor account managers who provided insights on best billing practices. A section in the newsletter stated "CMS reminds practices that OIG is still using analytics software to find billing errors and detect billing fraud." Another section noted "Billers are not able to

assign codes without the presence of legible, accurate, and comprehensive supporting documentation in the medical record."

P2 mentioned, "We had to find ways to provide timely communication of new requirements that affected our billing process." Furthermore, P2 explained, "At times, when there is no information to share, the newsletter served as a tool to reiterate the billing department expectations and to share positive results from improved billing practices." According to P1, the effect of an ongoing communication through emails, memos, newsletters, and procedure not only helped the reduction of payment denials but also reduced the volume of denials associated with inadequate or incomplete documentation. P1 stated "Claims denied reduced when clinicians were knowledgeable about billing requirements."

P3 noted "Keeping everyone informed increased our compliance with multiple healthcare payor requirements." P3 explained the benefit of having integrated technology where the clinical documentation, coding, and claim processing are in the same system helped by improving timely communication and reducing the time spent waiting on feedback to resolve billing issues. Nelson and Staggers (2017) attested that integrated billing management software such as electronic health records helps strengthen communication, reduce billing errors, increase timely reimbursement, and will eventually improve operational efficiency.

Stakeholders' Involvement

In a complex and interrelated system such as healthcare, multidisciplinary teams must interact to understand how their interwoven tasks affects organizational goals

(Marshall et al., 2016). Lee et al. (2016) explained that the key stakeholders involved in the billing processes are patients and their families, care providers, and healthcare payors. Terra and Byrne (2016) noted a strategy to reduce claims denied for lack of prior authorization is to ensure all stakeholders such as nurses, physicians, physician office, registration staff members, and payors are involved in the billing process. It is also advisable to hire staff members with both clinical and technical billing experience to help justify medical necessity (Terris & Byrne, 2016). For instance, P1 explained that "If the nursing staff does not properly justify medical necessity in their documentation, the claims for payment would be denied and the billing staff members who do not have clinical knowledge would have to engage in tedious research." The observation by P1 revealed that inefficiencies occurred when the billing staff members did not involve stakeholders who can provide feedback to resolve the issue. P2 asserted "Instead of pointing fingers to other departments, it was imperative for the billing department to partner with people who would provide inputs for resolution." I reviewed a memo written by P2 that indicated prior authorization should be noted in the patient electronic medical records in order for the billing staff members to reference the authorization to appeal denied claims.

P3 collaborated with account managers from Medicare, Medicaid, Blue Cross Blue Shield, and Tricare to create training on top 10 denied procedural codes. P3 explained "When I first started my position, I felt like the right hand did not know what the left hand was doing…everyone was doing their part but not working together to get the claims paid." The copy of the procedural manual provided by P3 showed that

training served as educational tool for clinical and billing staff members. The billing procedure noted that "Billers and clinicians must attend at least one coding and one billing training annually. A continuing education form must be approved by immediate supervisor and a receipt must be provided for reimbursement."

For example, the billing procedure that I reviewed provided guidelines on how the billing and clinical staff members should document and bill chronic care management (CCM) for Medicare beneficiaries with multiple chronic conditions. The CCM procedure noted,

> Document patient consent, if they declined care or indicated care will be provided elsewhere. Document 20 minutes of non-face-to-face clinical staff time. Contracted clinicians or locum tenens can bill for CCM services if they have 24/7 access to patient's electronic record are under the general supervision of eligible practitioner. CPT 99495 and 99496 cannot be billed during the same month as CCM CPT 99490.

To reduce ineligible insurance denials, P1, P2, and P3 collaborated with the billing, clinical, and information system department staff members to scan patient identification and insurance cards directly into medical billing system using an e-mobile app at every patient visit. This initiative resulted to timely billing, a 15% reduction of claims denied for incorrect patient insurance information, and an 18% increase in charge capture as shown on the ineligible insurance denial report that I reviewed. Also, I reviewed copies of emails and memos that showed P1, P2, and P3 involved stakeholders such as clinical and information system managers in the process to implement the e-

mobile application. The email showed that the CFO scheduled a demo of the e-mobile application with the software representative, billing managers, case managers, registration staff members, and the IT director. The copy of a memo written by the CFO stated

> The implementation of mobile charge capture will increase our charge capture and allow us to process claims timely. This is an opportunity for us to increase our cash flow. Your cooperation and continuous feedback is required to ensure a successful implementation.

Nelson and Staggers (2017) stressed the importance of involving stakeholders such as patients, healthcare providers, payors, and administrators in the implementation of an electronic health record. P1 noted that "Initially, some nurses did not embrace the e-mobile app because it was one more thing to remember during patient visit." P2 stated, "We used the e-mobile app at my previous job and it helped us captured charges in a timely manner." P3 also stated that "It took at least three months before we saw the improvements to our charges." Malonis (2013) explained that the use of mobile technology to capture out-of-office patient encounters resulted to 13% increase in charge capture and vom Brocke et al. (2014) advised managers to adopt tools to achieve alignment with its governance, information technology, organizational culture, resources, and staff competencies.

Relationship Management

Gittell (2016) emphasized that the lack of relationship among individuals who need to collaborate creates obstacles for implementing changes that would improve

efficiency and performance. According to Gittell (2016), the adoption of relational coordination theory can improve interpersonal interactions among key process owners who must communicate, collaborate, and coordinate tasks that are crucial to achieving a common goal. For example, when P1 encountered behaviors that created barriers to improve the timeliness of receiving physician order attestations from physician offices, P1 managed the barrier by developing a positive relationship with the physician office staff members. P1 explained that a positive relationship was developed through the increase of communication, appreciation, and promptness in response.

I reviewed copies of emails that P1, P2, and P3 sent to various physician office managers appreciating them for continuous support and partnership. The emails also showed invitations to socialization events. P3 stated "We hosted happy hours for our employees and business partners to increase familiarity with one another and discuss personal related topics." P2 explained "The gatherings enabled me to build a positive relationship with physician office staff members who was not responsive to our requests." P1 emphasized "I took the opportunity to ask the physician office managers for feedback on what we should do differently." In addition, instead of bombarding the physician office with email requests, the billing managers visited the physician offices at least once a month to increase appearance and familiarity. P2 explained

> When a physician recertification was not received timely and a follow up call was required; the physician office staff members does not perceive the call as pestering but the staff members were willing to help resolve the issue in a timely manner.

Although, P1, P2, and P3 did not quantify the reduction of billing administrative cost associated with the social events, they noted the increase in prompt response from physician office staff members and positive working relationships. As indicated by Nelson and Staggers (2017), providers should perform self-audits to ensure claims for payments are not fraudulent, unjustified for medical necessity, and not missing impertinent information required by payors. The billing procedure manual I reviewed revealed that the billing staff members were required to conduct self-audit on claims prior to processing for payment. P2 explained that when some billing staff members did not perform self-audit before processing claims, the billing managers recollected that some payment denials were due to errors not proactively fixed. To combat this behavior, P2 created an open-door policy and increased interaction with the billing staff members, which encouraged them to ask questions. P2 explained

> Initially, I thought it was an oversight when some billing staff members were not performing the self-audit, but I later found out in a meeting that it was because the staff did not feel comfortable asking questions to clarify the appropriate billing codes.

Because of increased relationship, the billing staff members felt comfortable raising issues and the organization recorded 25% reduction in claim audit recoupment that year. The experience of P2 aligns with Okyere-Kwakye and Otibu (2016) notion that a relationship building management style enhances personnel's commitment and productivity. Likewise, Leon-Perez et al. (2015) advised managers to separate behavioral and system issues when building relationships.

Performance Indicators

De Pourcq, Gemmel, and Trybou (2016) noted that the lack of monitoring key performance indicators limits managers' ability to identify processes that needs to improve. Raghupathi and Raghupathi (2014) advised that it is imperative for healthcare organizations to identify data within the organization that would reveal noncompliance with regulatory requirements, inefficiencies, and loss of revenue. Kim et al. (2015) explained that continuous monitoring of claims for payment status is imperative to achieve efficient billing processes. Nelson and Staggers (2017) suggested that healthcare managers can aggregate data from medical records and billing systems to develop scorecards for monitoring billing errors, untimely billing, and analyzing charges associated with specific procedures.

I reviewed a copy of the daily dashboard report provided by P3 that showed gauges, charts, graphs, and tables were used to monitor scorecards and trends of various billing processes. As shown on the report, the collection amount was trended by day, week, month, and year. In addition, listed on the report are the reimbursement scorecards for accounts receivable days, payment denial by procedures and an average number of days it took clinicians to document services provided to patients. P1, P2, and P3 noted the CFO reviewed various billing reports such as missing diagnosis report, unbilled report, denied codes report, aging report, and payor mix report monthly to identify inefficiencies in the billing process. P3 explained that the CFO estimated expected collections based on historical payment trends and analyzed if the current collections from healthcare payors were reasonable or if further research was required to determine unexplainable variances.

P2 stated “We partnered with our information technology department to build robust reports that incorporated data from various departments.”

The billing managers identified useful data to monitor their billing performance. For example, P1 monitored the list of top ten reasons for payment denials monthly and recorded 12% reduction in overtime hours for billing staff members when the volume of incomplete documentation, improper coding, and time spent following up with clinicians reduced. P1 stated “It was easier to identify areas that needed attention and people who should be fixing the issues.” Also, I reviewed a copy of preauthorization denial report that P3 reviewed weekly to ensure established billing processes were followed by the departments and individuals involved in the billing process. The preauthorization denial report showed that authorization numbers were not provided on 13 claims. The claims submission date showed an average of 4 days old.

According to Terra and Byrne (2016), healthcare organizations have a lot of data that could be used to influence decisions for process improvements. When analyzing data, it is important to identify sub-processes that would have impacted the results of the data. If the data shows undesirable results, the process might be broken and might need improvement. For example, after reviewing a discharged but not billed report, a hospital realized that it failed to assign the responsibility of editing claims held in prebill status to a department or an individual, and did not have a process to monitor unbilled services. The discovery led the hospital management to implement a new billing software which helped them recover $85 million (Terra & Byrne, 2016).

Relation of Findings to the Iceberg Change Management Model

According to Kruger (2009), the iceberg change management model conveys the awareness that managers focus only on obvious issues such as efficiency but does not consider hidden factors that hinders the achievement of goals. In fact, only 10% of the issue is visible on the tip of the iceberg and 90% of the issues affecting efficiency are not obvious but hidden below the iceberg. Therefore, managers are advised to implement strategies that would reveal hidden issues hindering the achievement of necessary changes.

Furthermore, the iceberg change management model explains that based on individual perspective and belief, people involved in a change process portrays attitudes and behaviors that either supports or opposes necessary changes. To manage change oppositions, the iceberg management change model suggests the application of power and politics management or the perception and belief management to challenge barriers created by individuals involved in the change process (Kruger, 2009). As shown in Figure 1, the relation of the iceberg change management model to the findings showed that the participants looked beyond the issue of cost and used collaborative strategies such as stakeholder involvement, communication, task coordination, relationship management, and performance indicators to identify hidden perceptive and belief of stakeholders which translated to attitudes and behaviors that impeded the changes required to reduce billing administrative costs in their organization.

Hence, the participants understood the importance of communal approach to solving problems by increasing communication to develop positive relationship with

process owners and coordinate interrelated tasks. In addition, the participants monitored their billing performances and obtained continuous feedback from stakeholders. The billing managers also realized that opposition from stakeholders can affect the achievement of desired change. Therefore, when change opposition occurred, the participants applied the perception and belief management and the power and politics management strategies suggested by the iceberg change management model.

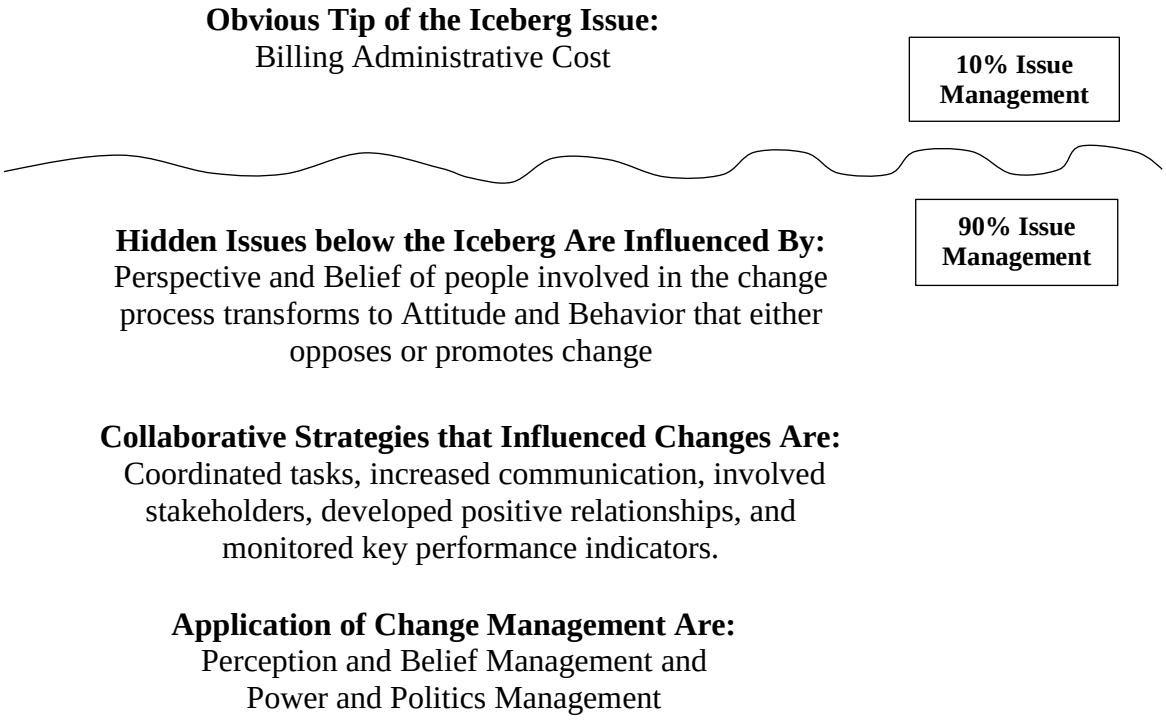


Figure 1. Relation of research findings to the iceberg change management model.

Phillips et al. (2015), explained that managing change in a complex environment requires a communal mindset to solve problems and achieve innovation. Nigam et al. (2014) cautioned that behaviors of individuals will influence the achievement of

necessary changes. For instance, the participants collaborated with stakeholders such as clinical and financial managers to coordinate a reasonable deadline for clinicians to complete documentation of clinical services needed for timely billing. The consensus was for the nurses to complete their documentation within 24 hours of providing services. However, some nurses opposed the change as they believed 24hours was not a reasonable timeline. To manage the change opposition, the participants collaborated with the CFO to monitor the untimely clinical documentation monthly report and with the approval of senior management, quarterly bonus were provided to incentivized nurses that met the established deadline. As a result of the implemented change, the billing managers noted a 30% reduction on unbilled services. The use of incentive is an example of how power and politics management can be used to influence attitudes and behaviors opposing desired change. Furthermore, Biron and Hanuka (2015) explained that it is imperative to support and reward behaviors that supports the achievement of desired goals.

The participants noted that nurses were providing services without preauthorization because of their perception and belief that preauthorization is within their job function as providing quality care to patient is more important than requesting preauthorization. P1, P2, and P3 collaborated with the clinical and registration staff members and provided training to show the importance of preauthorization as required by various payors for reimbursement. A preauthorization form was implemented to help nurses easily identify which services typically required preauthorization from payors. Due to their clinical background, the nurses were tasked with providing clinical justification for medical necessity while the registration staff members communicated

with the payors and served as a liaison between the clinical and billing team. As a result of these changes, P3 noted an increase of 20% in collection rate and reduction of lack of preauthorization denials. The coordination of interrelated tasks improved coalition among process owners and served as an example of how the use of perception and belief management strategy can influence attitudes and behaviors that opposes desired change.

Applications to Professional Practice

The research findings revealed that billing managers used collaborative strategies such as coordinated tasks, increased communication, improved stakeholders' involvement, developed relationship, and monitored performance indicators to identify hidden issues that impeded the achievement of reducing billing administrative costs. Furthermore, the billing managers applied the power and politics management and perception and belief management of the iceberg change management model to manage changes that reduced billing administrative costs. As such, other healthcare billing managers who lacks collaborative strategies to reduce billing administrative costs can adopt these strategies and the iceberg change management model to reduce billing administrative costs in their organization.

Dolansky, and Lopez (2015) advised that it is necessary for managers to adopt collaborative approaches to improve processes within a complex system. Therefore, healthcare billing managers can adopt these collaborative strategies to drive necessary changes that would improve their billing administrative costs. Billing managers can adopt the iceberg change management model to identify hidden attitudes and behaviors that are not obvious barriers to the changes implementation. For example, van Oostveen,

Mathijssen, and Vermeulen (2015) used the iceberg change management model in their study to reveal that the lack of nurse staff members was the tip of the ice and obvious issue but in fact, behaviors, attitudes, decision-making, and communication styles of physicians were the underlying barriers that translated to the lack of authority and autonomy, which hindered the ability to retain adequate nurses.

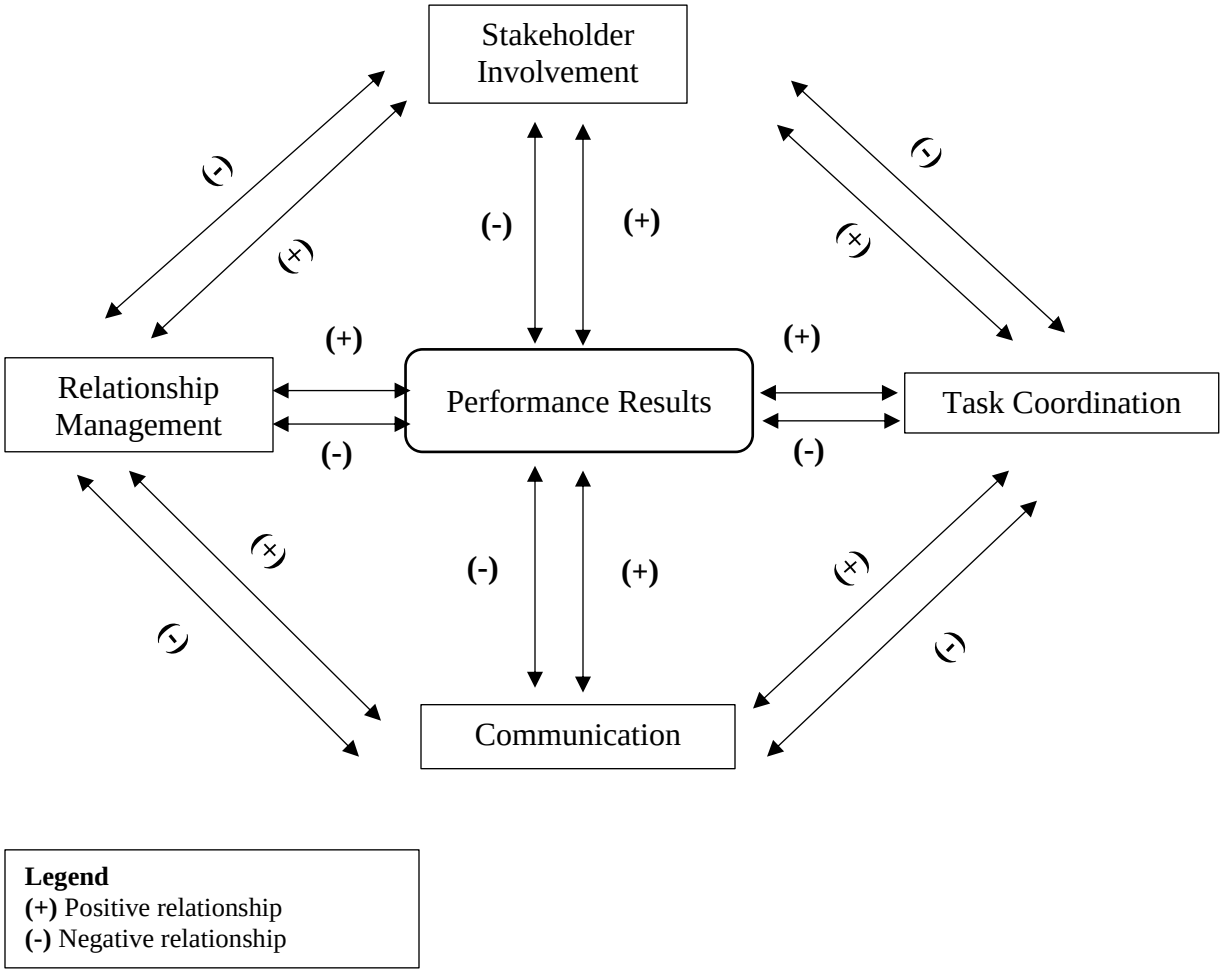
Similar to how P1, P2, and P3 developed relationships and increased communication with stakeholders across various departments who understood the complexity of the billing process and provided inputs that drove necessary changes, other billing managers could identify key stakeholders that would provide feedback for improvement. According to Bastian, Munoz, and Ventura (2016), healthcare processes can be improved with stakeholders' involvement when there are consistent interactions and communication of shared decisions. For instance, Dinsmore (2015) described how a technology development team did not involve stakeholders when implementing a new system and failed to address other prominent factors such as social and physiological effects of the new system, which was necessary to bridge the gap between the users and the technology. Buffone, Chenier, Schulenberg, and Sycz, (2016) explained that when perspectives of stakeholder's who understands the complexity of the system is incorporated in a change implementation, managers gain a better understanding of the challenges and increases their ability to be make decisions and solve problems.

Raghupathi and Raghupathi (2014) noted that monitoring of key performance indicators can increase process efficiencies. Taplin (2013) noted that coordination of tasks can improve the alignment of interrelated processes within a healthcare setting.

Furthermore, Leon-Perez et al. (2015) explained that relationship management can be used in business practice to improve job satisfaction, increase staff performance, reduce staff absenteeism, and reduce unnecessary costs.

I created a feedback model in figure 2 to illustrate the interactions of collaborative strategies revealed in this study. Mutale, Balabanova, Chintu, Mwanamwenge, and Ayles (2014) used feedback models as an avenue to understand the interrelationships of complex situations that is constantly changing and detrimental to the current and future sustainability of their organization. Real and Poole (2016) noted that system theory is a useful method to understand how sub-systems and sub-processes interacts. The feedback model in figure 2 begins with the effect of communication on the development of relationships which influences involvement of stakeholders who need to join forces to coordinate interrelated tasks. These factors have negative and positive implications on the organization's performance.

For instance, to reduce lack of pre-authorization denials, the perception and belief of nursing staff members that pre-authorization is a non-clinical function and a waste of time translates to attitudes and behaviors, which negatively impacts the opportunity to develop positive relationship, increase communication, involve stakeholders and coordinate related tasks. However, if the perspective and believe of the nursing staff members was positive, their attitude and behavior would welcome change and stakeholders would be involved and provide inputs to coordinate tasks, identify key performance indicators to monitor, improve communication and develop positive relationship needed to resolve the issue.



Implications for Social Change

Buller and McEvoy (2016) explained that collaborative practices influence economic performance and improves societal sustainability. Heywood et al. (2016) noted that collaboration is important to gain efficiency in managing the healthcare billing administrative costs. Consequently, collaborative strategies used by healthcare billing mangers to gain efficiencies would also help reduce the billing administrative costs that Jiwani, Himmelstein, Woolhandler and Kahn (2014) projected will rise from $24 to $45

billion in 2018 as the number of insured Americans increase. Although Obama (2016) noted that the number of uninsured reduced from 49 million to 29 million, Himmelstein and Woolhandler (2017) argued that 26 million individuals in the United States remain uninsured. Therefore, to improve the inefficient management of healthcare administrative costs and reduce the bureaucracy implications on patients who need care, Lee et al. (2016) and Semigran et al. (2016) suggested the need for healthcare reforms to focus on reimbursement.

Considering the complexity in managing reimbursements and the increasing billing administrative costs, the adoption of collaborative strategies such as stakeholder involvement, relationship management, task coordination, communication, and performance measurements by billing mangers would encourage a patient-centered health system and promote efficient practices that would reduce projected increase of billing administrative costs in the United States. The effect of the cost savings would help improve the sustainability of healthcare in the United States and potential savings could fund health coverage for the uninsured and underinsured.

Recommendations for Action

This study described collaborative strategies that healthcare billing managers used to reduce billing administrative costs. I recommend billing managers to use the research findings to manage the complexity of collaborating efficient billing processes with multiple payors, interdepartmental staff members, and multidisciplinary teams. Billing managers that lacks cohesiveness in their organization could benefit from implementing stakeholder involvement, relationship management, communication, task coordination,

and performance indicators to reduce billing administrative costs. As it relates to the research findings, billing managers who will manage change need to understand that individuals' perspective and belief translates to attitudes and behaviors that influences communicate with stakeholders, development of positive relationship with process owners, coordination of complex interdepartmental tasks, increase communication, and identification of performance indicators that would improve billing practices.

Therefore, healthcare billing managers should not focus only on the issue of cost, quality, and time. They should assess perspectives and beliefs of individuals involved in the billing process that cultivates attitudes and behaviors affecting billing administrative costs in their organization. Healthcare billing managers should adopt collaborative strategies that would help in identifying and managing factors impeding necessary changes for improvements. Healthcare billing managers should encourage the feedback from stakeholders and maintain positive relationships that would improve collaborative decision making. Healthcare billing managers should monitor key performance data indicators that would help in pinpointing areas for improvements.

To dissemination the research findings, I would summarize the findings to two pages and share with participants, executives, business managers, financial managers, business owners, and peers. This study will also be published and available for download through the ProQuest/UMI academia dissertation database. I will develop an electronic book version of the research findings and share with individuals interested in self-development and continuing professional education. In addition, I will seek opportunities

to present the research findings to business and financial associations, management training seminars, and leadership conferences.

Recommendations for Further Research

This single case study is limited to the perspectives of three billing managers from one healthcare organization. I realize that due to differences in healthcare organizational structure, the perspective of these billing managers alone may not be applicable to other healthcare settings. In support of my notion, Ingerslev (2016) noted that the complexity in healthcare systems cannot be solved by a single profession. Hence, my first recommend is that further research to include perspective of other stakeholders such as clinicians and payors. Secondly, I recommend further research on multiple case study that would describe possible differences of how billing managers from different organization reduced billing administrative costs. Thirdly, I recommend a follow up quantitative study to test hypotheses and provide statistical analysis on billing administrative costs. Fourthly, I recommend further study to describe the effect of organizational culture on billing administrative costs as culture affects decision making structure of an organization. In their study, Lee et al. (2016) noted that only 21% of literature addressed the effect of reimbursement practices on operations performance. Therefore, my fifth recommendation is further research to reveal how inefficient reimbursement practices affects operations results.

Reflections

This research provided me the opportunity to review literature and analyze data collected from participants that revealed collaborative strategies healthcare billing

managers used to improve billing administrative costs. I had no preconceived idea at the inception of the research on how and with whom billing managers collaborated with. Although some literature noted that organization culture affects collaboration, the participants did not share perspectives that inclined that their billing processes was improved with changes in organization culture. Instead, task coordination, communication, stakeholder involvement, relationship management, and performance indicators were more prominent themes revealed from literature and results of data analysis.

Although the participants disclosed it was their first time participating in a research study, I felt that the participants were passionate about improving billing processes and eager to share their experiences during the interview process. I noticed that one of the participant was anxious about providing supporting documents and wasn't quite sure on which document would be appropriate to share. After the participants answered follow-up questions and validated the interpretation of my findings, I asked for documents that would be available to the public but supported their assertions.

I learnt how to apply reflexivity, bracketing, and member checking to reduce bias in research. The awareness and application of these techniques helped me stand in a position of a student that acquired knowledge from participants. After conducting the study, I learned how to apply the iceberg change management model conceptual framework to gain a deeper understanding of research findings. The rigorous process of the DBA Doctoral Study helped me developed a mindset of persistence, patience, and perseverance, which I refer to as the "three Ps" of lesson learned. As I reflect on my

doctoral study experience, I can attest to my development of pragmatic and inquisitive worldview, which has encouraged my continuous acquisition of knowledge.

Conclusion

Collaboration triggers innovative ideas and changes that could lead to efficiency. Consequently, change management becomes difficult when resistance rises. Thus, as managers desire to make changes that would improve efficiency, it is imperative to not only focus on obvious issues, which according to the iceberg change management model represents only 10% of issue management and hidden issues affecting efficiency represents 90% of challenges impeding the achievement of necessary change. To manage the challenge of being blindsided by obvious problems, the result of this research revealed that managers can strategically reveal the underlying issues affecting change by applying collaborative strategies to increase communication, involve stakeholders, improve relationship management, and monitor performance. The participants of this study understood the interwoven relationship within their billing processes and successfully managed the complexities by applying collaborative strategies to gain efficiency. As communication or lack of it positively or negatively affect relationships, involvement of stakeholders and their willingness to join forces to coordinate interrelated tasks and provide feedback will also be impacted. The result of which affects performance. Therefore, I encourage managers to apply collaborative strategies to identify and manage factors impeding changes that would improve efficiencies.

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Appendix A: Letter of Intent

Dear Potential Participant,

I am a doctoral student at Walden University seeking volunteers of healthcare billing managers who had successfully used collaborative strategies within their organization to reduce billing administrative cost. I chose this research topic due to how fragmented multipayer health system have increased billing administrative cost in the United States. Your participation might add knowledge that could help reduce billing administrative cost in the United States. As a requirement of Walden's University Institutional Review Board, I will keep the identity and names of each participant confidential during and after the research. I will schedule an initial interview with each participant to ask eight open-ended questions. To ensure validity and reliability of the research findings, I will request a second follow up dialogue to confirm the accuracy of my interpretations. To ensure no new information is evolving, I will request no more than three sessions of up to 15mins each for additional follow up questions. Relevant documents such as meeting minutes, policies, procedures, and cost analysis can be provided to support on how collaborative strategies was used to reduce billing administrative cost. To answer the research questions, I do not request any data regarding patient information or diagnosis, please ensure no such information is provided throughout the process. If you are interested to participate, please respond to me via email. Also, I ask that you please refer any colleagues that have used collaborative strategies within your organization to reduce billing administrative cost.

Appendix B: Follow up Reminder

Dear Potential Participant,

I am following up on the letter of invitation to participate in my doctoral research study sent to your email address on …...

Kind Regards,

Stella Fayomi-Olaleye

Appendix C: Interview Protocol

Interview Procedure

1. I asked my colleagues to refer potential participants. Interested prospective participants gave my colleague permission for me to contact them.
2. I emailed invitation to participate and letter of cooperation to prospective participant.
3. I performed one follow up reminder request using the letter in Appendix B. When potential participant did not respond, I ceased from follow up to avoid unwanted solicitation.
4. I received signed letter of cooperation from interested parties.
5. I emailed consent form to potential participants who indicated an interest to participate.
6. I received signed consent form from participants.
7. I created a manila folder for each participant with a numeric naming convention and filed the signed consent form in a locked fireproof safe.
8. I emailed the interview questions to participants that signed the consent form.
9. I scheduled a face to face initial interview with each participant.
10. I conducted the interview in a private location that was offsite from participant work location and free from noise that could interfere with the audio recording.
11. I audio recorded the interview conversation after verbal consent from participant.
12. I wrote down key points and body languages during the interview process.
13. I asked participants for copies of relevant documents to support their notions.

14. At the end of the initial interview, I thanked the participant for their time and asked for a convenient time to schedule a follow up interview to validate correctness of interpreted conversations.
15. After the initial interview, I transcribed participants' responses and noted supporting evidences from the documents reviewed in a paragraph synthesis after each interview question using a Microsoft Word document.
16. During the follow up interviews, I engaged in member checking by asking participants to clarify my interpretations of their responses and understanding of the documents reviewed.
17. I made necessary adjustments to the transcript as suggested by each participant.
18. To ensure no new information was evolving, I requested additional follow up interviews to ask questions via phone calls.

Data Collection Tools

1. Interview questions
2. Email
3. Phone
4. Documentations received from participants
5. A notepad to write interview notes.
6. Manilla folder to file manual data and computer to store all electronic data
7. Microsoft Word and PDF file loaded into ATLAS.ti data analysis software
8. ATLAS.ti data analysis software

Appendix D: Interview Questions

The eight open-ended questions below will investigate your viewpoints regarding what collaborative strategies you used to reduce billing administrative costs.

1. What billing administrative cost did you reduce?
2. Who are the stakeholders involved in the collaborative process to reduce billing administrative cost?
3. What collaborative strategies did you use to reduce billing administrative cost?
4. What barriers to change did you encounter?
5. What strategies did you use to alter barriers to change?
6. What impact did the changes have on billing administrative cost?
7. How did you measure the improvement of billing administrative cost?
8. What other insights can you share on improving billing administrative cost?