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Successful Billing Strategies in the Hospital Industry

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This is to certify that the doctoral study by

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Abstract

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MBA, University of Maryland University College, 2015

BA, Strayer University, 2013

Doctoral Study Submitted in Partial Fulfillment

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Abstract

Failure to collect reimbursement because of changing regulations negatively impacts hospital profitability. A multiple case study approach was used to explore the successful strategies billing managers employed to collect reimbursement for all legitimate Medicare claims. The target population for this study included 5 hospital billing managers from 3 organizations in the Northern New Jersey region. The complexity theory was used as a framework for assessing changing Medicare regulations and how the managers adapted to them. The data collection process for this study involved gathering data from participant interviews, documentation from the organizations of the participants, and government documented regulations and manuals. The logical and sequential order of data analysis for this study embraced Yin's 5-steps data analysis that includes compiling data, disassembling data, reassembling data, interpreting the data, and concluding. The successful strategies billing managers used that emerged as themes were remaining up to date with Medicare changing compliance regulations; enhancing communication with staff, multiple departments, and Medicare; and adopting a robust billing system and other systems that compliment billing. The implications of this study for social change include the potential to ensure access to patient care for benefiting families and communities through the sharing of successful strategies for Medicare claims.

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Dedication

I want to dedicate this study to my family who supported me throughout my journey. First to my wife, Kristin, who stayed up many nights because I needed to finish just one more section. She always supported and encouraged me to keep going despite me wanting to give up. I want to also dedicate this study to my son, Shamar, who said I could do this no matter what it takes. Lastly, my mother, father and step-father, Laverne, Donald, and Bryant always believed that I could achieve whatever I wanted. They all inspired me with the trials and tribulations of their lives and how they overcame all obstacles. I am forever grateful for the dynamic family I have.

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Section 1: Foundation of the Study

There is an ongoing debate about hospital reimbursement and the impact of changing Centers for Medicare & Medicaid Services (CMS) regulations (Downey, Zun, Burke, & Jefferson, 2014). Hospitals are in a precarious position to maintain profitability despite changing CMS payment tactics (Bosko, Dubow, & Koenig, 2016). I contributed to the business practice with this research by analyzing the different strategies billing managers use to collect reimbursement for legitimate claims. The strategies billing managers employed were particularly interesting because these strategies can impact adequate reimbursement. I used the tenets of complexity theory to evaluate billing managers' adaptability due to the uncertainty of changing Medicare regulations, that are reflected in the current literature review. An outline of successful strategies, at this time, is described using the data collected from a systemic approach to a review of the literature.

Background of the Problem

CMS officials have implemented new regulations related to hospital reimbursement (Brasfield, 2015). CMS officials continue to try to reduce health care cost and ensure Medicare sustainability and the best quality of care for the patients in their health care plans (Brasfield, 2015). Although CMS officials attempt to make providers aware of reimbursement rules coming down the pipeline, at no time does CMS guide providers regarding how to manage risk. The associated risk may leave hospitals susceptible to financial hardship due to the changing reimbursement rules.

CMS officials want to fix health care in the United States by prioritizing rising cost, improving how providers deliver care, and enhancing patient outcomes (CMS, 2013b). The Medicare Prospective Payment System (PPS) is a process of reimbursement for health care providers who use a classification system for services to render payment (CMS, 2015c). There are different PPS reimbursement processes for inpatient hospitals, home health agencies, hospices, hospital outpatients, inpatient psychiatric facilities, inpatient rehabilitation facilities, long-term care hospitals, and skilled nursing facilities (CMS, 2015a). Under the PPS, Medicare continues to create different health care reforms that impact reimbursement through the quality of care measurements that include hospital readmissions, patient satisfaction, patient safety, and clinical outputs (Kittinger, Matejicka, & Mahabir, 2016; Marier, 2015; Martin, 2017).

As a result of CMS officials changing regulations and guidelines, hospitals need to ensure they have the right people and processes in place to ensure maximum reimbursement efforts. Maximizing reimbursement is one of the many ways community hospitals can remain operational and continue to offer services to patients. Providing safe and convenient health care is an essential element for community hospitals, especially for the older population (Countouris, Gilmore, & Yonas, 2014). The billing manager along with other hospital staff play important roles in making sure convenient hospitals stay open by applying best practices to address the risk brought on by changing regulations.

Problem Statement

Failure to collect reimbursement because of changing regulations negatively impacts hospital profitability (Bosko et al., 2016). From 1998 through 2005, hospitals did

not receive $40 billion in reimbursements as a result of changing Medicare regulations (Wu & Shen, 2014). The general business problem is some billing managers do not manage health care budgets efficiently because of changing regulations. Consequently, they may not be able to sustain profitable organizational operations. The specific business problem is some billing managers in hospitals in Northern New Jersey lack strategies to collect reimbursements for legitimate Medicare claims.

Purpose Statement

The purpose of this qualitative multiple case study was to explore the successful strategies billing managers employ to collect reimbursement for legitimate Medicare claims. The targeted population consisted of five billing managers from three hospitals who successfully employed strategies to collect reimbursement for legitimate Medicare claims for hospitals in Northern New Jersey. Study results indicated a contribution to social change by changing hospital policies that increased billing reimbursement. Without hospital policy changes, hospital payments would be substantially hampered and result in the closure of departments in teaching hospitals (Harris & Swallow, 2016). Lovell (2015) concluded that medical students could form community bonds and their professional identities while studying at teaching hospitals. Without teaching hospitals, communities could potentially lose the positive impact of developing deeply rooted compassionate medical professionals who identify with the needs of patients.

Nature of the Study

I used a qualitative research method to explore the reasons, opinions, motivations, and experiences of the billing managers to identify their successful strategies for

achieving and maintaining Medicare reimbursements. Haegele and Hodge (2015) suggested that a quantitative approach is appropriate when the researcher wants to discover and understand the relationships between phenomena by testing a hypothesis. Alavi (2016) also suggested that researchers more commonly use the mixed method for exploring phenomena and determining the relationships among variables. I did not use a quantitative or a mixed method approach because I was not testing hypotheses or determining relationships among variables.

Four principal types of qualitative research designs include ethnography, narrative, phenomenological, and case study (Babchuk, 2017). Sousa (2014) contended that the researcher uses a phenomenological design to describe, understand, and clarify the participants' experiences with a phenomenon usually not in the business environment. Butnaru (2015) suggested that the ethnographic approach ensures the researcher can determine the social interactions in the context of relationships. A researcher may use a narrative design to explore participants' stories across a length of time by synthesis methods (Webb, Clough, O'Reilly, Wilmott, & Witham, 2017). While the application of these designs is valuable for qualitative studies, these alternate qualitative designs do not permit the study of experiences associated with successful strategies billing managers employ to collect reimbursement for legitimate Medicare claims. The use of a multiple case study can enable the exploration and explanation of the business problem through validation implications gained from one case as it relates to other cases (Clarke & Higgs, 2016).

Research Question

What successful strategies do billing managers employ to collect reimbursement for legitimate Medicare claims?

Interview Questions

1. What is your background in the health care office and reimbursement functions?
2. What are the challenges associated with sustaining and improving reimbursement functions?
3. What has been your experience overcoming the challenges associated with lowered Medicare reimbursement?
4. What strategies do you use to collect reimbursement for legitimate Medicare claims?
5. What practices could health care billing managers enlist to prevent reduced Medicare reimbursement?
6. What strategies do you use to gain knowledge about any future changes to Medicare reimbursement policies and procedures?
7. How do you assess the effectiveness of strategies for achieving optimal Medicare reimbursement?
8. What additional information can you add that would be valuable for identifying the successful strategies you have used to collect reimbursement for legitimate Medicare Claims?

Conceptual Framework

Complexity theory is a framework that started as an outline of system behavior established in the 1980s at the Santa Fe Institute in a New Mexico science laboratory (Brady, 2014). The people who worked on the formation of this theory included former members of the Los Alamos National Laboratory (Brady, 2014). Scholars in diverse disciplines that included economics, physics, and ecology shaped the tenets of complexity theory (Brady, 2014). The idea behind the theory formation stemmed from wanting to create a cross discipline model that addressed issues plaguing complex systems (Brady, 2014). The premise was to use computer simulation to explain the dynamics of a complex system.

Pollack, Adler, and Sankaran (2014) stated that there was a lack of a clear outline of discipline to identify and determine the origin and author of complexity theory. However, Chandler, Rycroft-Malone, Hawkes, and Noyes (2016) reported that a group of researchers from different backgrounds came together in 1984 to further understand the complex system and nonlinear thinking. In early 2000, researchers used new and emerging complexity theory to evaluate the multifaceted and dynamic aspects of health care (Chandler et al., 2016).

Olya and Mehran (2017) suggested that researchers use complexity theory to describe concepts in fields like social sciences, hospitality and tourism, and marketing. However, Pollack et al. (2014) suggested that complexity theory as a managerial application can aid researchers with understanding how organizations function. To further understand the complexity theory and a manager's behavior, Caffrey, Wolfe, and

McKevitt (2016) suggested that this lens can provide a way to determine how an organization will implement policies and processes of strategic change in complex systems. I concluded that complexity theory was a possible means for understanding the multifaceted changing hospital environment billing managers must address.

Operational Definitions

CMS regulation: The guidelines, policies, protocols, and acts that determine the mandatory use, collection, encoding, and transmission of the data for all Medicare/Medicaid patients receiving skilled services (CMS, 2016f).

Fee-For-Service: A rate of Medicare reimbursement providers receive for specific services that may include office visits, tests, or supplies (CMS, 2015b).

Managed care: Health insurance plans and other parties that manage the care of the patient and determine the operational and regulatory aspects associated with provider reimbursement (CMS, 2016e).

Meaningful use: Electronic health record (EHR) incentive programs implemented by Medicare to use the health information obtained by the provider to improve the quality, safety, and efficiency of patient care (CMS, 2016a).

Medicare values: A final rule applied to determine levels of coverage and represents an observed estimate calculated provide an estimate to the actual average spending by a range of consumers in a standard population used for reimbursement (CMS, 2013a).

Provider: A person, business, or agency that provides the patient with a bill or receive s payment for health care during standard business operations (CMS, 2016b).

Reimbursement: Payment of benefits to a medical provider after they submit a claim on behalf of a beneficiary (CMS, 2016c).

Reimbursement model: A model that assumes the hospital-based practices align with Medicare's fee schedule to ensure an adequate flow of revenue (Konski, Yu, Freedman, Harrison, & Johnstone, 2016).

Reimbursement system: Technology used by health care organizations that include financial and clinical health information integrated and automated to improve their internal processes that will increase the effectiveness and efficiency of their process (Escobar-Pérez, Escobar-Rodríguez, & Bartual-Sopena, 2016).

Value modifiers: This program determines the amount of Medicare payments the provider receives based on their performance, level of quality, and cost measures. The program gives rewards low-cost and high-quality care provided (CMS, 2016g).

Assumptions, Limitations, and Delimitations

To uncover the elements that may have critically restricted me from conducting research, I outlined any deficiencies that may have impacted the availability of resources and the process of reasoning prevalent in any human shortcomings. There are always assumptions, limitations, and delimitations of a study that require disclosure to explore the phenomena further. The following subsections include a description of the assumptions, limitations, and delimitations that may have posed an impact on this study.

Assumptions

Qualitative researchers use components of behavioral analysis to investigate the information they collect to process for a study. Assumptions refer to the researcher's

presumed details that relate to a study that can shape and distort the analytic lens (Anderson, 2017). However, assumptions from the researcher can come from language, a person's ability to remember, analyze, and communicate events about the health care industry (Mammen, Norton, Rhee, & Butz, 2016). My first assumption was that the participating billing managers understood the responsibility of providing quality patient care that follows the guidelines set by the government payers. Another assumption included the participants following standards of the hospitals and honestly answering questions regarding the successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims. An additional assumption was that the participants would represent an accurate interpretation of their current business performance and operations.

Limitations

Limitations are concerns out of the researcher's control that may restrict the study (Wölfer et al., 2017). A limitation of this study included the small sample size, that may have not accurately depicted the reimbursement experience for all billing managers across the health care industry in the United States. Another limitation included my inexperience with interviews.

Delimitations

Delimitations are the boundaries set forth by the researcher that may cause ethical issues and limit the scope of a study (Paechter, 2012). For this study, there were qualitative interviews of five billing managers from two different organizations who specialized in Medicare reimbursement in the Northern New Jersey region for the

discovery of data. The participating individuals were all adults with no relation to a protected group or class. The participants were all billing managers who work for different health care organizations and who successfully employed strategies to collect reimbursement for legitimate Medicare claims.

Significance of the Study

The reason for conducting this study was to highlight the successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims. Study results illuminated both the business and social benefits from hospitals reducing delayed or denied reimbursement after rendering patient care. Saldaeva et al. (2016) contended that investigators who focus on research problems about public private partnerships could also identify and explore related socially relevant issues. Hospital billing managers could collect reimbursement for legitimate Medicare claims with successful Medicare reimbursement strategies.

Contribution to Business Practice

CMS officials designed value modifiers or value-based payments programs to determine the amount of Medicare payments the provider receives based on performance, level of quality, and cost measures (CMS, 2016d). While CMS officials seek to reduce cost, hospitals may experience reduced reimbursement because of a structured reimbursement system payment model, that has a large focus on rewarding quality and penalizing excess (Buck, 2016). Furthermore, the exploration of the expansion of CMS to reduce health care cost while creating a management system to achieve financial performance for participating hospitals may have a business impact. In this study, I

highlighted reimbursement strategies to improve managerial practices in the Northern New Jersey region. Managers may need to recognize the differences and uncertainty of the health care environment to prepare for changing reimbursement regulations. Billing managers may use the strategies highlighted in this study to reduce the risk associated with lower reimbursement after rendering patient care. The opportunities to increase reimbursements may enable billing managers to reduce inefficiencies in the hospital revenue management process and improve hospitals ability to better support their employees and patients.

Implications for Social Change

The United States health care industry consists of public and private payers who can impact access and delivery of care. To solve a multitude of problems with health care, billing managers should use a systems approach (Thomas, Corso, & Monroe, 2015). The results of this doctoral study may contribute to positive social change by providing information for the improvement of hospital practices in the health care industry to ensure organizations remain in business. Maintaining the presences of health care organizations can aid communities by providing access to safe and convenient health care, especially for the older population (Countouris et al., 2014). The results of this study contributed to positive social change by gaining an understanding of the successful strategies billing managers used for Medicare claims to develop a more effective and efficient process to ensure access to patient care for benefiting families and communities.

A Review of the Professional and Academic Literature

The review of the literature sets the foundation for the design of a sound qualitative case study to gain an understanding of multiple types of data and explain the successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims. Chukmaitov, Harless, Bazzoli, Carretta, and Siangphoe (2015) suggested that a literary analysis can be used in current hospital research to show a reliable and transparent history of reporting practices for CMS. Aryankhesal, Sheldon, and Mannion (2013) and Mirani and Harpalani (2014) stated that a cross-functional study of different hospitals might enable the researcher to determine how the ability to change the behavior of the billing manager can regulate the financial outcomes and the sustainment of business. Complexity theory was introduced by former members of the Los Alamos National Laboratory to explain cross-discipline behavior in a multifarious system (Brady, 2014). The ability to gain an understanding of how billing managers could apply a complex theory model to assess Medicare reimbursement was the incentive used to guide the literature review.

The following literature review addresses peer reviewed and government agency research of the historical and current structure of the U.S. health care system. This research provided the basis for a qualitative case study that addressed the successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims. The organization of the literature review is by topic, including the conceptual framework, the health care system, and literature about opposing theories. The literature review consists of roughly 117 references from peer reviewed journals, books, and

governmental reports, with 113 (96%) less than 5 years old. Section 2 consists of roughly 249 references from peer reviewed journals (93%), books (1%), and governmental reports (16%), with 237 (95%) less than 5 years old.

Literature Review Search Strategy

The literature review strategy for this study involved a search of the main topics and searched terms that included *Medicare, fee-for-service, managed care, health care reform, billing, meaningful use*, and *prospective payment plan*. Some additional search terms included *reimbursement, reimbursement model, reimbursement system, value modifiers, Medicare values, CMS regulations,* and *qualitative case study research methods and techniques*. I performed numerous online database searches of Business Source Complete, ABI/Inform Collection, Education Source, MEDLINE, ProQuest, Centers for Medicaid & Medicare Services, PubMed, CINAHL, and ScienceDirect. I also used the Google Scholar search engine. The use of the databases to search the topics and terms of this study added in the literature review process by improving access to new, in-depth, valuable electronic peer reviewed journal articles. Ward-Smith (2016) contended that a researcher should review the literature to detect the best practices and to determine how the main topics under investigation were explored by other authors to embrace evidence-based practice in health care. Neill (2017) stated that a systematic approach to a literature review begins with using keywords related to a researcher's topic or research question.

Complexity Theory

The researcher may be able to identify a multifaceted nonlinear model of an organization with interacting components or an intricate configuration of indicators with different relationships with the application of complexity theory (Olya & Mehran, 2017). The billing managers in the health care organization need to be able to balance different elements in a changing environment to create permanency (Charlesworth, Jamieson, Butler, & Davey, 2015). Under the context of health care, the researcher can use complexity theory to explore the understanding of the different levels of the interrelation among issues and stakeholders in the organization for managing a crisis (Therrien, Normandin, & Denis, 2017). Defining reduced reimbursement as a crisis and understanding the relationships and unpredictability may offer information about changing regulations and how the billing managers should react. Exploring the successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims was the topic, and complexity theory served as the framework.

I used the complexity theory as a framework to explore the strategies billing managers use to develop a process for assessing changing Medicare regulations and how the manager adapts. The tenets of complexity theory emphasize the unpredictable properties and the relationship between a system and the environment in which the organization operates (Therrien et al., 2017). The researcher can use complexity theory as a framework to outline a concept for a systemic approach that explains patterns of organizational change (Caffrey et al., 2016). This theory offers a lens for the researcher to observe a self-organizing component of complex systems with the implication that

leaders of health systems can choose, plan, and control the newest intervention that will then dictate the change process of the outcomes (Caffrey et al., 2016). Researchers have used complexity theory to explain the framework for describing the complex system of health care (Chandler et al., 2016). See Figure 1 for an outline of the complexity theory with a variation for Medicare reimbursement.

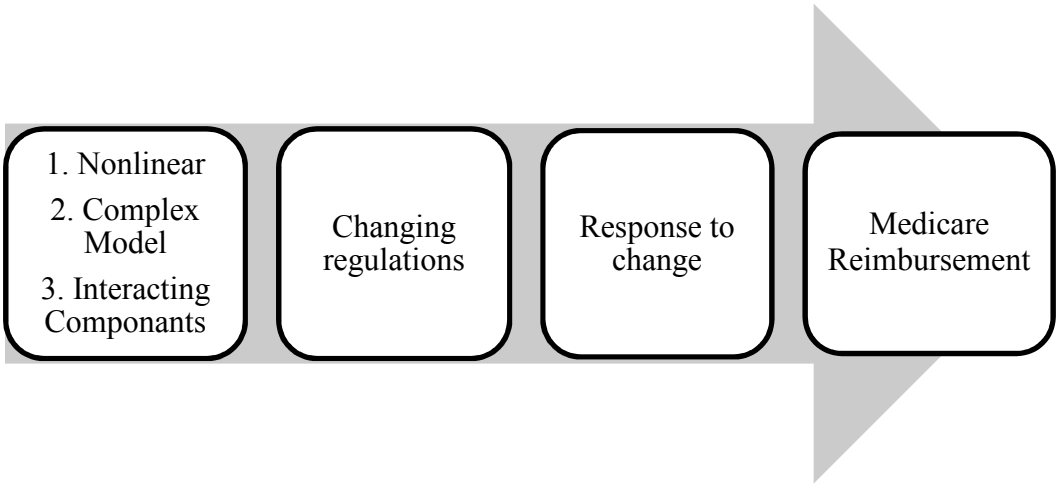

Figure 1. Complexity theory model and key components specific to changing Medicare regulations and the health care organization's response to change. This model is an adaptation of Olya and Mehran (2017) "Modelling tourism expenditure using complexity theory."

The researcher can apply complexity theory to uncover the influence decisions related to reimbursement. The complexity theory, as applied to changing regulations, includes three key components of the health care industry: nonlinear, complex model, and interactive components outlined in Figure 1. These core concepts add a conceptual lens to explain the health care organization, changing regulations, adaptability to change, and the process development to implement the strategies to ensure reimbursement of legitimate Medicare claims.

Brainard and Hunter (2016) observed that health care delivery is complex and unpredictable. The inconsistency of the outcomes makes the industry ever-changing, with health care workers in a position that will require them to develop unexpected relationships and have consequences that are unpredictable, hence the complex nature of relationships (Brainard & Hunter, 2016). The complex system embodies change, and workers must consider the consequences that may impact the health of the public (Brainard & Hunter, 2016). To prepare for change, the worker must understand uncertainty and develop a plan to reduce uncertainty (Brainard & Hunter, 2016). While Brainard and Hunter summarized the importance of complexity theory and how it aligns with the complex changes in the health care environment, Caffrey et al. (2016) reasoned that a complex organization constantly evolves and is impacted by the structure. Complexity theory provides a way to determine how an organization will implement policies and processes of strategic change in complex systems (Caffrey et al., 2016). This theory can also assist the manager in outlining a concept for a systemic approach that will explain patterns of organizational change (Caffrey et al., 2016). This theory offers a self-organizing component of complex systems with the implication that leaders and managers of health systems can choose, plan, and control the newest intervention that will then dictate the change process for outcomes (Caffrey et al., 2016). Ramasesh and Browning (2014) suggested that complexity theory gives insights into the behavior of a complex system and identifies the unexpected behaviors of the system. The complexity of a sociological system can make it difficult to distinguish all of the moving parts that make up the relationships within the system (Ramasesh & Browning, 2014).

Pollack et al. (2014) outlined the differences between complexity theory as a mathematical application and a managerial application. Researchers can use complexity theory as a conceptual framework to understand the organizations even though there is a different way to view the leader when applying complexity theory framework (Pollack et al., 2014). Most published literature that applied complexity theory to mathematics was between 1973 and 2002, and the application of complexity theory to management became more prevalent between 2002 and 2009 (Pollack et al., 2014). While Pollack et al. defined complexity theory as a dynamic concept that can cover different subjects, Mason (2016) suggested the application of complexity theory best fits policy changes with education. The decentralized dynamic of education within the health care industry becomes complex due to the instability of implementing policy changes and the unwillingness to change (Mason, 2016). Mason also contended that the similarities between the systemic policy changes and the hospital's impact due to Medicare policy changes both create an inability to sustain change. Cruz et al. (2017) surmised that worker interactions through developing attitudes and actions might increase with the education of people in the health care industry and the application of complexity theory. The idea behind seamless health care is to reduce the division between entities to share knowledge and experiences. Because of the exclusivity of the practices and the expertise of physicians and billing managers, the unit must receive the uniqueness of each profession to survive and create one unit (Cruz et al., 2017).

Sperry (2016) outlined complexity theory and the phenomenon of complexity and how it relates to the human experience. The human experience is complex based on

originality, vulnerability, and the uncertainty of events (Sperry, 2016). Sperry used complexity theory to explain how a process can become systematic and contribute to human behavior and shape experiences. Although this theory cannot explain all the sources of human behavior, it may aid in uncovering some uncertainty and reasoning for chaotic situations (Sperry, 2016). While Sperry looked at complexity theory from a human behavior position, Walton (2016a) further suggested that complexity theory offers a framework for the evolution of the social sciences to explain the complex interactions between a person's different values, goals, and resources. The participants in Walton's study defined complexity theory as the complexity of interventions and the complexity of social systems. Participants who defined complexity theory as a complex social system also embodied a systems approach that focused on evaluation more prevalent to policy, politics, and health care (Walton, 2016a). Walton provided insight into how people view complexity theory application.

Naqvi (2016) argued that complexity theory might have a positive impact when applied to power sector reforms and addresses the inadequacies in the development of thinking. Naqvi used complexity theory as a framework to address public policy distinctively to dissect the problem and adapt to policies that may impact a system. Naqvi suggested that the earlier constructs of complexity theory outlined the ability to identify disjointed subsystems and how leaders linked the smaller efforts to larger goals. While Naqvi provided insight into reform and the application of complexity theory application, Orlowski et al. (2016) suggested that the application of complexity theory to mental health service reform explained the variety of professional roles and the disjointed flow

of information. Orlowski et al. debated that practitioners and policymakers need to establish how the mental health system works before changing or adding new components. Because of the variety of workers and services, the mental health system consists of many different parts with high levels indicative of the inner workings of the many other health systems in the health care industry (Orlowski et al., 2016).

Squires, Uyei, Beltrán-Sánchez, and Jones (2016) examined the relationships between country level factors and health care worker production. Squires et al. used complexity theory to explain health care's multiple open systems that constantly generate change based on the context. The context of the system depends on the process that involves interactions between many different systems (Squires et al., 2016). Peter and Swilling (2014) suggested complexity theory as a conceptual framework to shape a transition by implementing an integrative, inclusive, and adaptive approach that will support change. A complexity theory approach outlines different elements of a complex system that an organization will need to adapt to cover a comprehensive range of services in health care (Peter & Swilling, 2014). Squires et al.'s and Peter and Swilling's articles both tie together the complex interactions and multiple services found in the health care industry.

Thompson, Fazio, Kustra, Patrick, and Stanley (2016) argued that complexity theory provided a framework for practices within allied health, medicine, and nursing disciplines to offer researchers guidance with the application. Complexity theory framework outline the relationships between health care workers, self-organization, and diversity (Thompson et al., 2016). More specifically, Thompson et al. described how the

applications of complexity theory can help a researcher explain diverse relationships and communication within a system and how that impacts change. However, complexity theory as an applied framework to research has added some confusion and inconsistent application that impedes on the operation and impact of the research (Thompson et al., 2016). Health care providers are left to manage an array of complex situations in a short amount of time to provide seamless health services to the public (Therrien et al., 2017). Complexity theory as a framework in the health care setting can provide explanations of the ability to survive and thrive despite the challenging factors and the complication of the changing parts of a health care system (Therrien et al., 2017). Researchers can use complexity theory to explain the ability to improvise and be vigilant to both unusual and exceptional requirements, and passive factors that enable responses to unexpected demands as they arise during a crisis (Therrien et al., 2017). Complexity theory explains how the interaction and unpredictable components form a relationship between a system and the environment in which it operates (Therrien et al., 2017). Thompson et al. and Therrien et al. outlined complexity theory as it relates to changes and uncertainty within the health care industry and how to respond and survive.

In the hospital, the billing manager can also utilize the social components of complexity theory to create a platform for building relationships and support workers through constant change. Billing managers must also build the skills to deal with changing regulations to improve their response to change. The skills needed to deal with change may come from education of health care as an open system, full of moving parts, defined by consistent change. The billing managers must understand the uncertainty of

government shifting payment models and the complexity of a health care system to plan effectively and speedily to improve reimbursement for financial stability with the implementation of multiple strategies.

Nonlinear, complex model, interactive components. Chandler et al. (2016) noted that complexity theory is the best framework to apply to any explanation for health care organizational systems' inner workings due to the multifaceted processes between many different groups of stakeholders. The stakeholders in the systemic interactions in a health care organization include different clinical professionals, non-clinical staff, and patients. Outlining complex processes across the social platform of health care among the care workers and patients requires a theory that accounts for the difficult characteristics within the context of a fragmented system (Chandler et al., 2016). To further explain the social context of health care and how it relates to a nonlinear industry, Chandler et al. suggested the existence of several layers of staff, patients, and organizational infrastructure. The hospital infrastructure includes the evolving technology, computer information systems, care delivery to patients, culture of the organization, and working practices (Chandler et al., 2016). The complex model of health care includes the different networks of people who exchange information (Chandler et al., 2016). For example, frontline non-clinical staff shares information with the clinician to treat the patient and, in turn, the clinician shares information with the patient and across the computer information system so that the bill can generate. The billing manager then uses the information to share with the insurance company to then receive reimbursement for the care rendered.

To assess surgical intricacies within the health care environment Chandler et al. (2016) suggested that they used complexity theory to extract five main concepts that included 'self-organization,' 'the interaction,' 'emergence,' 'system history' and 'temporality.' With these concepts noted, the social impact of the health care system is not easily changed due to the evident resistance to change. Majda and Qi (2017) suggested gaining control of a complex system is challenging due to dynamical instabilities and the uncertainty of tracking control. However, new change strategies will aid in mitigating the unknown (Majda & Qi, 2017). To explore a topic in health care, due to the complex social systems in hospitals, the researcher required a conceptual framework that offered them a way to explain development, implementation and the establishment of health care practices (Chandler et al., 2016). Decision making among professionals acting as an individual adds to the complex behavior within a compartmentalized system that includes multidirectional feedback that may impact the structure over time (Chandler et al., 2016).

Sturmberg and Lanham (2014) described nonlinear as the health care cure, evidence-based, and pay-for-performance incentive approach to address health care policymakers' inability to tighten boundaries for local service solutions. In this example, Sturmberg and Lanham used the notion of a complex adaptive system to explain organizational thinking where one entity, policymakers, can impact the entire health care industry from the outside by changing policies. However, the health care system may need more than one entity engineering change from the outside of the hospital to impact changing regulations and ensure Medicare reimbursement for legitimate claims. To

further assess strategic change within a complex adaptive system, Caffrey et al. (2016) suggested explaining patterns of organizational change and differences in policy implementation through the lens of complexity theory. Horvat and Filipovic (2017) proposed that organizations that set a foundation rooted in the fundamentals of a complex adaptive system consist of agents that exchange information and address problem solving opportunities without considering the interactions of the different parts in the system. Pype et al. (2017) insisted that health care organizations are best categorized as complex adaptive systems to assess team dynamics and determine the level of adaptability. Kuziemsky (2016) surmised that health care organizations are considered a complex adaptive system because of the different components that impact the entire whole that includes care delivery, education, and policies. The constant interacting parts work in a nonlinear way with various participants disconnected by time, space, the scope of practice, and working together may change over time (Kuziemsky, 2016). In contrast, Brand, Fleming, and Wyatt (2015) suggested a complex adaptive system in a workplace consists of systemic characteristics that impact system level performance.

Complexity theory, in different industries, may be the best framework to apply to an intricate nonlinear subsystem (Woodside, 2016). However, a complexity theory framework cannot ensure an open system will determine a potential outcome (Woodside, 2016). For example, a hospital's reputation for success does not determine all successful functionality without any change in a specific category. Proches and Bodhanya (2014) suggested that people can be complex and nonlinear, therefore, subjected to the influences within their environment. Proches and Bodhanya studied complexity theory to

outline and interpret the behavior and responses to a multidisciplinary stakeholder system within the sugar industry. Looking at a complex system, Proches and Bodhanva added that the conventional top-down leadership implementation does not work. Workers in organizations maintain supply chain despite the overtones of self-organizational processes with an application of a complexity theory framework (Proches & Bodhanya, 2014).

The uncertainty of economic markets has driven researchers to use complexity theory as a lens to explain different ideas and make sense of the financial market (Battiston et al., 2016). Complexity models have emerged from concepts that include ways to address changing regulations, systems with networks, how to utilize feedback, and flexibility (Battiston et al., 2016). Woodside, Nagy, and Megehee (2017) used complexity theories in their article to outline case-based modeling of complex results that were more than directionality for strategic management. Woodside et al. used a case based model to examine how complex entities can impact an outcome when the findings may include a mix of negative and positive outcomes to show differences.

Although Battiston et al. (2016) suggested that researchers can apply complexity theory during economic uncertainty, Pappas, Giannakos, Kourouthanassis, and Lekakos (2017) contended they used the complexity theory to examine causal patterns of purchase behavior despite an economic downturn. Pappas et al. also added that researchers could use complexity theory to explain other complex systems like multinational corporations, mass extinctions, rainforests, or human consciousness. To examine the complex nonlinear thinking that is prevalent in the health care industry, Gordon, Rees, Ker, and

Cleland (2017) used complexity theory to establish an alternative approach to explain leadership and leadership education. Onyx, McLeod, Suhood, and Ramzan (2017) also proposed that health care, when applying the tenets of complexity theory, will show that most phenomena and actions are connected and will develop across time, but are not linear. More specifically, connectedness is due to a collection of interacting elements that precludes what is happening (Onyx et al., 2017). Gordon et al. (2017) suggested that leaders can use a complexity theory approach to examine leadership as a cooperative constructed entity with several social interactions that include spoken word and non-verbal communications.

Maldonado (2017) suggested there is a gap between complexity theory and quantum theory that leaves room to examine each theory to fill in the gaps. Maldonado insisted that time explains complexity as it refers to a complex system. Complexity brings meaning to the lack of order and the ability to increase with time by examining the differences between the past and the quality of the future (Maldonado, 2017). To understand complexity and time as it relates to a complex system an organization may need to calculate the ability to increase complexity instead of a complex period (Maldonado, 2017). Eppel (2016) looked at complexity theory as a complex way of thought to include a complex adaptive system with co-evolution traits, self-organization, open systems, that may lack equilibrium. A complex adaptive system resembles a place with interacting members, interdependent relations, and a nonlinear repetitive nature between each other (Eppel, 2016). The repetitive nature influences patterns among system parts and the co-evolution of a change to a response (Eppel, 2016). Self-

organization is a product of repetitive behavior, embracing change, and further adjusting because of the understanding of self from the internal adjustment and ability to compensate (Eppel, 2016). A complex system lacks equilibrium because of the uncertainty, unpredictability, and crucial changes to an unstable environment (Eppel, 2016).

A complex health care system includes different interacting components that contain stakeholders and processes with activities that are nonlinear that may be subject to the pressures of delivering healthcare to patients. The conflicting views that can explain the nonlinear complexities of the interactive components of hospitals include the impact of changing payment reform, the impact of social change, the overall disconnected systems, and the uncertainty of the external environment. In the health care in a hospital setting complexity theory can also serve as a lens to identify the need for a complex adaptive system approach to problem solving. Billing managers may uncover patterns to establish a leadership framework to understand the dissimilarities of the system's parts and how to create connectedness with the study of nonlinear interactions between the different systems in a hospital. The billing manager may see structures and processes that create identity and emergence of new models with characteristics of self-organization.

Change. A change in a system means that there was an evolution to a new more attractive state of being (Walton, 2016b). To establish a complex system model approach in the public health industry, a worker needs to take a broad tactic to the design, implementation, and evaluation interventions necessary for change in a system to achieve

improvements (Rutter et al., 2017). Therrien et al. (2017) further surmised health care in the hospital setting is tough, but possible to change with the application of complexity theory. The worker can combine the different levels of stakeholders in a health organization with preparation and management of a crisis when complexity theory is applied (Therrien et al., 2017). Although change can happen at the organizational level, it can also take place at the individual level. Interventions in the health care industry can influence workers to control the demands and resources of the work environment to change for the improvement of performance (Gordon et al., 2018). In this instance, individual change is synonymous with individual interventions. Han and McKelvey (2016) suggested that complexity theory is a framework for change to improve an organizations ability to network, gain accountability, trust, legitimacy, and governance to achieve financial well-being

Roberts et al. (2016) asserted that complexity theory when applied to health care education, will pose as an intervention and the students may find new ways to learn. Other ways of learning in the health care industry can take place with role-playing. Dunn and Riley-Doucet (2017) surmised that they used complexity theory as a lens to examine clinical teachers to develop a role-playing simulation to enhance the education of staff with terminally sick patients. Cruz et al. (2017) also suggested that a complexity theory framework applied to education can add to the explanation of teaching and a shift of social transformation.

Change within a system includes moving from a familiar process to one that is unfamiliar. In the hospital industry, the billing manager may make changes from a

familiar process to an unfamiliar process to create an opportunity for improvement. However, change will take place through transformation, that will require individual education. The tenets of complexity theory explain change by making improvements while also considering all the stakeholders that depend on hospitals.

Response to change. Response to a change in the health care industry requires the ability to create continuous improvement within a health care facility (Jaworzynska, 2017). Arbab Kash, Spaulding, Johnson, and Gamm (2014) added that a good response to change initiatives in health care will require multiple efforts and will depend on each other for successful implementation. Lefroy and Yardley (2015) suggested that the use of complexity theory can improve the response to change by increasing the value of the outcome. However, Nasario de Sousa Filipe Duarte, 2016 suggested the response to change depends on the perceived condition of feedback and the environment. The increased value can come from self-critiquing all change and the ability to understand the social aspect of business evaluation (Lefroy & Yardley, 2015). Ma, Peng, and Sun (2014) contended that complexity theory holds a way to quantify how intricate a biological system is and the capacity to adapt and operate in a constantly changing environment. Compared to the health care industry, there are similarities in need to remain consistent with the ability to change the environment to include internal and external challenges. To ensure continuous adaptability organizations can create internal complexities like growing the business or creating new processes to respond to external complexities (Schneider, Wickert, & Marti, 2017).

Adaptability to change is the ability to scan the environment for process improvement opportunities constantly. The ability to adapt will require a review and adjustment of past and current changes, all while considering the complexities of business and the social element of people. Ultimately, the response to change will include the ability of the billing manager not only to adapt to change within but also adapt the changing Medicare regulations that will constantly change the environment of health care.

Opposing Theories to Consider

Two other theories I considered during research included systems theory and chaos theory. Dresden (1992) suggested that Henri Poincaré, as one of the first researchers that developed the theoretical framework for chaos theory in the late 1800s; however, the theory received more notoriety in the 1960s. Raisio and Lundström (2017) suggested that the tenets of chaos theory propose that small, random events can affect the final result. The researcher can explain social conditions, simple phenomena, and unpredictable behavior with an application of chaos theory; however, chaos theory applied as a phenomenon does not require a complex system (Raisio & Lundström, 2017).

Valentinov and Chatalova (2016) suggested that two systems theorists that devised the main tenets of systems theory are Niklas Luhmann and Ludwig von Bertalanffy. Luhmann looked at systems regarding operations and functionality differences within society, while Bertalanffy looked at the connectedness of a system within the different environments (Valentinov & Chatalova, 2016) When combined, the

two schools of thought of systems theory include the collective, systematic development of social issues and how it may enable a functional system that prevents connectivity. Pouvreau (2014) noted that Bertalanffy co-created the foundation of systems theory in 1956, while Procyshyn (2017) gathered that Luhmann further extended on systems theory in the early 1970s. Bridgen (2017) surmised that the researcher could examine the strengths and weaknesses of a system while considering the impact of the mission and goals of an organization with a systems theory framework. Systems theory can also provide a framework for the researcher to understand scientific and social issues with a wide range of view that plagues the interactions and relationships between the parts of a system (Bridgen, 2017).

Although both viable theories, the application of complexity theory offered a fundamental approach to the consideration of a multifaceted system like the hospital and the constant changing Medicare regulations, the billing manager's ability to change, while simultaneously responding to the changing environment through feedback. Conversely, the application of chaos theory does not require a complex system like health care, and I wanted to examine the hospital industry while considering how multifaceted it is currently. Researchers can use systems theory to examine a functional system that prevents connectivity of application; however, for this study, I examined change within a nonlinear system.

Expansion of the literature review. Changing regulations through the lens of complexity theory as a framework will require an understanding of the difficult nature of different interconnected parts. Hartwell (2017) suggested that an institutional system is

complex, and it is best to remove multiple barriers to reach institutional development. Long, McDermott, and Meadows (2018) suggested that health care organizations that used a complexity theory approach were able to achieve flexibility when responding to a constantly changing systems like health services based on pre-determined outcomes. Okwir, Nudurupati, Ginieis, and Angelis (2018) further contended that a complex organization through the lens of complexity theory is negatively impacted by the external environment internal complexities. Similarly, Turner and Baker (2017) suggested that complexity theory had an impact on leadership development with a consideration of the environmental environment. Dai (2017) found that despite the challenges of the environment, an organization can develop a person's talent with a complexity theory approach by way of a dynamic adaptive system approach.

External Real-World Complexities on the Hospital

Medicare is the largest health care payer for individuals living in the U.S. over the age of 65 and reimburses health care providers for services incurred by the beneficiaries (Haley et al., 2016). CMS officials determine the level of Medicare reimbursement for each procedure a provider will perform (Marier, 2015). For the most part, hospitals receive reimbursement from Medicare for inpatient care under the Inpatient Prospective Payment System (IPPS) (Krinsky, Ryan, Mijanovich, & Blustein, 2017). The IPPS reimburses hospitals based on the patients' diagnosis related groups (DRG) (Krinsky et al., 2017). Hospital reimbursement rates come from the DRG coding process CMS officials assigned to each procedure and each patient condition (Marier, 2015). DRG coding also includes special conditions of payment because of intensity, geographic

location, and the probability of malpractice (Marier, 2015). Once the hospital admits the patient, the provider diagnoses the patient and then assigns the DRG, that also impacts the reimbursement rate set by Medicare (Marier, 2015). Furthermore, wages in each area and caring for low income patients can impact a pricing system although many hospitals have limited ability to affect the rates (Krinsky et al., 2017). Policymakers used reforms through the Affordable Care Act (ACA) that made a 75% reduction in payments to hospitals in 2014 to address the differences in Medicare payments across hospitals (Krinsky et al., 2017).

Accountable Care Organizations (ACOs) was created to increase the evidence of care for the population while reforming payments on the inpatient and outpatient side of health care (McClellan, 2015). The purpose of an ACO is to serve as a payment model to drive quality of care with lower costs. An ACO also includes payments with caps or reduction payments on a per-member-per-month allotment based on preset quality measures for the patient (McClellan, 2015). However, a stiff ACO creates financial risk if there are not any improvements in quality. McClellan (2015) suggested that Kaiser Permanente in California closely resembles a stiff ACO and exhibits high financial risk whenever their costs exceed capitated payment. Medicare progression timeline that is specific to payment reform includes Medicare start 1966, Health care Management Organization (HMO) risk base payment, prospective payment 1993, physician fee schedule 1992, Balanced Budget Act (BBA) reduction in provider payments 1997, ACO contracts 2012 (Altman & Frist, 2015; Ginsburg & Rivlin, 2015).

At the center of reform is the desire to control cost and improve the quality of health care (Conrad, Grembowski, Hernandez, Lau, & Marcus-Smith, 2014). However, payment reform cannot easily determine a good balance of payments and rewards that will enhance the provider's desire to render better care (Conrad et al., 2014). Health care reform may create provider anticipation of new payments although the possibility of reform may reduce reimbursement (Conrad et al., 2014). The prospective payment reform should offer hospitals repayment under the assumption hospitals will reduce the length of stay and increase the quality of service for the patients treated (Herwartz & Strumann, 2014). For example, Needleman et al. (2015) suggested that Medicare reimburses long stay hospitals under the prospective payment system that lowers payments before the facility can submit all the charges for payment. However, the incentive plan tied to perspective payments might imply practices that enhance profits by upcoding the bill, unnecessarily readmitting patients, or choosing more costly treatments (Herwartz & Strumann, 2014). There may be a conflict for hospitals between receiving adequate reimbursement with incentives and reducing the chance for penalties. Mechanic (2016) suggested the risk of penalty have put providers in a mindset to resist payment models due to reimbursement reductions.

The level of care the provider delivers to the patient has characterized the health care industry in the U.S. However, for Medicare beneficiaries, the health care system will require the identification of each patient's need for care through the complexities of many different pay-for-performance indicators. The health care system in the United States

consists of inefficiencies, structural barriers, and systemic issues that prevent quality. The quality deficiencies in the hospital may negatively impact hospital reimbursement.

The Effects of Pay-for-Performance on Lowering Reimbursement

Medicare reimbursement has the potential to impact the success of providers because of the influence of state programs and commercial insurance payer reimbursement policies and payment levels (Panning, 2014). There was a financial penalty of .4% decrease to hospital Medicare reimbursement for not reporting measures because of pay-for-performance reform (Marier, 2015). The Deficit Reduction Act (DRA) increased both the penalty for not reporting and the amount of items hospitals needed to measure and report for full reimbursement (Marier, 2015). The process penalties increased to 21%, and the non-participation in the program penalty increased to 2% of total Medicare reimbursement (Marier, 2015). Furthermore, Haycock, Edwards, and Stanley (2016) proposed provider Merit-Based Incentive Systems and Alternative Payment Models are complex with consequences to providers who will drastically change provider payment systems and only reward providers who can establish better quality at a lower cost to Medicare. Under a Merritt-Based Incentive System, the Medicare reimbursement of hospital claims is contingent upon 50% quality, 10% resource utilization, 25% advance care information, and 15% clinical improvements (Haycock et al., 2016).

Policymakers constantly look to reduce costs and inadequacies in the health care industry that impeded Medicare payments for providers (Sood, Alpert, Barnes, Huckfeldt, & Escarce, 2017). Medicare reimbursement for home health was a model that paid

providers for separate services because of the inefficiencies and high costs prevalent in health care (Sood et al., 2017). However, Medicare payments shifted from paying for separate services towards prospective payments that pay providers for an entire episode of care (Huckfeldt, Sood, Escarce, Grabowski, & Newhouse, 2014; Sood et al., 2017). To reduce health care spending, the CMS reduced Medicare reimbursement by 3.5% for services home health providers already rendered (Rosati et al., 2014). Medicare payment changes reduce services for sicker patients with more health needs (Rosati et al., 2014). Furthermore, Huckfeldt et al. (2014) suggested that the interim payment system reform negatively impacted home health Medicare reimbursement for hospital procedures relating to hip and joint replacements.

Weil (2013) compared the inability to control cost and utilization with health care reform in the U.S. while Germany's universal access to multiple payer systems creates a global budget approach that may become a better model for the future of health care. Grabowski, Caudry, Dean, and Stevenson (2015) concluded long term facilities could benefit from reform models that focus on patient health and care for long term outcomes. Aryankhesal et al. (2013) used a mixed method approach to examine the pay-for-performance system in Iran. Aryankhesal et al. suggested that Iranian hospitals have one of the first examples of a pay-for-performance model in the world. Hospitals in Iran use a grading system to measure pay-for-performance outcomes, while hospitals in the U.S. use measurement indicators to assess risk.

Downey et al. (2014) looked at health care reforms and the impact on reimbursement rates and how the low payments impacted the emergency department.

Downey et al. also noticed higher reimbursement for privately insured patients versus patients with public insurance, like Medicare. There was a total reduction in reimbursement of 40% while hospitals can account for 2.5% of the total reduction because of a decline in reimbursement (Downey et al., 2014). White and Wu (2014) uncovered a hospital revenue decline from 1996 to 2009. White and Wu suggested that the hospitals that experienced the highest decline included those in urban areas, teaching hospitals, and not-for-profits. Feemster and Au (2015) surmised Medicare penalties for safety-net hospitals could create further gaps in health care for patients with serious health conditions because of race and living in low income neighborhoods.

Recent Medicare reforms that impact orthopedic surgery are readmission penalties, bundled payments for Comprehensive Care for Joint Replacement (CJR) and Surgical Hip and Femur Fracture Treatment (SHFFT) programs, Merit-based Incentive Payment System (MIPS), and pay-for-performance (Carter Clement, Bhat, Clement, & Krieg, 2017). Orthopedic surgery providers are at financial risk for reimbursement of legitimate Medicare claims due to the complex payment system (Carter Clement et al., 2017). Borelli, Paul, and Skiba (2016) suggested that bundled payment reform will continue to decrease reimbursement and negatively impact operational costs for the hospital. The providers who are well prepared for the changing reimbursement reform will be the ones in the best position to survive the risk (Carter Clement et al., 2017). Furthermore, Manchikanti, Helm, Calodney, and Hirsch (2017) contended that the implementation of MIPS would streamline all quality efforts and link four programs that included meaningful use (MU) Physician Quality Reporting (PQRS), value-based

payments (VBP) and a proposed Clinical Improvement Activity into one. The combined quality incentive should refocus the care delivery reform principles and bridge the Advanced Alternative Payment Models (APM) and positively impact the hospital industry (Manchikanti et al., 2017).

Payment for performance has not returned any patient outcome benefits (Peabody et al., 2014). Peabody et al. (2014) looked at ten community hospitals and measured physician quality using clinical performance models of physicians throughout six months. Under the pay for performance, physicians received bonus payments when they met satisfactory the requirements set forth by CMS officials (Peabody et al., 2014). Using regression analysis, Peabody et al. found an improvement of 7% and 9% of the general self-reported health, however, insignificant because it only managed to improve two vital outcomes (Peabody et al., 2014). Ryan, Burgess, Pesko, Borden, and Dimick (2015) also surmised hospitals under pay-for-performance reform did not show any improvement of clinical processes or the patient experience.

In summary, CMS officials have experimented over the years with health care reform in the form of Medicare alternative payment models that either incentivize higher quality and lower costs or penalize providers for not rendering quality care. CMS officials use Pay-for-performance indicators to evaluate five dimensions of performance that includes quality, access to care, efficiency, equity of care, and health outcomes. CMS officials use claim information to determine the provider's performance based on measurements of the hospital's activity process, improved outcomes, patient satisfaction, and the structure of electronic medical records.

Value-based payments. The value-based payments program paid $1.4 billion based on performance parameters that included Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) measures of patient experiences as an inpatient (Elliott et al., 2016). The achievement, improvement, and consistency of patient care under this program will negatively impact hospital reimbursement more often among the low performing and high minority hospitals (Elliott et al., 2016). Within the three achievement categories, achievement had the most impact on reimbursement while improvement and consistency were more prevalent in the low performing hospitals. Conclusively, the intent of payment for performance is supposed to improve care (Elliott et al., 2016). Nonetheless, the incentive portion of the value-based payment program does not provide enough resources to make necessary changes for hospitals operating in communities serving minority patients (Elliott et al., 2016). McClellan and Leavitt (2016) noted that the hospital would have to take necessary steps to reduce the impact of value-based payment reform to include competencies like a patient centered system, coordination of care, patient risk assessment, and financial readiness.

Inpatient Medicare payments are transitioning to value-based payment programs that look to reimburse hospitals based on value and incentivize due to improving patient satisfaction, health outcomes, proper clinical protocols, and decreasing costs for the industry (Turner, Broom, & Counte, 2015). Turner et al. (2015) examined the correlation between the impact of value-based payments and hospital financial performance due to value-based incentives. Overwhelmingly, the results specified value-based payment incentives were too small to make a significant enough impact on a hospital's financial

performance and showed no correlation (Turner et al., 2015). Bosko et al. (2016) suggested that a value-based payment system is indicative of reimbursement for the quality of care and not quantity. Wu and Shen (2014) suggested that the $40 billion loss of Medicare reimbursement was due to changes to regulations and categorized by the payment groups that consisted of hospitals that were small, moderate, or large. The findings presented Wu and Shen concluded that the hospitals that experienced enormous Medicare reimbursement cuts due to changing regulations led to declining patient outcomes over the long-term.

Medicare managed care plans. The government enacted the BBA of 1997 to create managed care to reduce Medicare spending. Through the managed care portion of BBA, Medicare beneficiaries can enroll in a HMO, also known as Medicare Advantage plans, that will limit patient choices based on a predetermined amount Medicare prepays for services (Carter Clement et al., 2017). Medicare Advantage plans differ from traditional Medicare by paying for patient care with monthly capitated payments, therefore, creating more efficiency (Huckfeldt, Karaca-Mandic, Escarce, Rabideau, & Sood, 2017). CMS officials use laws to determine the rates paid to a provider who renders care to Medicare and Medicare Advantage plan beneficiaries to ensure costs align with care provided (Obama, 2016).

Meaningful use. Mirani and Harpalani (2014) performed a cross functional study to determine best how the ability to change the behavior of the manager can regulate the financial outcomes and ensures profitability. Mirani and Harpalani explored the billing manager's ability to adapt and implement an electronic health record (EHR) that will

align with Medicare incentive programs. Mirani and Harpalani suggested that organizations can use an efficient EHR system to meet program requirements and file for reimbursement promptly to receive incentive payments from Medicare. Mirani and Harpalani concluded that a successful EHR implementation might ensure that a hospital receives maximum reimbursement in the short run. Despite the possible positive impact on reimbursement, Huerta et al. (2013) noted that the American Hospital Association (AHA) reported only 55% of hospitals would participate and gain leverage from the Medicare reward payments. However, 55% counts as a small group and may not have an impact on improving quality for the Medicare beneficiary.

Providers streamline care by using EHR, however, digital technology can become risky for the patients. There may be risk associated with data privacy of the patient's information and ethical standardization when implemented an EHR (AlHamad, Al Omari, & AlHamad, 2014). Curtis, Brown, and Platt (2014) suggested that EHRs will not provide a complete picture of clinical care, therefore, rendering one component of the EHR not meaningful. To gain meaning, the provider may want to create connectedness of the outpatient, inpatient, and other care facilities EHRs to gain the entire picture.

Inpatient readmission, hospital acquired infections. The most recent regulation change that aligns with value-based payments includes quality measure surrounding Severe Sepsis/Septic Shock Early Management Bundle. By monitoring, maintaining, and reducing patient septic shock, a health care provider can reduce patient mortality (Aaronson, Filbin, Brown, Tobin, & Mort, 2017). However, the definition and criteria for outcomes that impact patient mortality are complicated and pose challenges for setting

standards for the disease. Aaronson et al. examined 50 clinical charts to determine a pattern of how a provider could measure the performance. Conclusively, severe sepsis and septic shock have too many layers to determine accurate outcomes and if the government wants providers to improve the outcomes of this disease, reporting techniques need to change (Aaronson et al., 2017). Before CMS officials use measures to hold providers accountable, the government may need to fix the reporting. To overcome reporting challenges, Unruh, Jung, Kaushal, and Vest (2017) proposed a reduction in hospital readmission and a rise in reimbursement may happen if hospitals adopt a notification system that will alert providers in the event of a possibility of rehospitalization.

Erickson, Winkelmayer, Chertow, Bhattacharya (2017) looked at the impact of Medicare payment reform on patient hemodialysis and readmissions for hospitalizations and determined an insignificant reduction in Medicare spending, but an increase in cost by $13 to $87 million per year. Consequently, a reduction in inpatient readmission through financial compensation or financial imposition has not shown any consistent results (Erickson et al., 2017). Lu, Huang, and Johnson (2015) suggested differences in care delivery due to reform range from little to no quality improvement.

Patient satisfaction. Patients can compare health care facilities with the Five-Star quality rating system of service indicators (CMS, 2018a). The quality indicators include inspections, staffing, and quality measures based on patient experience assessments (CMS, 2018a). However, Weeks, Kotzbauer, and Weinstein (2016) suggested that the deficiency in this evaluation system is the lack of detailed measures of patient experience.

The evaluation system also negatively impacts health care and unfairly labels hospitals that are outliers of the measures (Weeks et al., 2016). Konetzka, Grabowski, Perraillon, and Werner (2015) also noted that public quality reports causes disparities for facilities and will continue to widen the quality gap. The Patients' Perspectives of Care Survey (HCAHPS) is a survey given to the patient to record their experience while in the care of a hospital (CMS). The purpose of the HCAHPS program was to gather and publish data about the patients' experience of care to compare hospitals, to create an incentive for the hospitals to improve the quality of care, and to increase health care accountability and transparency (CMS, 2017). Mazurenko, Menachemi, Collum, and Ferdinand (2017) stated that Medicare reimbursement is highly reliant on patient satisfaction scores that put hospitals at risk of ensuring they increase patient satisfaction. McFarland, Johnson, Parker, Meyerson, and Holcombe (2017) suggested the way to ensure better patient satisfaction scores is to focus on the factors that will enhance the patients' perception such as a clean hospital, timely assistance, and physician communication.

Fraud and patient safety. There is a constant need to regulate and enforce the health care industry to reduce and prevent fraud and abuse (Pardue, 2016). However, Pardue (2016) proposed the ongoing efforts to decrease fraud is not working. Hembroff (2016) added that fraud in the form of misidentification prevents organizations form maintaining accurate electronic health records and may lead to other patient safety issues. Once CMS officials refocus their efforts on data collection, root cause analyses, and transparency within the health care industry, patient safety and compliance audits may improve (Pardue, 2016).

Suppliers/Stakeholders

Some of the stakeholders in the United States health care system include direct care professionals, trade technical staff, and administrators that make up a multidisciplinary care team for the patient. The drawbacks to working in multidisciplinary teams within health care include the lack of integration and collaboration between different medical disciplines (Liberati, Gorli, & Scaratti, 2016). Doctors have different specialties that also impact their styles and clinical approaches, and nurses have focused their efforts on caring for the patient with more regulatory limitations (Liberati et al., 2016). Despite multidisciplinary constraints, Alpert, Hsi, and Jacobson (2017) suggested that there is a shift toward vertical integration in hospitals to acquiring more physician practices. The shift included a 30% increase in physician practice ownership due to the 2005 Medicare Part B payment reform that reduced the reimbursement for chemotherapy drugs for physicians and expanded of hospital reimbursement through the 340B Drug Discount Program under ACA (Alpert et al., 2017).

Elderly patients. Health care spending has increased by 17.85% from 1995 to 2015 in the U.S. due to declining health needs, growth in population, and the aging patient (Dieleman et al., 2017). However, if hospitals close to accommodate increased health care spending that will create a challenge for older adults to access health care in their communities (Countouris et al., 2014). The participants in the study discussed their level of social isolation, travel for care challenges, and access to knowledge about available health care to obtain services (Countouris et al., 2014). Conclusively, patients

need more information about health care resources and access to services geared toward the needs of older adults (Countouris et al., 2014).

Characteristics of the United States Health Care Industry

Government officials determine the problems and the solutions for the health care industry in the US. However, Forest (2014) noted that complete integration of health care would require the patient to have the ability to socially and culturally understand their health information. Assessing the impact of different factors of health services will add to the strategic development and aid in forming a better way to enhance care delivery for patients. An ongoing improvement process analysis is a useful tool for the health care system in the U.S. because of the continuous changes in health care organizations (Cunning, 2014). Cunning (2014) also suggested that the more common changes include technology, regulations, patients' requirements, and outcomes.

Hospitals. The responsibility of the hospitals is to assess community health care needs (Wiley & Matthews, 2017). Although there are benefits from the transformation, the challenge remains with the health care policy agencies and the underdeveloped laws that govern the health delivery (Wiley & Matthews, 2017). Unfortunately, there is a disconnect between payment structures that reward technology driven solutions and the opportunity to work with patients to change social issues to improve health outcomes (Wiley & Matthews, 2017). Armit and Oldham (2015) suggested there is a moral responsibility to the patients and the staff and an understanding of outcomes and how it aligns with financial success. Therefore, the billing manager needs to manage the balance of Medicare reimbursement for all legitimate claims and the wellbeing of the billing staff

and the patient. The billing manager can involve the billing department staff to embrace the changes in a complex system.

Reimbursement. Thomas et al. (2015) suggested that the resolution to health care reimbursement is a systems approach. Thomas et al. also contended that the government and the public would need to take part in establishing a health care system that would thrive to become a positive dynamic entity. The challenges associated with limitations, as specified by Thomas et al. included the complex understanding of a public health system and the lack of complete data. Furthermore, provider reimbursement from Medicare continues to become more complex and even more challenging to obtain because of the constant changes. Jun, Tsai, and Gong (2016) suggested that the changes in Medicare payments occur in a vacuum and can negatively impact the volume of services and the level of care the hospital provide.

Medicare modifiers and values that impact maximal reimbursement. To achieve maximum hospital reimbursement, one must reduce the total number of claim denials by gaining a clear understanding of what Medicare requires (Craig, 2014). Harris and Swallow (2016) suggested that changing Medicare policies impact reimbursement substantially by decreasing payer payments and as a result, many departments in teaching hospitals may close. Harris and Swallow noted that CMS officials added new modifiers for hospital claims that may impact reimbursement. Additionally, Padula et al. (2017) examined how incorrect coding of patient conditions led to poor hospital performance measures and Medicare reimbursement penalties.

Expansion of the literature review. Value-based payments, a Medicare payment model for hospitals have made reimbursement difficult for providers because providers must work hard to improve patient satisfaction and other quality measures (Carver & Parsons, 2012). After a review of the successful strategies billing managers used three themes emerged that included remaining up-to-date with Medicare changing compliance regulations; enhancing communication with staff, different departments, and Medicare; and adopting a robust billing system and other systems that compliment billing. Tan and Shankararaman (2014) believed that a proactive process embodied both an analytic tool with process management technology to accomplish constant improvements. Brady et al. (2017) contended that effective communication and workflow provisions in a health care setting would minimize risk, enhance patient flow, and the quality of communication can positively impact patient safety. Saragih, Lo, Reza, and Setiadi (2013) contended that a billing system is one of the most important components in a hospital and will govern the financial stability of that hospital.

Transition

I used Section 1 of this study to explore the business problem I identified as what successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims. In Section 1 I also incorporated my purpose, method, and design for this study. In the literature review, I exhibited a historical perspective of current health care reimbursement methodologies and the impact on hospitals, external complexities of hospitals, characteristics of the health care industry, and the conceptual framework used for the lens of this study. In Section 2, I explore further the conceptual framework

highlighted in the literature review. I also provide the rationale for the use of a qualitative case study to explore the successful strategies billing managers employ to collect reimbursement for legitimate Medicare claims. In Section 2, I describe the role of the researcher, explain the research method and design, provide a justification for participant selection and sampling method, and provide the process I used to ensure I conducted ethical research. Section 2 also includes a clarification of the data collection, data analysis processes and a discussion of the steps I used to test reliability and validity. In Section 3, I include a presentation of the findings, application to professional practice, and implications for social change. Moreover, I present my recommendations for actions and future research on billing and hospital reimbursement. Last, Section 3 includes a discussion of my experience during the doctoral study journey and the conclusions of the data analysis.

Section 2: The Project

The purpose of this qualitative case study was to explore strategies that successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims. I explored the billing managers' perspectives of health care business models that included organizational structure, patient care delivery, and reimbursement methodologies. My role as the researcher was to objectively collect data ethically, minimize my bias, and adhere to research standards suggested by the Institutional Review Board (IRB). In Section 2, I describe the role of the participant, data collection, population and sampling methodologies, ethical research, data collection instruments and techniques, and data organization and analysis. In Section 2, I also explain my qualifications to conduct this study and describe the processes and tools I used to ensure the reliability and validity of my findings.

Purpose Statement

The purpose of this qualitative multiple case study was to explore the successful strategies billing managers employ to collect reimbursement for legitimate Medicare claims. The targeted population consisted of five billing managers from three hospitals who successfully employed strategies to collect reimbursement for legitimate Medicare claims for hospitals in Northern New Jersey. Study results indicated a contribution to social change by changing hospital policies that increased billing reimbursement. Without hospital policy changes, hospital payments would be substantially hampered and result in the closure of departments in teaching hospitals (Harris & Swallow, 2016). Lovell (2015) concluded that medical students could form community bonds and their

professional identities while studying at teaching hospitals. Without teaching hospitals, communities can potentially lose the positive impact of developing deeply rooted compassionate medical professionals who identify with the needs of patients.

Role of the Researcher

I was the main researcher and data collection instrument for this study. My role as the researcher was to gather data, examine existing literature, and interpret the data from the participants interviewed for this study. Olin, Karlberg-Granlund, and Furu (2016) stated that the researcher may achieve different objectives during the exploration. Moreover, O'Grady (2016) suggested the role of qualitative researcher, in retrospect to the researched components relationship, was to gain a better understanding of the process of making meaning.

To reduce researcher bias, I used a triangulation method to cross validate the information used in this study. Morse (2015) suggested that a triangulation method fosters reliability and validity by expanding an understanding of the research through a multiple method approach. Morse also suggested that a researcher's bias may hinder the researcher's ability to interrupt different components of the study. Three types of researcher bias include anticipating a result, asking bias questions, or having a small number of study subjects, whereas the latter is more common in qualitative research (Morse, 2015). However, Morse stated that the best way to prevent researcher bias is to take a neutral stance and remain vigilant with questions that compare sets of data. I followed suitable qualitative research guidelines and procedures to minimize potential personal biases. Hollis et al. (2016) recommended planning, conducting, interpreting, and

responsibly reporting data analyses to reduce bias and increase transparency. Bracketing is when researchers set aside their preconceived notions and act in a nonjudgmental manner (Anneli, Kiikkala, & Astedt-Kurki, 2015). I exhausted every measure to set aside my personal views and judgments to remain unbiased.

Miracle (2016) suggested that the primary purpose of the Belmont Report is to ensure ethical research compliance and the protection of all rights for research subjects or participants. To remain compliant with the requirements of the Belmont Report protocol, I respected participants' autonomy, ensured their wellbeing, and provided justice within the scope of this study. I ensured ethical considerations by providing each participant with the informed consent and provided information about the study to all participants before their participation. Additionally, I asked participants to verify the accuracy of their responses and assured them that they were free to withdraw from the study at any time before or during the interviews by notifying me via email.

I conducted semistructured interviews with experienced participants and recorded responses in specific organizations. I had direct professional experience with front office hospital billing and how to meet Medicare guidelines for patient eligibility and knowledge of partial versus full reimbursement as a part of operational experience within my organization. I was familiar with organizational strategies to collect reimbursement for legitimate Medicare claims success through monitoring hospital compare. CMS officials maintain a consumer-orientated website that provides information on how well hospitals provide recommended care to their patients under Medicare criteria (CMS, 2016d). Some of the members of the sample population had similar service backgrounds

with Medicare guidelines, eligibility, and familiarity with Hospital Compare or another similar agency. Leah and Virginia (2010) asserted that when the researcher shares the same experience with the participants, they can further explore and understand the research topic.

To limit the impact of any personal bias, I followed an interview protocol (see Appendix), that included open-ended questions, and then I documented all responses verbatim. Waldeck (2017) suggested that researchers can limit personal bias and appreciate the vulnerabilities of the participants, the interview questions should be well planned and piloted before conducting interviews to ensure legitimacy. To mitigate the chance of assumptions, I used open-ended questions. Xue, Cai, and Zhao (2017) contended that the participants can respond in their own words when the researcher use open-ended questions. Additionally, I used member checking. According to Thomas (2017), researchers can use member checking to limit bias and establish quality qualitative research. During the member checking process, the researcher asks participants to confirm that the data collected during the interview accurately reflects their responses (Birt, Scott, Cavers, Campbell, & Walter, 2016). Researchers can use interview protocols to establish a method for questioning, to build rapport with each participant, and to maintain direction of the interview (Hamilton, Powell, & Brubacher, 2017). I used an interview protocol that included an interview script and a numbered list of interview questions (see Appendix).

Participants

To meet the inclusion criteria for participation in this study, the participants had to work in a hospital in the Northern New Jersey region in one of the following roles for a minimum of 5 years: reimbursement director, financial billing services manager, follow up manager, billing manager, or revenue integrity director. The participants needed to have had experience and knowledge about the strategies to collect reimbursement for legitimate Medicare claims. After I invited the participants to take part in this study, I established a level of knowledge of the study topic by asking questions specific to Medicare billing practices. The need was to connect with billing managers who had demonstrated successful strategies to collect reimbursement for legitimate Medicare claims. Billing managers support an organization's reimbursement efforts as it relates to payments, claims, and reimbursement documentation (Ashe, 2016). Kessler, Heron, and Dopson (2013) contended that a researcher may explore the parallels between different hospitals with a multiple case study.

When recruiting participants, the researcher should consider how complicated and lengthy the process may become (Robinson, 2014). Therefore, the researcher should formulate a strategy that includes the process for participant recruitment that meets the resources available (Robinson, 2014). I built a list of participants from the New Jersey Department of Health website. In the health care facilities search under consumer reports and guides further specified by the hospital, the hospital performance report gave insights into each hospital ranking by county, region, and treatment area and how they measure up to Medicare performance indicators to receive payments. I selected hospitals in the

Northern New Jersey region to include Passaic, Morris, Essex, or Bergen County based on hospital performance that may enable each hospital to receive maximum reimbursement. Next, I used the hospital's website to search for the participant title, name, and contact email.

I contacted each manager via e-mail to introduce myself and explain the purpose of the research. I contacted each research participant via email for permission to gather the appropriate data. Yin (2017) suggested that researchers should conduct confidential interviews and ensure the data gathering techniques remain anonymous. Each participant and organization in this study received an identification label, such as Participant 1 (P1), Participant 2 (P2), Organization 1 (O1), Organization 2 (O2). I used this level of namelessness to ensure trustworthiness, reduce the risk of marginalized fear of retaliation, and guarantee honesty.

Ultimately, I interviewed five billing managers to ensure data saturation. Data saturation can transpire when new concepts or themes that may form from the data no longer occur and when sufficient data exist (Yin, 2017). I reached data saturation when themes contained a high degree of similarity or when no new themes occurred. After I received approval from IRB, I forwarded the consent forms to all participants via email. Information collected will remain in a secured locked box for a minimum of 5 years, and only I have access to this locked box.

Research Method and Design

To have a better understanding of a phenomenon in the health care industry, researchers have a choice of using a qualitative, quantitative, or mixed methods approach.

Rosenthal (2016) suggested that the researcher can use a qualitative research method in the health services field to gain more insight into the reasoning behind people engaging in common actions and behaviors. Additionally, Alderfer and Sood (2016) noted that the researcher could use a qualitative methodology to guide them toward good reporting and evaluating data. Vass, Rigby, and Payne (2017) suggested that the researcher can use a qualitative inquiry to explore peoples' thoughts or feelings by collecting their words through text or interviews.

Moreover, Park and Park (2016) described the use of quantitative research as a method a researcher can use to measure, evaluate, and generalize findings to reproduce an objective to expect and control the phenomena. McKim (2017) asserted that the novice researcher could use a mixed method design to gain an understanding and explanation of a study. Despite the benefits of mixed methods, McKim warned that researchers who opt for mixed methods should have a good understanding of both qualitative and quantitative methods and that there would be added expenses for supplies and extra data collection. For this study, the use of a qualitative method was deemed best for examining the themes, patterns, and the complexities of the health care industry to identify the distinctive features of the participants who share the phenomenon.

Research Method

I used a qualitative case study approach to explore the successful strategies billing managers employed to collect reimbursement for all legitimate Medicare claims. Safdar, Abbo, Knobloch, and Seo (2016) suggested that researchers can gain insight by using a qualitative research approach when examining health care phenomena because it is less

complex, it costs less than performing other methods, and it surveys of opinions and practices of a large sample group. Safdar et al. expounded that a researcher may apply a qualitative research method by providing a good description of the information and clarifying the data with sound findings. Vandermause et al. (2017) also described a qualitative research method as a way the researcher may explore basic human phenomena between patients and caregivers and the things that concern them about the nature of their experiences. Riese, Carlsen, and Glenton (2014) noted that the use of a qualitative methodology as valuable in the health services field because it provides a framework for decision makers to evaluate policy issues and intervention efforts. From this qualitative investigation, the analysis of data revealed useful information for billing managers to ensure they receive reimbursement for all legitimate Medicare claims.

As a research methodology, a quantitative study was not appropriate in exploring the successful strategies billing managers employed to collect reimbursement for all legitimate Medicare claims because researchers use quantitative research to investigate facts to support or refute a hypothesis. As noted by McCusker and Gunaydin (2015), quantitative researchers look at the numbers and statistics by way of tools that include questionnaires and equipment to examine relationships between variables to test hypotheses despite the contextual details. Marcikić, Pejanović, Sedlak, Radovanov, and Ćirić (2016) surmised that the application of quantitative research in the health care industry is extremely low. Under the context of health care, a researcher may use a quantitative methodology to uncover patterns within a timeframe related to irregularities in the organizational structure (Marcikić et al., 2016).

Sometimes health care researchers use a combination of qualitative and quantitative methodologies; a mixed methods approach was also not appropriate for this study because quantitative research cannot address the experiences and assumptions of billing managers when addressing the concerns of collecting reimbursement for all legitimate Medicare claims. Pickard, Wainer, Bailey, and Ingersoll (2016) noted that a mixed methodology provides a way to collect and analyze data to determine the difference between variables and gain a more thorough understanding of the participants' experiences. Bastian, Munoz, and Ventura (2016) suggested that the use of a mixed methodology is beneficial when researchers need to establish an integrated view of the information with a quantitative and qualitative approach. Furthermore, Bastian et al. (2016) surmised that mixed methods might be a better fit for health care studies that assess clinical outcomes through quantitative data visualization tools while using a qualitative methodology to create a questionnaire to examine the stakeholder's experiences. I used a qualitative method because I gathered expressive information not conveyed in quantitative data that encompassed the beliefs, experiences, and the motivations of the billing manager. The goal of this study was to explore the best strategies billing managers use to collect reimbursement for all legitimate Medicare claims.

Research Design

I used a case study approach to explore the successful strategies billing managers employed to collect reimbursement for all legitimate Medicare claims. Morgan, Pullon, Macdonald, McKinlay, and Gray (2017) defined case study research as a comprehensive

method that includes multiple sources of information to provide detailed accounts of the researched phenomena in a factual context. Hyett, Kenny, and Dickson-Swift (2014) suggested that the researcher can use case study research to gain the flexibility to utilize the case and research question to support an outcome with the writing. Cronin (2014) noted that case studies are a way the researcher can systematically investigate an environment to examine the experience of the participant in the health care setting that can include a person, group, community or institution. Unicomb, Colyvas, Harrison, and Hewat (2015) illustrated a case study approach to create detailed reporting in a non-experimental manner despite a lack of direct control of variables. Furthermore, Yin (2017) suggested that researchers can use a case study research design to exploit proposition, analysis, and outline the linkage between data and proposition to arrive at an interpretation of the data.

Crema and Verbano (2016) conducted a qualitative case study to explore managerial approaches for patient improvement and risk reduction. Adams, Gardner, and Yates (2017) further used a case study approach to explore nurse practitioner service structures to gain insight into how they govern safety and quality during health care reform in the private sector. A case study design for this study was useful for exploring the successful strategies billing managers employed to collect reimbursement for all legitimate Medicare claims because of the complexities of the health care industry. Although Medicare regulations are the component that determines reimbursement, billing managers in different organizations may experience the impact of regulations distinctively. I used a multiple case study approach to the qualitative method to gain an

understanding of the data and explain the best strategies across different organizations within an entire region. Aryankhesal et al. (2013) suggested that a cross-functional design can relate to different hospitals and best determine how the behavior of the manager aligns with a successful financial outcome.

I also considered several methods of inquiry that included phenomenology and ethnography. Kaivo-oja (2017) surmised that a researcher could use a phenomenology design to understand how individuals construct their worldview by interacting with the participants in their lived experiences. Abayomi (2017) asserted that participants in a phenomenology study could express their own experiences without fear of distorting the facts. Bakanay and Çakır (2016) further suggested that the researcher can use phenomenological research to understand the experience of a participant through their lived accounts of the phenomenon and the research. Hampshire, Iqbal, Blell, and Simpson (2014) describe the use of an ethnography design to outline the experience of the participant as a narrative dialogue of two separate minds about the story of the participant's account. Burford and Park (2014) also asserted that a researcher could use an ethnography design to observe an account of the participant in their natural field environment to collect data about the phenomenon. These alternate qualitative designs did not fit this study because I was not exploring the participants' worldview, nor was I narrating a dialogue for the participants. I explored the participants' experiences associated with successful strategies the billing managers employed to collect reimbursement for legitimate Medicare claims. For this study, a case study design was best to explore the experiences of the billing managers within the context of the strategies

to collect reimbursement for legitimate Medicare claims to gain a better understanding of the impact of changing regulations and reimbursement. I also reached data saturation by interviewing participants until no new information emerged and the themes contained a high degree of similarity. Yin (2017) noted that data saturation could occur when no new concepts or themes develop, and sufficient data exist.

Population and Sampling

The target population for this study included five hospital billing managers from three organizations in the Northern New Jersey region. The participants included billing managers who possessed experience and knowledge of using successful strategies to collect reimbursement for legitimate Medicare claims. By sampling this population group, I was able to gather data from professionals with experience in billing management, leadership, budget forecasting, billing and coding, and the regulatory requirements for the hospital industry. The three hospitals that chose had a significant hospital rating on the Hospital Compare website that signifies they comply with different Medicare guidelines to ensure reimbursement.

I used the purposeful sampling method for this study. Prakash Pillai and Abraham (2016) suggested that the use of purposeful sampling is best for selecting participants in management. Additionally, Benoot, Hannes, and Bilsen (2016) asserted that the use of purposeful sampling means of qualitative research is a way to solve practical limitations of time, resources, and access to information and the expertise. For example, Abd Mutalib et al. (2017) used purposeful sampling to understand the topics that impacted medical tourism to include things like wellness tourism, treatment abroad, health travel,

and plastic surgery. I used a purposeful sampling approach to collect data from participants who possess comprehensive knowledge and extensive experience of using strategies to collect reimbursement for legitimate Medicare claims. Yin (2017) suggested that researchers can use purposeful sampling to uncover similarities and differences between the circumstances when compared.

I selected billing managers who fit into two categories: (a) those who were in a managerial role within their organization for 5 or more years, and (b) were responsible for five or more employees with billing job titles. The participants consisted of the following categories: reimbursement director, financial billing services manager, follow up manager, billing manager, or revenue integrity director. Billing managers with knowledge and experience of using strategies to collect reimbursement for legitimate Medicare claims operations are adequate for the population of this study. I conducted face-to-face interviews. I allocated a period of 30 to 40 minutes for each interview and conducted the interviews when convenient for the participant. Emmel (2015) suggested that a qualitative researcher can ensure data saturation with a sample size of between five and 50 participants. Yin (2017) contended that a researcher must reach data saturation to ensure replication of findings. I interviewed five billing managers, asked probing questions, and ensured data saturation.

There were several published articles outlining participant sample size for qualitative method studies. To establish a baseline for sample size for qualitative research, Hagaman and Wutich (2017) advanced that the use of data saturation will aid the researcher in determining sample size. Data saturation can transpire when new

concepts or themes that may form from the data no longer occur and when sufficient data exist (Yin, 2017). In comparing the sample size of similar qualitative studies, Murphy, Ko, Kizer, and Bindman (2015) interviewed four participants from five institutions to examine the strategies that were implemented to ensure patient care and payment under the duress of health care reform. I used a sample size of five participants from three organizations to reach saturation. I reached data saturation when themes contained a high degree of similarity or when no new themes occur.

Health care billing managers face unique challenges in maintaining traditional business practices, considering the regulation changes that may occur under Medicare value-based payments (Hernandez, Machacz, & Robinson, 2015). Gilman et al. (2014) added that the financial risk for hospitals continues with Medicare policies that include not only value-based payments, but a plan to reduce hospital readmissions, and meaningful use of EHR implementation to reduce the cost of health care. McDermid, Peters, Jackson, and Daly (2014) suggested that researchers may face challenges while conducting interviews because participants are in the workplace with their colleagues. The researcher needed to be mindful of the participant's privacy and confidentiality (McDermid et al., 2014). Interviews took place in the billing manager's offices to permit privacy and alleviate interruptions from colleagues.

Ethical Research

The participants in this qualitative study were billing managers that worked for three different hospitals in the Northern New Jersey region. Sil and Das (2017) suggested that informing all participants of the potential risks and benefits of participation in a study

is a basic ethical principle. Before selecting participants, I provided potential participants with information about their prospective roles in my study. It was the researcher's role to investigate with consideration for the ethical discrepancies that may arise (Das & Sil, 2017). Tolich et al. (2017) added that the core principles of research ethics that must extend to the participant includes doing no harm, confidentiality, autonomy, and beneficence. I fulfilled the ethical requirements of this study by discussing the informed consent, confidentiality rights, options to withdraw, the ethical review board process, and maintaining participant confidentiality. The consent procedure and my ethical behavior aided me in protecting the participants' rights in this study.

To reduce the incidence of harm, all participants for this study were over the age of 18 and were not be members of a protected class. The protected class participants include any pregnant women, fetuses, neonates, prisoners, and children (Chwang, 2014). There was minimal risk for participation in this study with the likelihood of risk has been no greater than ordinarily encountered in everyday life. Furthermore, the interview questions were not offensive or threatening and did not create any risk to employment as the questions would not pertain specifically to the individual billing practices. The interview protocol (see Appendix) strictly adhered to the IRB's ethical rules and procedures.

Informed consent is a process that involves the researcher explaining to a study participant their role, risks of participation, and rights before participation in the study (Regmi et al., 2017). All participants for this study volunteered for participation without coercion and understood and signed the informed consent. All participants received a

copy of the informed consent upon request. A conflict of interest is not an issue, and there were not any negative impacts on any professional relationship due to participation or non-participation in the study.

Participants had the right to withdraw at any time during the interview process without penalty. The participant could withdraw from the study at any time by notifying me via email or phone call. There were no incentives offered for participation in this study. Data collection was through audio recordings, then transcribed electronically, and uploaded into the NVivo 12 software system. To adhere to Walden University Research standards, I protected participants' rights and identity by maintaining locked storage of encrypted audio recordings, e-mail questionnaires, and transcriptions for 5 years. After 5 years, the destruction of all data will ensure the confidentiality of the participants of this study.

There are several factors the researcher needs to consider protecting the identity of the participant to ensure privacy and confidentiality. Saunders, Kitzinger, and Kitzinger (2015) suggested that the qualitative researcher should omit the participants identifying details that include names, organization names, culture, religion, and unusual information easily recognizable. Thorogood et al. (2014) proposed the use of a coding system to replace participant identifiers with numbers to provide anonymity and separating research data from personal information. Each participant and organization in this study received an identification label, such as Participant 1 (P1), Participant 2 (P2), Organization 1 (O1), and Organization 2 (O2). Participant labels aligned with the number

of organizations and the participants' transcribed interviews, informed consent forms, audio recordings, and data analysis.

Adherence to Walden University's Institutional Review Board (IRB) process guaranteed ethical standards compliance before conducting research. I submitted the IRB application and my research to the IRB. The study and form were included with an outline of data collection tools, research participants, and an electronic informed consent to ensure the study met the ethical standards of the United States federal regulations and Walden University and await review and approval. Data collection began only after receipt of approval by the Walden University's IRB (Approval No. 10-16-18-0659468).

Data Collection Instruments

Researchers add quality to their study by becoming transparent when they report the data collection instrument practices (Derrick, 2016). To explore the successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims, I served as the primary instrument of data collection by using open-ended questions in face-to-face semistructured interviews with billing managers. This study did not require the use of any other data collection instruments. Castillo-Montoya (2016) noted that using an interview protocol enables researchers to increase the quality of data from the interview and ensure the consistency of the process across the collection of interview data. An interview protocol (see Appendix) was a guideline for conducting the interview sessions. I used the same interview protocol with all participants to ensure the consistency of the process of collecting data from participant interviews.

I collected document data from the organizations regarding the strategies and processes they used to collect reimbursement for legitimate Medicare claims. I gathered critical information contextualizing the strategies to collect reimbursement for legitimate Medicare claims, goal setting, and evaluation systems documentation. I used the data I retrieved from the documents to reconcile the data I gathered from the interviews, specifically to assess whether the strategies and processes interviewees indicated they used connected with the historical records or if there were inconsistencies. Researchers can use corresponding data to increase the quality and validity of the information gathered (Houghton, Casey, Shaw, & Murphy, 2013). I asked questions about each billing manager's activities, business objectives, and process outcomes of Medicare reimbursement for legitimate claims as the data collection instrument through semistructured interviews. Sarma (2015) noted that the qualitative researcher is an acceptable instrument for data collection. Senot, Chandrasekaran, and Ward (2016) relied on semistructured interviews of hospital staff to highlight the mechanisms to create collaboration within a system. Brayda and Boyce (2014) suggested that qualitative interviews may uncover the meaningful perspective of the participant.

To ensure that I was able to capture not only interviewees' verbal responses but also related phenomena such as their effect, as demonstrated by instances of fidgeting, certain eye movements, etc., I conducted face-to-face interviews. Face-to-face interviews are the best interview means of collecting data (Bowden & Galindo-Gonzalez, 2015). I recorded the interviews with a digital audio recording device to ensure free flowing conversations without the worry of having to simultaneously transcribe interviewees'

answers, something that can be both off putting to interviewees and distracting. The use of a recording device enabled me to transcribe, review, and analyze the interviews on a later date. I conducted a case study using data sources that include participant interviews and relevant documentation from selected agencies. Gavinelli, Morra, and Di Gregorio (2016) asserted researchers could use multiple data sources to establish quality and relevant documentation from selected agencies accuracy of the data. I also permitted the participants the opportunity to check all responses. According to Thomas (2017), researchers can offer respondents the ability to check their responses to ensure their accuracy. However, it is important to note that researchers must be careful to prevent respondents from significantly changing answers that can lead to data being materially and consequently improperly altered, thereby threatening internal validity. Participants should confirm that the data accurately depict their interview responses (Dikko, 2016).

Data Collection Technique

The data collection process for this study involved gathering data from participant interviews, documentation from the organizations of the participants, peer reviewed literature, and government documented regulations and manuals. Regarding government documented regulations and manuals, the former refers to official legislation, whereas the latter refers to paperwork that may be legally significant. When laying out data collection plans, Winchester, Salji, and Kasivisvanathan (2017) suggested that the researcher must consider how much data is required, the meaningfulness of the collection, and the intended purpose of the data. The plan for data must be deliberate. For this study, the data collection process began with face-to-face interviews of billing

managers from hospitals located in the Northern New Jersey region. Janghorban, Roudsari, and Taghipour (2014) asserted that the most common method used for data collection in qualitative research is interviewing participants. Additionally, Matysiewicz (2016) used semistructured interviews with health care managers to determine the form of systems and network structure in different networks to understand the value creation of the medical market. Using a similar approach, I used this study to conduct semistructured interviews to identify the successful strategies billing managers use to obtain owed Medicare reimbursement.

During each interview, I focused my attention as much, if not more, on the participant's physical cues that included facial expressions, body movements, and how the participants interacted with the documentation provided than one their actual responses since the instantaneous effect is more difficult to control than speech. Observing participants during their interviews can add to the validity of the study. I reviewed the documentation after I conducted the participant interviews. The documentation to support this study included a business policy on reimbursement, policy on Medicare reimbursement, policy for electronic health record, and all other work instructions for maintaining legitimate claims. Finally, I used member checking to confirm the accuracy of the collected data, transcription, and analysis. Birt et al. (2016) described member checking as confirming the accuracy of participants' responses by permitting them to review those responses before data analysis. The participants reviewed and verified all transcribed interviews via e-mail.

Researchers conduct pilot studies to test procedure to determine the best way to conduct a future full study (Dikko, 2016). I conducted a limited scope of multiple case study using proven techniques. I did not conduct a pilot study to test the research procedures to prepare for a larger study.

Face-to-face interviews. I conducted face-to-face interviews to explore the successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims. I provided each participant with consent forms to review and sign, to gain written permission to conduct the interviews. I used a digital audio recording device, and I explained to each participant the purpose of the digital audio recording device was to provide accuracy, validity, and clarity during data collection and transcription. According to Bowden and Galindo-Gonzalez (2015), face-to-face interviews are preferable. However, a disadvantage could have been finding meeting times that are convenient both for the interviewer and interviewees. To overcome this disadvantage, I let participants choose from multiple timeframes.

Researchers can use open-ended questions to collect richer, more descriptive, and illustrative participants' responses than closed-ended questions (Xue et al., 2017). Interviews occurred in private locations to limit distractions and ensure confidentiality. Holding interviews in private locations can often establish a good rapport with participants, so they feel comfortable enough to speak freely. I was prepared to reiterate potentially unclear responses to participants to ensure that I sufficiently understood their answers immediately after given. Each interview lasted approximately 30 to 40 minutes. Once the interviews were complete, I transcribed the digital audio file into a Word

document and saved it to my computer. Each participant interview received a corresponding label such as P1, P2, from O1, O2.

Documentation. I gathered organizational documentation data about Medicare performance goal setting and evaluation systems. I requested the needed documentation from appropriate organization representatives. I triangulated the data obtained from organizational documentation and participant interviews. Pitre and Kushner (2015) suggested that researchers can use triangulation for alternative theories of the systematic contexts of dissimilar viewpoints about a phenomenon. Gavinelli et al., (2016) used a case study method with triangulation of multiple sources that included documents, interviews, and observation, to gain a more in-depth data collection. I included documentation from CMS, Centers for Disease Control Prevention (CDC), and Agency for Health Research and Quality for the government reports. Deigh, Farquhar, Palazzo, and Siano (2016) suggested multiple data sources while implementing a multiple case study approach and strengthen data findings. While the advantages of employing such an approach outweigh the disadvantages, it may be difficult to obtain needed organizational data on a timely basis.

Data Organization Technique

After I transcribed participant interviews, I used the NVivo 12 software program to develop codes and manage the data. Spaulding, Gamm, and Menser (2014) used NVivo 9 to analyze, code, and identify themes within the data from the interviews of health system leaders and leaders at hospitals to explore the strategic considerations among leaders at major health systems. Similarly, I used NVivo 12 to analyze, develop

codes, and create themes from the data I collected through interviews of the participants in the health care industry. The data from participant interviews will receive labels P1 through P5 and O1 through O3. For easy data retrieval, the collection file was labeled to identify the main data folder and subfolders that will correspond to each audio recording, interview questions and notes, and consent forms. I stored the hard copies of the interview data in a locked file cabinet. Additionally, I stored the soft copies of the interview data on a password encrypted computer file and external backup storage drive. These measures ensured the safety of confidential data.

Once the interviews were coded and themed, I stored the data by date, health care organization, and participant. Storage of audio recordings, transcriptions, and electronic consent forms that included identifying information like names and addresses will remain in a password encrypted computer file. I stored the data in a password encrypted computer file or a secure file cabinet for a minimum of 5 years. After 5 years, all data will be destroyed to ensure the confidentiality of all the participants in the study.

Data Analysis

The logical and sequential order of data analysis for this study embraced Yin's (2017) five-step data analysis that includes compiling data, disassembling data, reassembling data, interpreting the data, and concluding. To ensure consistency while compiling data, I transcribed the semistructured interviews and imported the data into the computer data analysis software NVivo 12 to analyze, organize, and uncover themes. I converted the data by disassembling the data by coding, then reassembling the data by classifying the coded data with computer software such as NVivo. I identified and

interpreted the occurrences of words and other meaningful phrases that form related patterns and themes obtained from participant interviews and relevant company documents. I analyzed data from interviews and organizational documentation.

Foley et al. (2017) suggested that researchers analyze data for three primary reasons including the following: to become familiar with the data, document relationships, and summarize interviews to identify relevant themes. He also suggested that it is incumbent upon the researcher to code the data consistently to ensure internal validity (Foley et al., 2017). I chose to use the NVivo 12 software after researching different qualitative data analysis techniques and software programs. Yongxin, Deschamps, de Freitas Rocha Loures, and Pierin Ramos (2017) asserted the use of computer software would aid the researcher with coding and identifying occurrences of words and other meaningful phrases.

Another meaningful component of data analysis included the use of the interviews, observations, and documentation review to provide a method of triangulation. Johnson et al. (2017) approached a triangulation method with multiple views by using data collected from document review, interviews, observations, digital diaries, and focus groups to analyze different types of information for comparison of the findings. I used methodological triangulation. Cairney and Denny (2015) suggested that methodological triangulation is the process of using multiple methods of gathering data to maximize validity. Tibben (2015) described theory triangulation as a case study method that involves the researcher using more than one theory to interpret the phenomenon. Archibald (2015) noted that investigator triangulation involves the use of multiple

researchers in an investigation. Pepin et al. (2018) suggested that data triangulation encompasses a review of data from the different dimensions of time, space, and the person.

The literature review is the foundation for exploring the billing manager's successful strategies to collect reimbursement for legitimate Medicare claims. I organized the recently published studies in the literature review section by themes to present the information comprehensively. The conceptual framework of my research is complexity theory because of health care systems classification of interrelated, unpredictable, multifaceted organizations. Joachim and Holly (2014) suggested that health care leaders must focus on many different ideas that will include evidence-based guidelines with pay-for-performance that will require the ability to establish a complex framework to adapt to the challenges of each situation. Throughout a health system, Brand et al. (2015) described the elements that impact the health industry includes system level behavior that is interrelated, codependent, and unable to change easily. Fenwick and Dahlgren (2015) further defined complexity theory as a concept that will offer a framework for understanding the social process of learning an intricate system. I compared the central themes of the literature to explain how the fundamental themes support, contest, or enhance the phenomena. Yin (2017) suggested a comparison of the key themes to the literature will explain how the themes align. If a critical theme related or differed from the literature or the conceptual framework, I reported it in the findings in Section 3 of this study.

Reliability and Validity

Reliability

Reliability in a qualitative research study refers to the ability to achieve replication of the process used and the results (Leung, 2015). I achieved reliability by remaining consistent during data collection, ensuring accurate data recording, triangulating, and member checking. Birt et al. (2016) suggested that member checking will enhance trustworthiness while Pitre and Kushner noted that researchers use triangulation as a method to explore multiple viewpoints about a research phenomenon. In their study, Voon, Abdullah, Lee, and Kueh (2014) assessed hospital service excellence, and how to ensure reliability by testing the consistency of responses to each item.

Additionally, Polit (2014) suggested reliability of health measures would require more than internal consistency, but also the ability to notice small changes across the entire spectrum. I achieved consistency across the data by using the same questions with all interviewees, reviewing the interview data, utilizing the NVivo 12 software to analyze all data. Zamawe (2015) suggested that the researcher can use NVivo to analyze and manage data through character-based coding with text and multimedia functions to add creativity, efficiency, accuracy, and reliability. I also remained consistent by adhering to the interview protocol (See Appendix) as a guideline from which to conduct interviews and subsequently ensure reliability or rather, dependability.

Dependability. In qualitative research, dependability is the equivalent of reliability, typically found in quantitative research (Yilmaz, 2013). Differences in

terminology aside, the underlying concept relates to ensuring that the data collected is trustworthy. In qualitative research, to ensure dependability, psychosocial considerations are often made around how to make participants comfortable enough to be forthright and relay critical information to the researcher. Additionally, Munn, Porritt, Lockwood, Aromataris, and Pearson (2014) posited that the researcher could increase the likelihood of dependability by ensuring that the research process has logical methods to answer the research question and can maintain clear and concise documentation. However, even this is not a guarantee of dependability, especially if participants are not honest.

Furthermore, qualitative researchers ensure dependability by ensuring consistency and reporting any changes, corrections of participant responses, that may occur throughout the research process (Munn et al., 2014; Yin, 2017). I transcribed interviews and used NVivo 12 software to analyze data from research participants. To ensure consistency and minimize mistakes, I used member checking by reviewing the interview responses with each participant. Yin (2017) explained that having an adequate interview protocol is vital to establishing dependability. To adhere to Yin's recommendation, I used an adequate interview protocol (see Appendix) to assure the dependability throughout the data collection process.

Validity

The four factors that determine validity include credibility of the participants, the number of accessible sources, consistency of source information, and data security (Kruth, 2015). The use of a constant comparison method with an arrangement of evidence will ensure credibility (Stewart, Gapp, & Harwood, 2017). I analyzed the data

and then iterated to ensure that I had sufficiently consistently explained the data. Per Thomas' (2017) suggestions, I employed member checks to ensure validity.

Dikko (2016) noted that supplementary interviews could also validate data because any changes can be guided and answered by the interviewees. Johnson et al. (2017) used a multiple triangulation method to validate the research findings for improving service delivery in the health care industry. The method of multiple triangulation in Johnson et al. study included a review of multiple methods of data collection, multiple sources, and multiple investigators with different areas of proficiency. I used this same method of triangulation when collecting data for this study by interviewing participants with familiarity with Medicare reimbursement and sufficient information to suggest any claim.

To ensure internal validity for this study, I transcribed all participant interviews verbatim and used NVivo 12 software program to check themes. I also checked the transcripts for any similarities between study participants. Internal validity for this study included a constant check for any personal biases before and during the study to ensure an analysis free from subjectivity. To ensure external validity, I created interview settings that participants could be as honest and focused as they would also be in other similar settings.

Creditability. Morse (2015) outlined creditability as a dependable internal validity. Creditability of qualitative research refers to the trustworthiness of the findings (Stewart et al., 2017). Researchers can establish creditability by using strategies that include peer debriefing, observation, member checking, triangulation, and recurrent

themes (Korstjens & Moser, 2017; Liao & Hitchcock, 2018; Thomas, 2017). To ensure creditability, I documented all recurrent themes that arose from participant interviews and performed member checking by permitting participants to review and validate the interview notes. Triangulation can also occur by collecting and analyzing data from multiple sources (Johnson et al., 2017). I ensured triangulation by analyzing the data from participant interviews, government and organizational documents.

Transferability. Morse (2015) outlined transferability as a dependable external validity. Morse further noted that transferability is a validity action that will ensure the ability to transfer the original findings to any other context or an individual. To ensure transferability, researchers use purposeful sampling for analyzing data from specific groups of participants to access information and expertise (Benoot et al., 2016). To ensure transferability, I used the purposeful sampling method for this study as well as assess the attributes of participants and provide a thick description of the discovered phenomena and how it can apply to other environments.

Confirmability. Yin (2017) contended that confirmability relates to the research results. Moon, Brewer, Januchowski-Hartley, Adams, and Blackman (2016) suggested that the researcher can ensure conformability by showing the results are linked to the conclusions by way of ease and replication of the process. Researchers can also use methodical triangulation to guarantee confirmability.

The researcher can achieve triangulation of data by way of using several sources of data collection (Sarma, 2015). Bogdanova, Šiliņa, and Renigere (2017) suggested that the health care practices, complexity of learning, and the prevalence of different subsystems

triangulation can increase the credibility and validity of the data analysis. To create triangulation data collection methods, there was a review of the current related peer reviewed literature, a review of government published literature, a review of organizational published documents and policies that relate to the strategies to collect reimbursement for legitimate Medicare claims, reimbursement practices, and semistructured interviews of the participants. To ensure confirmability, I used semistructured interviews, supporting documentation with journal logs, and a review of the interview results. I also used member checking to ensure confirmability.

Data saturation. Although data saturation will dictate the sample size and may differ among studies, researchers can achieve data saturation when themes are persistent, similar, and sufficient data exists (Moser & Korstjens, 2018; Yin, 2017). I reached data saturation by conducting semistructured interviews with five billing managers who successfully collect reimbursement for legitimate Medicare claims. I attained data saturation, when themes contain a high degree of similarity or when no new themes occurred.

Transition and Summary

The investigation of the successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims was the basis for this qualitative case study. Section 2 included a description of the role of the researcher, explanation of the research method and design, a justification for participant selection and sampling method, and the process I used to ensure conduction of ethical research. Section 2 also included a clarification of the data collection, data analysis processes and a discussion of the steps I

used to test reliability and validity. Section 3 includes a discussion of research findings, implications for social changes, application to professional practice, reflections, recommendation for future actions and research, and conclusion.

Section 3: Application to Professional Practice and Implications for Change

Introduction

The purpose of this qualitative case study was to explore successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims. I conducted interviews with five billing managers and performed record reviews within three hospitals in northern New Jersey. I compared data from all sources, including the interview data and the organization review data, using triangulation of sources. I maintained the confidentiality of the participants with the use of codes instead of names for identification on the documentation, such as O1, O2, and O3 for the organizations, and P1 through P5 for the individuals within each organization. I reached saturation in the data using an experienced population who was successful in implementing the Medicare billing practices for reimbursement for legitimate claims. I established an inductive analysis of data by identifying words, phrases, ideas, and actions that were consistent in participant interviews and the organizational records to identify patterns and themes. Last, I compared the themes uncovered from the interviews and records to the main ideas identified in the literature review and conceptual framework to answer the research question.

The three main themes that emerged from data analysis included the successful strategies used by billing managers in this study: (a) remain up-to-date with Medicare changing compliance regulations; (b) enhance communication with staff, different departments, and Medicare; and (c) adopt a robust billing system and other systems that compliment billing.

The deficiencies in other studies as they pertain to maximizing reimbursement with the ever-changing CMS regulations include ongoing review and building relationships to ensure new rules consider reducing risk, enhancing care, and lowering health care cost. However, an analysis of the findings showed that healthcare is a complex system with an array of subsystems, that can add an opportunity for connectedness to improve reimbursement despite changing Medicare regulations. The following sections include the findings in more detail.

Presentation of the Findings

I conducted a multiple case study of five billing managers from three hospitals who had successfully employed strategies to collect reimbursement for legitimate Medicare claims for hospitals in Northern New Jersey. The research question for this study was as follows: What successful strategies billing managers employ to collect reimbursement for legitimate Medicare claims? I created the interview questions (see Appendix), asked the participants the interview questions, and collected and analyzed their responses to answer the overarching research question further. I used a Sony® recorder to record the interviews. I used NVivo® software to transcribe and analyze the transcriptions. As a result of the participant interviews and the publicly available organization documentation reviews, I uncovered three themes: (a) remain up-to-date with Medicare changing compliance regulations, (b) enhance communication with staff, different departments, and Medicare and (c) adopt a robust billing system and other systems that compliment billing. Prior to presenting the emergent themes, an understanding of the Medicare officials' criteria of top performing hospitals in the

Northern New Jersey region is essential. This criterion, along with the emerging themes and successful strategies found in the themes of this study, can ensure Medicare regulation compliance that will, in turn, increase the likelihood of increased hospital reimbursement.

Hospital Compare Rating

In October 2012, Medicare officials started reducing Medicare payments for IPPS hospitals that had excessive readmissions (CMS, n.d.). CMS officials have defined excessive readmissions as patients who are readmitted into a hospital's inpatient status in less than 30 days (CMS, n.d.). The readmission ratio consists of the hospital's number of predicted 30-day readmissions of patients who had any condition, including heart attack, heart failure, pneumonia, chronic obstructive pulmonary disease, hip/knee replacement, and coronary artery bypass graft surgery by the expected number of patients (CMS, n.d.). CMS officials calculate the expected number to readmissions patients from the average hospital with similar patients (CMS, n.d.). Ultimately, a ratio greater than 1.000 is an indicator that a hospital has excess readmissions.

Table 1 shows the average ratio of hospitals in the northern New Jersey region split by three performance tiers. Table 1 includes hospitals that are in Passaic, Morris, Essex, or Bergen County and is divided based on hospital performance that may enable each hospital to receive maximum reimbursement. Of the 323 options, only 80 hospitals (25%) were in the northern New Jersey region. Of those 80 hospitals, about half, 41 (51%), perform below the 1.000 indicator and therefore receive maximum Medicare reimbursement. I selected three hospitals from the top performing tier.

Table 1

Hospital Readmission Ratio Range by Tier for the Northern New Jersey Region

Tier	ERR Bottom	ERR Top
Tier 1	.07786	.9997
Tier 2	1.0015	1.1122
Tier 3	1.1127	1.3226

Note. EER= excessive readmission ratio. This model is an adaptation of CMS (n.d.) "Hospital Readmissions Reduction Program." data set of New Jersey readmission ration performance between July 1, 2013, and June 30, 2016.

In addition to the excessive readmission ratio, CMS officials use a 5-star rating system to determine the hospital's performance. I also cross referenced the excessive readmission ratio data set findings with the Medicare government star rating to choose three hospitals that are top performers. The information used to determine performance included the patient experience survey, timely effective care, complications and deaths, use of medical imaging, tracking patient testing electronically, and payment and value of care (see CMS, 2018b). After I reviewed the star rating for hospitals in the northern New Jersey Region, I selected hospitals that had between three and five stars in addition to the top tier performing in the excessive readmission ratio. A review of the top performing hospitals revealed successful billing strategies. Mirocha, Bents, LaBrosse, and Rietow (2013) reported that top performing companies believe that having good business strategies and good leadership development strategies have made them top performers. Top performing companies also tend to adopt a cohesive and well-organized approach to creating and supporting the leaders in the company for the short and long

term (Mirocha et al., 2013). To follow are the three themes I identified from the data and how they align with the literature and the conceptual framework complexity theory.

Emergent Theme 1: Remain Up-To-Date With Medicare Changing Compliance Regulations

The first emergent theme was to remain up-to-date with Medicare changing compliance regulations. The successful strategy rendered from this theme was remaining up-to-date with Medicare changing regulations, that ensures the hospital is prepared for change. Table 2 depicts the remain up-to-date themes expressed by the billing management participants.

Table 2

Remain Up-To-Date Themes

Theme	*N*	%
Being proactive	21	27
Stay on top of change	25	33
Understand Medicare makes reimbursement hard	22	29
Ready for change	8	11

Note. *n* = number of times a strategy was stated. % = percentage of times a strategy was stated.

Bank et al. (2017) contended that change experts suggest that an organization's readiness for change directly relates to their successful execution of any change initiative. Similarly, Nuño-Solinís (2018) suggested that readiness for change in a healthcare organization is positively related to the increased organizational efforts and staff motivation for overcoming barriers and issues associated with change. A billing manager's ability to adapt to change when faced with changing Medicare regulations is

necessary for survival. All five of the billing management participants revealed a belief that being ready for the changing Medicare regulations ensures they are in a better position for successful Medicare reimbursement. P1 stated, “You must then try to the best of your ability to make sure your department and your organization is ready for the change.” P2 supported this sentiment by stating, “So, you always have to make sure that you have your policies upfront, and even a small error could cost the hospital significant dollars.”

P1 from O1 stated, “I'm on every list serve they got. I'm constantly out there looking to see what's going on in the world of Medicare.” P2 from O2 stated, “Anytime CMS or Medicare offer seminars we will always be the first to jump on them.” P3, P4, P5, all from O3, suggested being ready for change in their organization consists of understanding and monitoring changing regulations and monitoring staff.

P3’s statements aligned with experiencing difficulty staying on top of Medicare regulation changes. P3 stated, “It is almost like, they say the rule, then the rules go through so many changes. Thank God we have the bulletins, which keep you abreast.”

P4 further elaborated on the importance of staying on top of Medicare changes by giving an example. P4 stated,

> Making sure the medical necessity and the NCDs (National Coverage Determination) and all other policies that are out there are adhered to. This is because the regulations they change, one minute something is covered and one minute it is not. You have to have these diagnoses with this procedure, and you have to really stay on top of that.

P5 also added the degree of difficulty, how management ensures the process of monitoring changes, and the role management and staff play in the process of readiness. P5 stated,

> So, for sustaining it's really monitoring closely what you are doing and how you're doing it. So that means constantly looking at the system to make sure that your system is working the way you expect it to, make sure that you're monitoring your staff to ensure their productivity levels are where they're supposed to be, and that they are following the established policies and procedures.

All five participants also expressed that Medicare officials make reimbursement hard for hospitals; however, being proactive and ready for the changes reduced some of the pressure from the uncertainty. P1 stated,

> Those rules included thousands of codes that if you bill this, you can't bill this with it. So, I think that is significantly challenging because that list continues to grow. So, in a sense yeah, I guess it is every single claim because any claim has the potential to fail. I think some of the rules that they come up with are not the ones that providers can comply with easily. And so, for one claim, for instance, the two-midnight rule, that one scenario causes three claims. That to me is thee most unbelievable thing ever. And to make the rules so difficult to comply with is something I just don't understand. It's an antiquated system that needs to go.

However, P1 continued to express how being proactive can reduce the strain of the challenges associated with changing regulations. P1 stated,

> You need to address it further upstream. So, I'm a really big advocate about finding it and figuring out where upstream how we can stop it. We have a system that we use that can go out there and project the payments that are coming, and I monitor that as well.

Similarly, P2 stated Medicare makes reimbursement difficult for hospitals to obtain reimbursement; however, organizations can overcome the challenges by being proactive. P2 stated,

> I would say just more ways that Medicare will make it harder for hospitals to adhere to all their guidelines. They put a lot of pressure on hospitals, and probably not enough on physicians. And again, that goes back to the manager and his team being very proactive with departments.

P3 stated that Medicare makes reimbursement difficult, the changes are constant, and the hospital relies on the level of reimbursement Medicare will give. However, hospitals can overcome challenges related to Medicare reimbursement through proactivity. P3 stated,

> It is almost like, they say the rule, then the rules go through so many changes. So, the challenge really is you are dependent on what the rate of reimbursement they give you. I think our compliance department went to Medicare to try to overcome the issues to have a higher reimbursement. That happened a while ago, that's why I strongly believe that if you think you should get reimbursed more, then, the right discipline can go to Medicare and talk to the advisory, higher authority, I forgot

> what you call that position, but you can propose, based on what you have, they can approve or reject.

P4 statements also aligned with Medicare makes it hard for hospitals to attain reimbursement; however, being proactive by monitoring the reimbursement will ensure adequate levels. P4 stated,

> The regulations, the Medicare regulations are the regulations. They are strict, and they have to be done the way that they say it should be done and there should probably be some pretty good cause if it isn't. This is because the regulations they change, one minute something is covered and one minute it is not. We want to make sure that we have an average of what we expect to see coming in from Medicare and if it dips a little bit low, then we need to go find out what we missed.

P5 added,

> You know the challenge tends to be can you meet their deadlines and get your systems up to speed based on what they say that you need to do. Making sure that we monitor and track very closely what we have coming out of EPIC, which are dashboards. What we can do to prevent them, this is what we need to prevent them in the future. We determine do we need a system enhancement, is this a training issue, so we identify the root causes and then put something in place.

Value-based payments, a Medicare payment model for hospitals have made reimbursement difficult for providers because providers must work hard to improve patient satisfaction and other quality measures (Carver & Parsons, 2012). In terms of

health care, Tan and Shankararaman (2014) believed that a proactive process embodied both an analytic tool with process management technology to accomplish constant improvements. Looking at reimbursement and the hospital's preperation for changing regulations through the lens of complexity theory will consist of understanding the difficult nature of functioning as interconnected parts of a whole. Hartwell (2017) suggested that an institutional system is complex, and it is best to remove multiple barriers to reach institutional development. Next, there needs to be an active engagement of enhancements to encourage development (Hartwell, 2017).

The findings from Theme 1 aligned with the existing body of knowledge and the conceptual framework for this study. Long et al. (2018) found that, when an organization applied a complexity theory approach, they were able to achieve flexibility when responding to a constantly changing system like health services. The evolution prevalent in health care consists of implementation and redefining based on pre-determined outcomes (Long et al., 2018). The essence of being proactive, staying on top of change, understanding that Medicare makes reimbursement hard, and being ready for change all remains in line with the implementation of development before management will know an outcome. Okwir et al. (2018) further expounded that the organization can use a complexity theory approach to evaluate the external environment and the organization's internal complexity. No new information was uncoveres during member checking. The review of archival organizational documents showed that the policies and procedures embody the strategies that are in place to improve the techniques the management teams use to adapt to the changing regulations of all payers, to also include Medicare. For

example, O3 administrative policy includes the practices, government regulations, and work instructions prevalent to all reimbursement include the following:

> The purpose of this policy is to identify the governing rules for the collection of all fees associated with facility patient care rendered at the "Medical Center" and the processes for interaction between the patient, guarantor, and the Medical Centers' Customer Service and Registration staff. The adherence of this policy will result in the uniformity of the Medical Center's revenue collections while maintaining the reputation that the Medical Center is known for.

Emergent Theme 2: Enhance Communication With Staff, Different Departments, and Medicare

The second emergent theme was communication. The successful strategy rendered from this theme was the enhancement of communication with staff, different departments, and that Medicare information will prepare the hospital for changing Medicare regulations. Table 3 depicts the communication themes expressed by the billing management participants.

Table 3

Communication Themes

Theme	*N*	%
Education	11	17
Collaboration	31	48
Meetings	13	20
Communication	10	15

Note. *N* = number of times a strategy was stated. % = percentage of times a strategy was stated.

Brady et al. (2017) contended that effective communication and workflow provisions in a health care setting would minimize risk, enhance patient flow, and the quality of communication can positively impact patient safety. Similarly, Tingle (2018) suggested that good communication in health care is vital for safe patient care. Specific to Medicare patients, O'Lawrence and Poyaoan-Linzaga (2018) recommended that communication can reduce barriers and enhance patient to provider collaboration. Pontefract et al. (2018) added that interprofessional communication in the hospital can also positively impact the quality and coordination of care, that in turn facilitates collaboration among workgroups. Pontefract et al. also suggested that collaborative work groups enhanced interprofessional education. Hospitalists can enhance communication efforts and professional competence levels by highlighting relevant experiences through sharing knowledge with colleagues by way of tutorial guidance and working meetings (Stadnicka, Kowal, Trojanowska, & Zarzycka, 2018). A billing manager's ability to enhance communication through collaboration, meetings, and education when faced with changing Medicare regulations is necessary for survival. All five of the billing management participants revealed a belief that enhancing communication will ensure they are in an optimum position for successful Medicare reimbursement. P1 stated, "I communicate whenever I learn anything, and that communication goes out to everybody to say this is coming. We need to all be aware and be mindful because this will impact us."

Similarly, P2 and P3 stated communication happens on a committee or within a team. P2 stated, "I'm very active with HFMA (Healthcare Financial Management

Association). On a lot of the committees, we discuss the many changes to reimbursement." P3 stated, "The revenue cycle is every Tuesday so if there is any revenue issue to discuss they will invite the people. For example, the denial team may work with a physician adviser." P4 suggested, "So, with that, you need the communications across the board with the different team members and in different areas throughout the hospital. Correspondingly, P5 stated,

> I think it is that whole communication aspect. I would like to emphasize that we have the revenue cycle meetings with not just the technical folks, not just the patient accounting folks, but also from the clinical folks so that they understand what's happening.

Coming together as a team through collaboration was a concept that morphed through communication efforts. All five participants believed that collaborating with other work departments to include medical records, registration, and any clinical professionals will enhance reimbursement efforts despite changing Medicare regulations. Lestari, Stalmeijer, Widyandana, and Scherpbier (2018) agreed that the likely remedy to challenges in health care is collaboration among interprofessional units. A diverse collaborative work setting is not just necessary to survive in health care, and it will also enhance the quality outcomes of the patient, and enable change efforts (Bucknall & Hitch, 2018; Hardin, Kilian, & Spykerman, 2017; Wang, Roy, Barry, Chang, & Bhatt, 2018). P1 stated, "We are partnered with our clinical colleagues, it's a partnership." P2 illuminated this pint by refereeing to collaboration as a system and giving an example:

> They work with the departments. So, they have a system in place where there are a lot of partnerships with various departments in the organization. So again, it goes back to making sure that you really have partnerships within your organization with key departments, as well as having that external review. Even after we feel like we put all of our efforts into the process, somebody else can take a look at it to say: You missed this code, and this charge always comes with this procedure, and we're not saying that you charged for the supply for everyone one these surgical procedures. For example, an appendectomy always has X Y Z, things like that. They meet with information systems to set the charges up. It's definitely not just PFS (Patient Financial Services); you have so many areas that are involved with this whole process. Thank God we're not alone.

Similarly, P3, P4, P5, all from O3, suggested collaboration happens within teams, in and outside of meetings, and with Medicare. P3 stated, “We have the revenue cycle team, the denial team, that are like a multidisciplinary department from HRIS coding to registration.” P4 stated, “We call the Novitas customer service reps. We reach out to a special provider rep if we need additional information.” P5 stated,

> I would like to emphasize that we have the revenue cycle meetings with not just the technical folks, not just the patient accounting folks, but also from the clinical folks so that they understand what's happening. We have a constant feedback stream with the technical end of the system and the folks who handle that. In addition to everything that you heard, whether it's vender's or meetings or system upgrades or IT, those are sort of more informal channels that you can use when

> you're talking to your peers. That can be extremely valuable because it helps you to understand how the system is working for other people and how it might not be working. I think making sure that you plug into the industry making sure that you connect with others. Whether it is HFMA or any other sort of informal channels that you may have, that you are plugged into that information to flow through.

Education was another concept that morphed through communication efforts. All five participants believed that education is important to remain relevant to Medicare regulations, thereby ensuring adequate reimbursement for legitimate Medicare claims. Bahmani and Farhanian (2018) associated training and a few other factors as the key indicators that will solve the challenges of developing a functioning health system in hospitals. Walsh, Meskell, Burke, and Dowling (2017) contended that staff training positively impacts hospital staff knowledge and disposition. Furthermore, Sung and Choi (2018) found a positive correlation between training and development and organizational performance due to the improvement of the employees' competence and enhancement of commitment. P2 added that they created experts with training and development within the organization. P2 stated,

> I would say one of the things when my manager for the Medicare billing first came on board, and we divided the staff by category. Which we felt was helpful for many reasons. People became experts at what they were handling, and they were cross-trained. Therefore, at any time if somebody was on a leave or something, the manager could always put somebody else in that area.

P1 stated, “We also have educational sessions once a year for these departments to say if you're a care department then this is what is allowed, and this is what is not allowed.” P2 suggested that the entire team needs the education to become effective “In my opinion, it’s how you raise your staff and teach them and educate them and give them the tools and resources that they absolutely need to be engaged.” P3 stated, “Strong education, we have the training team to support us. We have the MedLearn sessions, aside from the monthly information.” P4 also added, “We have the MedLearn sessions that happen every month. We get e-mails pretty much as the bulletins are posted from the trainer; she sends them out almost immediately.” P5 extended “We have a training department that's dedicated to making sure that the updates to Medicare are disseminated not just to the people who are working in this department but also the clinical areas that have to know what those rules are as well.”

The findings from Theme 2 aligned with the existing body of knowledge and the conceptual framework for this study. Dai (2017) found that an organization can develop a person’s talent with a complexity theory approach by way of a dynamic adaptive system approach while intermingling with opportunities and challenges in the environment. Turner and Baker (2017) highlighted complexity theory and development by relating leadership development with environmental factors. A complexity theory framework may shed light on the correlation of the leader and formation of the successful leadership development programs that will include functioning in a multifaceted unpredictable environment (Turner & Baker, 2017). While evaluating communication as a theme, education, collaboration, and meetings are all in line with trying to bring a complex, non-

linear model together. Mayhew, C. (2016) used complexity theory as a lens to evaluate an intricate, nonlinear, dynamic system, that is full of uncertainty and mostly overlooked. Member checking uncovered one correction, P5 stated change "flows" to "to flow." The review of archival organizational documents showed that the policies and procedures embody the strategies that are in place to enhance communication through development and education. For example, O2 benefits policy includes the practices and development benefits offered to all employees include the following:

> Our employees are our greatest resource. When we invest in their career development, it translates into providing the exceptional level of patient care we're known for.

Emergent Theme 3: Adopt A Robust Billing System and Other Systems That Compliment Billing

The third emergent theme was to adopt a robust billing system and other systems that complement the billing system. The successful strategy rendered from this theme was to adopt a robust billing system and other systems that compliment billing that will prepare the hospital for changing Medicare regulations. Table 3 depicts the robust billing systems and other systems that compliment themes expressed by the billing management participants.

Table 4

Robust Billing Systems and Other Systems That Compliment Themes

Theme	*N*	%
Constant review	13	27
Audits	12	25

Good billing system that can handle multiple things	15	31
Clean bills	8	17

Note. *N* = number of times a strategy was stated. % = percentage of times a strategy was stated.

Saragih et al. (2013) contended that a billing system is one of the most important components in a hospital and will govern the financial stability of that hospital. The hospital's complexity produces a need for an intricate billing system that can learn and gain a complete understanding of the functionality of billing to be able to support the needs of the hospital (Saragih et al., 2013). Similarly, de Freitas Moura Souza, de Oliveira, and Daher (2016) suggested that a good billing system can improve recording activities, maintain accurate patient histories, and enable administrative and financial management for the hospital. A billing manager's ability to learn and monitor a billing system when faced with changing Medicare regulations is necessary for survival. All five of the billing management participants revealed a belief that a robust billing system with editing abilities, auditing functionality, scrubbing capacities, and the ability to handle multiple things will ensure they are in a better position for successful Medicare reimbursement. P4 suggested, "We use the Novitas system hand in hand with our internal financial system." P5 stated,

> Both in the EPIC system, as well as the related system we use that includes e-premise, will catch edits and make sure that the clinical data is clean as it can possibly be so that we get paid the first time and we don't have to wait for pay.

Kreimer (2014) suggested that clean claims come from good staff training, knowing what a clean claim is, and how to submit one, otherwise claim denials can

occur. Clean claims do not mean the hospital payments, there may be other reasons the payer may decide to delay or deny payment on clean claims (Bilimoria, 2015). Fortunately, Medicare reimburses the provider for clean electronic claims within 14 days (Pollock, 2013). Additionally, the clean claims process may include claim scrubbing. Claim scrubbing includes a validation, by the billing office, of the information on the claim to include patient insurance and the services performed by the clinician with supporting documentation (Baum, 2017). Baum (2017) also suggested that claim scrubbing will reduce errors that cause denials, prevent reworking, and uncover medically unnecessary procedures. Baum (2018) later contended that a health provider with a denial rate higher than 3% to 5% could benefit from implementing a technology driven claim scrubber. P1 elaborated on how the billing system is an important process to prevent future denials. P1 stated,

> The claim left Epic, that is our HIS system, it left our clearing house, and Epic said its clean the clearing houses said it's clean, but yet when it goes to Medicare it just bounces because there's something else wrong with it. And then what I do is try to do when that happens is tie it back to the HIS because you don't want to wait until it gets all the way there.

Standard technology will include electronic claims and claim scrubbers; therefore, an efficient implementation of a good billing system that can embrace enhancements can impact a hospital's financial abilities (Larch, 2012). Developing and connecting with vendors that embrace these technologies can increase automation, reduce errors, and increase the volume of clean claims (Larch, 2012). Dezfuli and Smith (2012) suggested

that the implementation of an improved billing system may have a positive impact on health practices.

P5 stated,

> So that's where you are looking for improvements, always be willing to take on that improvement even though it may challenge some of your processes and procedures. If you're going to be better at this, you have to be able to adapt to the technology and the technology typically follows the rules and policies and procedures that the payers put through. So, you always want to make sure that if your system can do more, and do it more effectively, that you're engaged in that process. So, we're very heavily engaged in that, in fact, we have about three meetings a week having to do with upgrading the system and processes.

A good billing system that can handle multiple things was another concept that morphed through a robust billing systems and other systems that compliment themes. Three participants believed that a good billing system that can handle multiple things is important to remain relevant to Medicare regulations, thereby ensures adequate reimbursement for legitimate Medicare claims. P5 suggested that the billing system will require the capabilities to receive enhancements. P5 stated, “It could be as simple as updating the contract management system that's within EPIC, or it can be something with the system that has to be modified in some way to meet any requirements.” Additionally, P2 proposed similar system abilities. P2 stated,

> Cost and budget establish the charges they actually meet with the departments, they will determine if we're doing new services, they create the CPT codes, they

> equate it to charge set up, bundle charges, single charges. They meet with information systems to set the charges up.

Billing system capabilities are important, as they are central to the hospital being able to make necessary changes to accommodate the changing Medicare regulations. P3 stated, "Clearly the challenge is Medicare is so regulated. We have to make implements to the system and processes in accordance with their guidelines. Which can be both positive and negative." P5 added that system updates are also important "EPIC has periodic upgrades, in fact, we are about to go through one right now." Another caveat to a billing system handling multiple things includes editing capabilities. P5 stated,

> But then once that flows in the billing process, and we are ready to drop the bill then we have all kinds of edits. That system e-premise will be used to scrub the claim to make sure that it goes to the payer appropriately and actually gives us feedback, prior to the submission from the payer's own editing system to say this is a problem with this particular payer. Or there's a problem in this particular field even before it gets there we have an opportunity to correct it, so it goes out clean.

Although edits happen in the billing system, P1 suggested that the billing department is responsible for updating other areas about the edits. P1 stated,

> We push those edits out to the departments because they are the ones that are rendering the service. It's not really clean until Medicare say it's clean and so you can have all the edits you want up front, but it's the editing that happens at their front door when it gets to that contractor that says whether it's clean or not. So, we work those edits every single day just to make sure

Audits was another concept that morphed through a robust billing systems and other systems that compliment themes. All four participants believed that audits are important to remain relevant to Medicare regulations, thereby ensuring adequate reimbursement for legitimate Medicare claims. P1 stated,

> There’re packets of claims that have different things that will stop at the door of Medicare. So, in a sense yeah, I guess it is every single claim because any claim has the potential to fail. You just have to be on top of where it's failing. And the ones that do fail usually are pockets of things. And what you want to do is make sure you move that upstream so that you're not waiting until five days after the claim is going out the door which most of the time is at least 15 days after discharge. So why wait two weeks if you can get that error resolved upfront let's do that. And then in 15 days, I can have my money.

Similarly, P2 stated,

> You have your whole myriad of audits you do in a month, that's tells you everything. We don't like when the outsiders tell us something's wrong. We like to know ourselves, and when the outsiders come in and do their own audits, they might find that we missed one or two things or something that we just never knew about, we're not clinicians so there are some things that we would never know to look for.

Similarly, P3, P5, both from O3, suggested that conducting audits plays an important role in the continuous review of the billing system and the claim. P4 stated, “We have an external auditing team that looks at the coding on our Medicare accounts, to

make sure that this coding is at the highest level of specificity so that we are getting the most that you can for that account." P5 further added, "We go through certain high-volume denials. We drill down to see why they occur. We will break it down to the literal denial remark code that came in per payer that week."

P2 and P4 suggested that reports are another good auditing tool. P2 stated, "I monitor every week. I have reports that tell me how much I'm going to get paid over the next two weeks." P4 stated,

> We make sure that we correct those accounts because those are accounts that we billed, and they are suspended in the Medicare system because something needs to be corrected on them. So, we make sure that we have no RTPs (Return to Provider) pending. If we don't see any pending then we know dealing correctly, those are clean claims and the money should come in.

Lastly, monitoring trends, to include Medicare payment shifts, projecting payment issues, and payment averages, are a part of the constant review to ensure and maintain adequate Medicare reimbursement. P1 stated, "I monitor that on a weekly basis. I monitor payment trends to make sure that we're getting paid and if we're not getting paid, then I will call to find out what's going on." P2 stated, "Any time our average goes down a little bit we're looking to see why, and then we will then target specific areas. It all goes back to the auditing." P5 similarly suggested, "KPIs or key performance indicators, it is the cash collected, it's the denial rates, it's probably those two things above all else."

The findings from Theme 3 aligned with the existing body of knowledge and the conceptual framework for this study. Fernando, Bee, Jabbour, & Thomé (2018) used

complexity theory to examine the relationship between energy management and a resource-based view and found that the successful implementation of energy management in an organization will depend on the size and structure, business strategy, policies, and audits. Morton (2014) suggested that conducting audits are a useful way to examine and substantiate the benefit of any changes to a workflow.

While evaluating a robust billing system and other systems that compliment as a theme, constant review, audits, a good billing system that can handle multiple things, and clean bills are all in line with trying to bring a complex, non-linear model together. Through the lens of complexity theory, Javorsek and Schwitz (2014) suggested that interdependence and adaptation are unpredictable and full of random events and difficult problems that will arise and will require a diverse group of people and possibly outside assistance to establish a training and review process. The training and review process should include reliable sources, sureness of the topic, and the ability to incorporate different viewpoints (Javorsek & Schwitz, 2014).

Member checking uncovered two corrections, “We have no implements without them saying so” should present as “We have to make implements to the system and processes in accordance with their guidelines” according to P3, “Return to payer” should present as “Return to provider” according to P4. The review of archival organizational documents showed that the policies and procedures embody the strategies that are in place to maintain a robust billing system. For example, O1 code of ethics and corporate compliance includes the practices that ensure the accuracy of patient billing include the following:

> One of the most important aspects the commitment to compliance is our dedication to the preparation and submission of accurate claims for payment to federal and state health care programs. Team members can bill for only those goods and services actually provided and medically necessary. All claims for payment for services provided by the health system must be supported by complete and accurate documentation in the medical record, proper coding based on that record and bills that accurately reflect the coding.

The findings confirm the existing knowledge of the discipline. The billing manager successful strategies for legitimate Medicare bills despite changing regulations through the lens of complexity included three key components of the health care industry: nonlinear, complex model and interactive components. Despite the challenges billing managers faced, three successful strategies emerged. Sturmberg and Lanham (2014) contended that a complex adaptive system could add to a way of organizational thinking and coupled with the policymakers can impact changing policies. To further assess strategic change within a complex adaptive system, Caffrey et al. (2016) suggested that complexity theory framework can explain patterns of organizational change and differences in policy implementation. The current literature adds to the previous literature review because Long et al. (2018) found that, when an organization applied a complexity theory approach, they were able to achieve flexibility when responding to a constantly changing system like health services.

Cruz et al. (2017) suggested that a complexity theory framework applied to education can add to the explanation of teaching. Similarly, Dunn and Riley-Doucet

(2017) surmised that teachers could enhance the education of staff when they applied a complexity theory framework. The current literature extends on the previous literature review because Sung and Choi (2018) found a positive correlation between training and development and the employees' ability to gain commitment to an organization.

Applications to Professional Practice

The findings in the study have the capacity to positively impact two areas of business practice. The first are area includes the supplementary information available to hospitals considering the implementation of the new Medicare billing strategies that provide a proven method to support success. The second area includes the increased amount of successes in implementing the Medicare billing strategies may stimulate a surge in the number of hospitals that migrate to implementing the new strategies for Medicare billing, further expanding its reach of positive influence on the hospital industry. This study expanded the existing business practice about Medicare reimbursement for hospitals.

The themes defined in this study provide application guidelines for future billing managers to use in the implementation of Medicare billing to collect reimbursement for legitimate Medicare claims. When combining the themes into practice processes, a hospital could align current strategic goals and action plans to model successful Medicare billing strategies with small changes to prevent changing the current structure. While combining practices, billing managers could align the hospital fundamentals with Medicare billing strategies by disseminating it through the strategic plan distribution, reinforcing the infrastructure of the hospital with the proven foundation that the well-

structured Medicare billing plan will provide. An effective alignment with successful Medicare billing strategies may bring the hospital the reimbursements that are common in successful hospitals.

All three organizations profitably transformed by implementing the successful Medicare billing strategies by embedding the policies into the hospital systems. Embedding the Medicare billing strategies into current structures required fewer issues to motivate and create staff acceptance. This finding has the potential to benefit hospitals and improve upon their methods to complete billing system changes. Moreover, all three organizations adapted to the adjustments by positioning the changes through a strategic system, without specific indication of the change within the strategic goals. This finding emphasized a possible future change to the technique for billing managers to use in implementing conversion programs with a reduced need for intricate change management techniques. This change technique may also reduce staff resistance to change by removing the discouraging feeling associated with Medicare regulation changes and the impact on reimbursement.

Implications for Social Change

The United States health care industry consists of public and private payers who can impact access and delivery of care. To solve a multitude of problems within health care, billing managers should use a systems approach (Thomas et al., 2015). The results of this doctoral study may ultimately contribute to positive social change by providing information for the improvement of hospital practices in the industry to ensure that organizations remain in business by being financially solvent via adequate

reimbursement. Maintaining the presence of health care organizations can aid communities by providing access to safe and convenient health care, especially for older populations (Countouris et al., 2014). The results of this study may contribute to positive social change by fostering the strategies several billing managers used as a criterion for successful Medicare claims so that other billing managers can develop a more effective and efficient practice to benefit families and communities.

The findings positively influence changes by providing a proven method hospital can use to succeed in the implementation of successful Medicare reimbursement, that may stimulate an increase in the amount of health care organizations that gain successful Medicare billing practices on their journeys towards financial solvency. Implementation of good payment models and billing practices will reduce costs and improve the value of care (Lockett, 2014). Future hospitals may overcome complacency and implement good Medicare billing practices to ensure reimbursement of legitimate claims by aligning with the top approaches identified within the scope of this study. Hospitals who have successfully implemented strategies to ensure they collect reimbursement for legitimate Medicare claims can increase growth in revenue, improve patient health outcomes, support job growth and reduce unemployment, ensuring they remain operational and convenient to members of the community (Armit & Oldham, 2015; Countouris et al., 2014).

Recommendations for Action

The purpose of this qualitative case study was to identify successful strategies billing managers employ to collect reimbursement for legitimate Medicare claims. The

themes identified provide application guidelines for future hospital billing managers to use in the implementation of Medicare reimbursement strategies. Based on the combination of the themes identified and the practice processes, it would be feasible for hospitals to align current strategic goals and action plans to model successful Medicare billing strategies with small changes to prevent changing the current structure. This action would promote the implementation of a Medicare billing model without the need for staff to have an additional cultural acceptance of change because of the surrounding current business configuration.

Many groups should pay attention to the results of this study because of the prospective advantages. Such groups include hospitals that are currently implementing or are exploring the possibility of successful billing strategies to collect reimbursement for legitimate Medicare claims, consulting organizations in health care assisting organizations with the implementation of successful Medicare billing, CMS officials, and any of the previously mentioned groups using any other Medicare billing strategies. The understanding and application of the strategies proceeding from the results of this study will propagate the information naturally utilizing benchmarked best practices, and the nature of successful Medicare reimbursement. I will distribute the study findings electronically, in my efforts with the National Association of Health Services Executives, and through my work efforts in my organization, and my academic teaching efforts.

Recommendations for Further Research

I used purposeful sampling to select billing managers in the northern New Jersey region who met the eligibility criteria and had experience with Medicare billing. I

examined publicly available hospital documentation and strategic reports as the basis for the aggregated research question for this study of the problem of Medicare billing. I analyzed the coded data from the open-ended semistructured interviews with study participants and hospital records provided by the study participants. I used the details of the data gathered to gain a rich comprehension of the business problem and identify strategies that may prove effective for billing managers to improve Medicare reimbursement. Conducting further research that includes more than the target population of this study might lead to additional knowledge regarding the strategies necessary for billing managers to collect reimbursement for legitimate Medicare claims.

Researchers could utilize a qualitative approach to identify strategies for improving hospital performance regarding changes regulations and how it adversely impacts billing managers reimbursement using a larger sample in a different geographical region. Researchers could conduct a quantitative or mixed-method research study to determine the financial impact of changing Medicare regulations on hospitals. A researcher can also conduct further research to address the limitations of this study.

Further research can include the exploration of the hospital billing manager's response to the business problem of changes to all reimbursement. Little research exists on the relationship of the out of network legislation for billing managers and hospitals and how this impacts care quality and financial sustainability of a hospital. According to the Medical Society of New Jersey (MSNJ), hospital staff is responsible for checking, advising, and educating the patient about the financial impact of services (MSNJ, 2018). There are hefty fines to any institution that does not adhere to the policies stipulated in

the legislation (MSNJ, 2018). One participant in my study mentioned the severe cost impact to the hospital when policymakers implement new regulations, to also include declining reimbursement. It would be beneficial to know if an ongoing review and building relationships between hospitals cohorts may reduce financial risk, enhance care, and lower health care cost after new regulation implementation. Therefore, a recommendation for future research is to examine how the cost of any changing regulation negatively impact hospitals and their cohorts.

Alternatively, researchers could use the study findings to develop a survey that details the billing manager's actions used to ensure successful reimbursement with changes in regulations. Researchers may use this survey tool to collect types of data billing managers would need to track to determine the frequency and how to record the data. The next recommendation for further research includes the exploration of billing manager responses to the business problem when the hospital cannot financially support out of network patients and send them to an alternative healthcare facility. Researchers could apply a qualitative approach like that used in this study to determine strategies for improving billing manager performance after the patient decide to go to providers besides hospitals.

Further studies may involve researchers examining the strategies that would influence hospitals to downsize due to diverting patients to different types of facilities. Further studies can also include researchers with more research experience. The final recommendation for further research includes the exploration of hospital billing manager responses to the business problem of the compartmentalized hospital industry and how it

prevents sharing valuable insight and information. As suggested by some study participants, sharing information about changing regulations and reimbursement can lead to billing managers constructing a deeper understanding of possible strategies that can be implemented to improve their hospital's reimbursement. Strategies identified by billing managers may be best practice and serve to support other billing managers facing reimbursement issues.

Reflections

The DBA process was a great learning experience for me. I have gained a better understanding of Medicare billing, specifically my knowledge about successful strategies to ensure reimbursement for all legitimate claims. I took different actions to limit my personal bias during this study. I used well-planned, open-ended questions, an interview protocol, documented all participant responses verbatim and performed member checking. Well planned interview questions may limit personal bias (Hollis et al., 2016). Participants can respond in their own words with open-ended questions (Xue et al., 2017). According to Thomas (2017), researchers can use member checking to limit bias and establish quality qualitative research. Members can also ensure the data accurately reflect their contribution (Birt et al., 2016). I used an interview protocol to maintain direction and limit my personal bias during the process (Hamilton et al., 2017).

In completion of this study, my thinking changed about the topic of billing to collect reimbursement for legitimate Medicare claims. There was a shift in my thinking because of the change management technique that all three organizations shared. In all three cases, the billing managers moderated Medicare reimbursement by embedding

payment for performance into the organization's framework rather than changing the organization to meet Medicare guidelines and basic structure. Billing managers were able to not only adapt to change successfully for their hospitals' benefit but also anticipate certain types of changes or realities based on experience. In one aspect, the management concealed the effort so that the staff would not be aware of the impact of new Medicare guidelines. Organizations can use obscured efforts to strengthen their framework without having to affect the staff adversely.

Conclusion

Many hospitals accept Medicare patients for inpatient and outpatient services. The purpose of this multiple case study was to explore the successful strategies billing managers employed to collect reimbursement for legitimate Medicare claims. The population of the study consisted of five billing managers from three hospitals who possessed experience with Medicare billing and reimbursement. The implemented successful strategies that included a consideration of changing Medicare regulations provided a conceptual framework of the study. I gathered data using interviews and organization record reviews. I established an inductive analysis of data by identifying words, phrases, ideas, and actions that were constant in participant interviews and the organizational records to identify patterns and themes. I used triangulation of sources to cross validate the information from the interviews and the organizational record review of data for consistency. Three main themes emerged from the data during this study; Theme 1: remain up-to-date with Medicare changing compliance regulations, Theme 2: enhance communication with staff, different departments and Medicare, and Theme 3: adopt of a

robust billing system and other systems that compliment billing. An increase in Medicare reimbursements may enable billing managers to reduce inefficiencies in the hospital revenue management process and improve the ability to better support the employees and patients in hospitals.

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Appendix: Interview Protocol and Questions

Interview Protocol

A. Self-introduction to the participant.

B. Go over consent form and interview process.

C. Ask participant if he or she has questions.

D. Ask permission to record the interview.

E. Ask permission to begin the interview.

F. Start the recording.

G. Start with interview question 1 and follow the interview questions sequence until the last interview question.

H. Ask follow up questions.

I. Observe the participant for any physical cues like facial expressions, body movements, and interaction

J. Verify interview responses with the participant.

K. Ask participant if he or she has questions.

L. End the recording.

M. Thank participant for their time and participation in the study.

N. End Protocol.

Interview Questions

1. What is your background in the health care office and reimbursement functions?
2. What are the challenges associated with sustaining and improving reimbursement functions?

3. What has been your experience overcoming the challenges associated with lowered Medicare reimbursement?
4. What strategies do you use to collect reimbursement for legitimate Medicare claims?
5. What practices could health care billing managers enlist to prevent reduced Medicare reimbursement?
6. What strategies do you use to gain knowledge about any future changes to Medicare reimbursement policies and procedures?
7. How do you assess the effectiveness of strategies for achieving optimal Medicare reimbursement?
8. What additional information can you add that would be valuable for identifying the successful strategies you have used to collect reimbursement for legitimate Medicare Claims?