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# Strategies in Mitigating Medicare/Medicaid Fraud Risk

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# Walden University

College of Management and Technology

This is to certify that the doctoral study by

Godfred Adomako

has been found to be complete and satisfactory in all respects, and that any and all revisions required by the review committee have been made.

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Walden University 2017

### Abstract

## Strategies in Mitigating Medicare/Medicaid Fraud Risk

by

Godfred F. Adomako

MAFM, DeVry University, 2010 BBA, University of Toledo, 2008

Doctoral Study Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Business Administration

Walden University

May 2017

#### Abstract

In the fiscal year 2014, approximately 1,337 health care providers lost their provider license to Medicare/Medicaid fraud. Out of the 1,318 criminal convictions reported by the U.S. Medicaid Fraud Control Units (MFCU), 395 (30%) were home health care aides who claimed to have rendered services not provided. The purpose of this multiple case study was to explore licensed and certified home health care business managers' strategies to mitigate Medicare/Medicaid fraud risk. A purposive sampling of 9 business managers and chief executive officers from 3 licensed and certified home health care businesses in Franklin County, Ohio participated in semistructured face-to-face interviews. Data from the interviews were transcribed, coded, and analyzed to identify themes regarding Medicare/Medicaid fraud risk management strategies. Drawing from the Committee of Sponsoring Organization's internal control framework and fraud management lifecycle theory, 5 themes emerged: the control environment, risk assessment, control activities, information and communication, and monitoring activities. Findings from this study included maintenance of integrity and culture, training and educating both staff and clients about fraud reporting processes and the consequences of fraud, rotating staff on a regular basis, performing fraud risk assessments, implementing remote timekeeping and monitoring system, and compensating shift leaders to coordinate activities in the clients' residences. The implication for positive social change includes reducing healthcare cost for all taxpayers through Medicare/Medicaid fraud reduction.

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### Dedication

I dedicate this doctoral study to my loving mother, Kate Afrifah who selflessly took care of my needs throughout my younger age, when everyone else had given up hope in me. I also dedicate this study to my beautiful wife, Olivia Adomako, my two adorable kids, Samuel Adomako and Bernice Adomako for their understanding and unconditional love. I have fought a good fight. It is your turn to challenge the status quo. Achieving this milestone is an indicative of the fact that nothing is impossible with dedication and perseverance. I also dedicate this work to my father, Solomon Adomako and my father-in-law Matthew Biney for their encouragement and moral support.

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### Section 1: Foundation of the Study

In 1948, President Harry Truman attempted to introduce national health insurance, a universal health insurance for all Americans, but was not successful (Blumenthal, Davis, & Guterman, 2015). The opposed faction of the proposed program argued in favor of health insurance for the elderly instead of universal health insurance (Blumenthal et al., 2015).

In 1965, the U.S. Congress passed a law under the Title XVIII of the 1935 Social Security Act (42 U.S.C. § 301 *et seq.*) for the creation of Medicare/Medicaid health insurance program (Blumenthal et al., 2015; Centers for Medicare & Medicaid Services [CMS], 2015). The program was aimed at providing health care insurance for Americans who are 65 years and older. In 1972, congress expanded the insurance coverage to people with disabilities, regardless of age, and people with end-stage renal disease (Blumenthal et al., 2015; CMS, 2015; Jaffe, 2015).

The original Medicare program consisted of two parts: Part A and Part B. Part A covered cost associated with inpatients hospital stays, care in skilled nursing facilities, hospice care, and some home health care costs (CMS, 2015). Medicare Part B covered cost associated with specific doctors' services, outpatient care, medical supplies, and certain home health services (CMS, 2015). Since Medicare/Medicaid inception by President Lyndon B. Johnson in July 1965, several expansions and amendments governing the Medicare program has taken place, including Medicare Part C and Part D, Children's Health Insurance in 1997, and Affordable Care Act in 2010 (Jacobs & Callaghan, 2013). Medicaid, on the other hand, is a joint federal and state program designed to supplement medical cost for people with low income (CMS, 2015). Such an expansive health care program is vulnerable to fraud.

#### **Background of the Problem**

Health care fraud, waste, and abuse constitute about 30% of the United States of America's annual health care expenditures (Murrin & General, 2015; Thornton, Mueller, Schoutsen, & Hillegersberg, 2013; Van Capelleveen, Poel, Mueller, Thornton, & Van Hillegersberg, 2016). Most of these fraud cases are caused by dishonest providers, dishonest employees, organized crime, colluding patients, and deliberate attempts of patients for health care benefit qualification (Joudaki et al., 2014; Murrin & General, 2015; Thornton et al., 2015). Despite the growing concern to intensify efforts in curbing health care fraud and abuse, the problem still persists (Hampton, 2015), causing an increase in the cost of health care delivery in the United States (Van Capelleveen et al., 2016). To effectively adopt strategies for Medicare/Medicaid fraud prevention, one must understand the intricacies involved in fraud and the fraud lifecycle.

Many researchers disregarded home health aides as significant perpetrators of Medicare/Medicaid fraud, but as posited by Joudaki et al. (2014), these researchers have attributed fraud risk factors to provider coding errors, provision of unnecessary health services by doctors, provision of unnecessary services by therapies and nurses, and billing errors. Nevertheless, out of the 1,318 criminal convictions reported by the U.S. Medicaid Fraud Control Units (MFCU), 395 (30%) were home health care aides who claimed to have rendered services not provided (CMS, 2015; Murrin & General, 2015). In this study, I explored strategies licensed and certified home health care business managers adopted to mitigate Medicare/Medicaid fraud risk.

#### **Problem Statement**

In fiscal year 2014, approximately 1,337 health care providers lost their provider license to Medicare/Medicaid fraud (Murrin & General, 2015). Out of the 1,318 criminal convictions reported by the U.S. Medicaid Fraud Control Units (MFCU), 395 (30%) were home health care aides who claimed to have rendered services not provided (CMS, 2015; Murrin & General, 2015). The general business problem is that business leaders are unable to project the effects of Medicare/Medicaid fraud on their companies' sustainability. The specific business problem is that some licensed and certified home health care business managers lack strategies to mitigate Medicare/Medicaid fraud risk.

#### **Purpose Statement**

The purpose of this qualitative multiple case study was to explore strategies some licensed and certified home health care business managers use to mitigate Medicare/Medicaid fraud risk. The target population was licensed and certified home health care business managers located in Franklin County, Ohio who had developed and implemented strategies to mitigate Medicare/Medicaid fraud risk. I gathered data from reviewing company's internal policies and interviewed six business managers and three owners and chief executive officers of home health care agencies. Findings from this study might support the development of effective and efficient strategies and derivative processes to mitigate Medicare/Medicaid fraud risk. The implications for social change include cost savings which might result in expansion of health care coverage to more uninsured Americans.

#### **Nature of the Study**

I used a qualitative methodology for this study. Qualitative, quantitative, and mixed methods are the three commonly used types of research (Long, 2014). Using the qualitative method, a researcher gains an in-depth knowledge of a phenomenon with little to no existence of empirical or theoretical knowledge, while with quantitative method, a researcher makes a determination as to whether a specific variable influences or predicts an outcome (Mertens, 2014). The mixed research method encompasses both qualitative and quantitative research methodologies and provides a more holistic approach to findings (Long, 2014). I chose to use the qualitative research method instead of quantitative or mixed method because my intention was to gain insights from practitioners who had developed and implemented strategies to mitigate Medicare/Medicaid fraud risk.

I used a case study design in this study. Qualitative research is comprised of options that include narrative, ethnography, phenomenology, and case study. With narrative design, a researcher studies the biography of an individual (Safari & Thilenius, 2013). Narrative design was not appropriate for this study since I did not examine a biography. Ethnography is a research design, for exploring the way of life of a group of people (Bristowe et al., 2015). Ethnography was not appropriate for this study because I did not examine the culture of a people. Researchers use phenomenological design to explore how individuals' make sense of their lived experiences around them (Lewis, 2015). With phenomenological design, researchers study lived experiences of research participants in regards to the special phenomena. Case study was the appropriate design. Using a case study design provides a researcher the opportunity to study a bounded process in detail relative to the contextual framework (Yin, 2014).

#### **Research Question**

What strategies do some licensed and certified home health care business managers use to mitigate Medicare/Medicaid fraud risk?

#### **Interview Questions**

- 1. How often and in what manner does your company assess fraud risk management for potential fraud exposure?
- 2. What strategies did you use to ensure Medicare/Medicaid fraud avoidance/reduction?
- 3. How did you implement strategies to mitigate Medicare/Medicaid fraud risk?
- 4. How did you overcome barriers associated with implementing the strategies?
- 5. How do you assess the effectiveness of the strategies?
- 6. What other aspects regarding Medicare/Medicaid fraud risk mitigation can you share with me?

#### **Conceptual Framework**

Leaders' ability to design appropriate strategies to avoid fraud has received little attention from accounting researchers (Rendon & Rendon, 2015). The fundamental framework for this study is the fraud management lifecycle (FML) theory. Wilhelm (2004) developed the fraud management lifecycle theory to describe the eight stages of fraud management under the premise that business managers have the capability of mitigating fraud risk with proper adherence to the fraud management stages. Wilhelm identified the eight key stages underlying the theory as deterrence, prevention, detection, mitigation, analysis, policy, investigation, and prosecution. As applied to this study, the fraud management lifecycle theory holds that fraud affects businesses'

sustainability. The findings from this study may provide strategies to mitigate Medicare/Medicaid fraud risk in the home health care industry.

### **Operational Definitions**

*Fraud risk:* Fraud risk may be defined as company's vulnerability to fraud (Nia & Said, 2015).

Home health aides: Home health aides are employees of licensed and certified home health care businesses, or in some cases, independent employees that provide individuals with disabilities in their private residents with activities of daily living (Cooper et al., 2016).

Licensed and certified home health care business managers: These are managers of businesses primarily licensed by the state to provide services such as skilled nursing and other therapeutic programs to individuals or group of individuals in their private residents (Centers for Medicare & Medicaid Services, 2013).

*Medicare/Medicaid fraud:* Knowingly submitting fabricated statement with the intention of obtaining payments from federal or state health care fund (Centers for Medicare & Medicaid Services, 2015).

*Relators:* Individuals allowed under the False Claims Act, to file lawsuit on behalf of the government, against suspected fraudsters (Johnston, 2015).

Unqualified audit report: This is a type of audit report where auditors express their opinion to indicate the firm's financial report is devoid of material misstatement (Czerney, Schmidt, & Thompson, 2014).

#### Assumptions, Limitations, and Delimitations

#### **Assumptions**

Assumptions are unverifiable statements of facts that researchers consider to be true (Fan, 2013; Kirkwood & Price, 2013). The four fundamental assumptions that pertained to this study were as follows: First, the data gathered through interviewing research participants and reviewing documents would provide a true and accurate reflection of the current Medicare/Medicaid fraud phenomena in the United States of America. The second assumption pertained to the presumption of fair and honest answers from research participants to the openended semistructured interview questionnaire (see Appendix B) without fear, cohesion, or favor. The third assumption was the presumption of accurate gathering of unadulterated key ideas and themes through recording, coding, and analysis. Lastly, the finding from the study was presumed to serve as guiding principles to other licensed and certified home health care business managers who lack antifraud resources or risk management strategies.

#### Limitations

Limitations are potential weaknesses inherent in a research study that a researcher may not be in a position to address (Kirkwood & Price, 2013). Licensed and certified home health care business owners located in Franklin County, Ohio might not have necessarily represent the entire home health care industry because fraud risk factors might differ based on geographical location of the business. The findings from the study might not be transferable to the privately funded health care programs. Another limitation was that even though the target population might demonstrate the development and implementation of fraud risk strategies, the respondents

might not have necessarily been exposed to the appropriate fraud risks to test the validity of their respective fraud risk strategies.

#### **Delimitations**

Delimitations refer to the scope of the research (Firmin, Bouchard, Flexman, & Anderson Jr, 2014). In this study, I explored strategies some licensed and certified home health care business managers used to mitigate Medicare/Medicaid fraud risk. The target population was licensed and certified home health care business managers located in Franklin County, Ohio who had demonstrated the development and implementation of fraud risk strategies to mitigate Medicare/Medicaid fraud risk. Qualitative research is characterized by small sample size (Bernard, 2013). The greatest delimiting factor was the data collection processes. This process included responses to semistructured interviews from licensed and certified home health care business owners and managers, as well as review of articles, company documents, and government reports. Other data collection methods such as observations were not feasible for consideration.

#### Significance of the Study

#### **Contribution to Business Practice**

Fraud, waste, and abuse (FWA) constitute approximately 30% of all health care cost, ranging from dishonest providers, dishonest employees, organized crime, and colluding patients (Murrin & General, 2015; Thornton et al., 2015). The data from this study might be valuable to small business managers lacking antifraud resources or risk management strategies. The results from this study might contribute to developing and implementing effective and efficient methods to avoid fraud and increase business survival rate.

#### **Implications for Social Change**

Findings from this study might contribute to positive social change by (a) the provision of quality care to Medicare/Medicaid recipients through cost savings and (b) reduce healthcare premiums for all insurers (Bayerstadler, van Dijk, & Winter, 2016). With a reduction of Medicare/Medicaid fraud, the government might have enough resources to enhance the Medicare/Medicaid program or redirect resources to much needed areas of the economy to benefit society. Byrd, Powell, and Smith (2013) posited that while people measure losses caused by fraud in financial terms, the cost to humans' health and life is immeasurable.

#### A Review of the Professional and Academic Literature

The purpose of the literature review was to substantiate the foundation of the primary research question: What strategies do some licensed and certified home health care business managers use to mitigate Medicare/Medicaid fraud risk? To address this research question, I conducted a qualitative case study by exploring insights from practitioners who had demonstrated a successful strategic implementation of Medicare/Medicaid fraud risk mitigation. The eight stages of the Wilhelm's fraud management lifecycle in support of the purpose of this study are: (a) deterrence, (b) prevention, (c) detection, (d) mitigation, (e) analysis, (f) policy, (g) investigation, and (h) prosecution. Under each of the eight stages, I synthesized the literature and explored its functions in the fraud management cycle.

The review of previous researches on mitigating Medicare/Medicaid fraud risk commenced with Walden University's electronic library searches for peer-reviewed articles published between 2013 and 2016 from databases such as EBSCOhost, the Academic Electronic database, ProQuest, Science Direct, and Business Premier. The initial search included keywords

such as *Medicaid and Medicare fraud, health care fraud statistics, fraud deterrence, fraud prevention, fraud detection, fraud mitigation, fraud analysis, fraud policy, fraud investigations, and fraud prosecution.* I also obtained documents from Google Scholar database, government websites, and book searches. Total number of references for this study numbered 145, of which 125 (86%) is peer reviewed articles published within five years of this study completion date.

#### **Historical Perspective of Fraud Theories**

Medicare/Medicaid program is accessible to more people than a decade ago (CMS, 2015; Ku, Sharac, Bruen, Thomas, & Norris, 2013). The increase in fraudulent behaviour resulted from the increase in program accessibility (CMS, 2015; Overholser, Thompson, Sosland, & Stimson, 2016; Van Capelleveen et al., 2016), prompting various fraud task force to intensify efforts for prevention (Metcalf et al., 2015). Researchers have increased their investigations because of these fraud vulnerabilities (Braithwaite, 2015; Davis & Pesch, 2013; Power, 2013; Stolowy, Messner, Jeanjean, & Richard Baker, 2014; Williams, 2013). The need to proportionately distribute attention to all possible areas of fraud vulnerability is essential (CMS, 2015).

Among the theories and concepts prevalent in the realm of fraud causation, detection, and prevention research includes the fraud triangle, white color crime, fraud scale, fraud management lifecycle, and the fraud diamond theory. Extensive literature exists regarding the causes of fraud; however, this study is not about the causes of fraud, but about mitigation of Medicare/Medicaid fraud risk factors. It is worth noting that fraud is different from fraud risk. Power (2013) defined fraud risk as the probability of fraud occurrence. Power defined fraud as the actual occurrence of an intentional act of deception to the detriment of the victim. Consequentially, accounting literature relies heavily on Cressey's (1953) fraud triangle theory as the conceptual framework

for evaluating fraud risk factors (Boyle, DeZoort, & Hermanson, 2015). Cressey (1953) propounded the fraud triangle theory characterized by three elements: (a) opportunity, (b) pressure, and (c) rationalization. Cressey contended that with motivation to commit fraud when an opportunity arises resulting from weak controls or lack of oversight, coupled with justification, fraud would likely occur.

Added to the fraud triangle theory was Wolfe and Hermanson's (2004) fraud diamond theory with individual *capability* element. Wolfe and Hermanson exemplified the fraud triangle theory with the perpetrators' personal traits and abilities to commit the fraud in question. Wolfe and Hermanson addressed the need to evaluate the capabilities of the responsible individuals through measures similar to background checks and skills evaluation. The researchers' argument was that pressure, opportunity to commit and rationalization might exist, but if the potential fraud perpetrator is not capable or does not possess the requisite ability to commit the fraud in question, fraud might not occur. Wolfe and Hermanson further argued that fraud perpetrators are usually individuals with sufficient knowledge and capability to identify control weaknesses and vulnerabilities.

Sutherland, Cressey, and Luckenbill (1992), on the other hand, developed differential association theory. The authors were of the view that people acquire criminal behavior through associating with intimate personal groups, interactions, and examples. Criminal behavior is not inherited (Sutherland et al., 1992). The basic idea of their argument was that persons who engage in criminal activities rationalize their behavior in a manner that pacifies their self-made ethics. Sutherland et al. did not directly address the fraud triangle but touched-based on two elements: opportunity and rationalization.

Albrecht's (2004) conceptualization of fraud motivation was somehow synonymous with pressure, opportunity, and rationalization - elements of Cressey's (1953) fraud triangle theory. Albrecht argued that even though Cressey originally introduced the elements of fraud, the concept of *fraud triangle* did not become widely acceptable until his 1991 journal publication. The nice fraud motivational factors Albrecht identified include: (a) living beyond one's means, (b) zeal for personal gain, (c) high personal debt, (d) association with consumers, (e) insufficient pay, (f) excessive gambling problem, (g) opportunity to defraud the system, (h) peer pressure, and (i) personal traits.

Regardless of the various updates to the fraud triangle theory over the years, several fraud prevention programs continue to use it as a conceptual framework. However, Schuchter and Levi's (2015) findings from interviewing perpetrators of white-color crime in Switzerland and Australia showed something otherwise. The researchers found opportunity element as universal, described perceived pressure as silent, and rationalization element as simplistic. The universality of fraud triangle as fraud contextual framework, according to Lokanan (2015), does not fit in every fraud prevention situation.

#### Wilhelm's Fraud Management Lifecycle Theory

Wilhelm (2004) developed the fraud management lifecycle theory. Wilhelm used the theory to describe the eight stages in the fraud management lifecycle under the premise that when business leaders manage these stages effectively, there will be a substantial reduction of fraud losses and societal cost that fraud losses cause. Wilhelm propounded this theory by conducting workshops, interviews, direct observations, and evaluation of fraud and security publications of the communication, banking and finance, insurance, as well as security

industries. Wilhelm identified the eight key stages underlying the theory as deterrence, prevention, detection, mitigation, analysis, policy, investigation, and prosecution.

Fraud deterrence. Wilhelm (2004) posited that understanding the stages of the fraud management lifecycle in a holistic and interconnected form is the most effective way of managing fraud. The author defined fraud deterrence as inhibition of fear of consequences in fraud perpetrators with the hope of distracting and discouraging potential fraud activities. Several researchers (Armenter & Mertens, 2013; Salleh & Othman, 2016; Skatova & Ferguson, 2013; Yiu, Xu, & Wan, 2014) defined deterrence as the use of punishment to induce an outcome. In a study conducted by Cheng, Li, Zhai, and Smyth (2014), the researchers used neutralization and general deterrence theories to examine the relationships between fraud deterrence and occupational fraud. The findings suggested an inverse relationship between potential punishment associated with fraud and its actual occurrence. In other words, the occurrence of fraud is not dependent on perceived punishment (Cheng, Li, Zhai, & Smyth, 2014). Consistent with Sutherland et al. (1992) differential principles, Cheng et al. argued that when fraud perpetrators' evaluation of the perceived rewards for fraudulent behavior exceed the gains of lawful behavior, fraud is imminent.

Contrary to Cheng, Li, Zhai, and Smyth's (2014) argument, the U.S Office of Inspector General's fiscal year 2015 report indicated statistical evidence for the effectiveness of punishment as a deterrence strategy. In this annual report, the department indicated that since the inception of the Medicare Fraud Strike Force, out of the 2,536 defendants prosecuted for a total of \$8 billion, 1,477 defendants received sentences for an average prison term of 49 months.

These actions have resulted in a decrease in home health care payments of over \$100 million in

Miami, \$40 million in Dallas, and \$25 million in Detroit.

While Salleh and Othman (2016) agreed with Skatova and Ferguson (2013) on the effectiveness of punishment as fraud deterrence strategy, Yiu et al. (2014) used social learning theory to investigate the impact of punishment by observing 604 Chinese firms between 2002 and 2008. The researchers found the effectiveness of punishment as a deterrence strategy. However, Yiu et al. argued that punishment is effective as a deterring strategy only if the observing party's evaluation of the possibility of getting caught is high. Cheng et al. (2014) disagreed with Salleh et al. (2016) as well as Skatova and Ferguson (2013) on the grounds of the perpetrators' disregard for the existence of potential punishment at the time of the crime.

Contrary to the perceived punishment as a deterrence strategy was the view of Davidson, Desai, and Gerard (2013) who found continuous auditing as a deterrence measure. The mere suspicion of existing monitoring system might create conscientiousness among potential fraud perpetrators (Davidson et al., 2013). Although Davison et al. (2013) argued in favor for the existence of some form of a deterrence strategy, Mooijman, Dijk, Ellemers, and Dijk (2015) viewed punishment from two different dimensions: motive of deterrence and motive of *just-deserts*. If the motive of punishment serves as a form of deterrence, punishment is usually severe and occurs in public domain (Mooijman et al., 2015). Contrary to the deterrence motive is *just-deserts* motives, which are characterized by punishment proportionate to the severity of the crime without necessarily having deterrence intention (Mooijman et al., 2015). After all, leaders' motive of exerting punishment on subordinates is to encourage compliance with the existing rules and deterring others from engaging in the same or similar behavior (Parks, Joireman, & Van Lange, 2013).

Contrary to the Inspector General's fiscal year 2015 report, health care fraud still exists, despite the strict punishment mated to the fraud perpetrators. For example, in September 2014, Angella Allison of Centerville, Iowa, the former owner and chief executive officer (CEO) of Cornerstone Counselling Center, received a 12-month prison sentence and ordered to pay over \$700,000 in restitution for health care fraud and money laundering (Internal Revenue Services [IRS], 2015). In August 2014, Lianna Ovepian of Tujunga received a 96-month prison sentence and ordered to pay over \$9 million in restitution to replenish the Medicare program for generating several fraudulent prescription medications to patients (IRS, 2014). The punishments for engaging in health care fraud activities include loss of operational license, denial of payment, fines, and imprisonment (Krause, 2013). To curb fraud, Padgett (2015) suggested improvising mechanisms to identify critical areas of fraud risks and assist organizational managers with mitigation strategies.

Fraud prevention. Wilhelm (2004) defined fraud prevention as a process of hindering a fraudster from committing or perpetrating fraudulent activities. Wilhelm (2004) compared prevention to security activities in the field of information technology (IT) – Implementing appropriate procedures and processes to make it difficult for fraudsters to commit fraud. Petrașcu and Tieanu (2014) related fraud prevention to control activities that corporate leaders design to hinder fraudulent activities from occurring. Fraud prevention is relevant within the fraud management lifecycle because fraud is less expensive and more effective in the prevention stage than the detection stage (Mansor, 2015). Mansor's argument was that if business managers design all the necessary control mechanisms to prevent fraud from happening, businesses save all the efforts and resources to track and investigate fraud.

The problem with Mansor's (2015) assertion is, as argued by Petraşcu and Tieanu (2014), no single organization is immune to fraud risk, irrespective of the extent of established control mechanisms (Laxman, Randles & Nair, 2014). Nevertheless, unnecessary controls could cause bureaucracy (Rubasundram, 2015). Fraud occurs in different forms. Thornton et al. (2015) identified 18 different types of health care frauds after evaluating 252 peer-reviewed articles. CMS (2014) identified at least six common health care types of health care frauds. Rahman and Anwar (2014) conducted a study to determine the effectiveness of fraud prevention and detection programs in Malaysian banks. The findings from 146 respondents indicated that performing account reconciliations on a regular basis is perceived to be an acceptable strategy for fraud prevention, followed by staff ethics training, strong password protection, frequent audits, increased role of audit committee, prospective employees' background checks, and data mining.

Ríos-Aguilar and Lloréns-Montes (2014) conducted a research to investigate the feasibility of using employees' cellular phones or smart phones as a tracking device in establishing the physical presence of employees at their respective remote locations. The researchers experimented with Samsung Galaxy S4 and Apple iPhone 5, using a mobile web application to determine the location of employees. They found accuracy pertaining to the use of mobile location system, which suggests that employers could use the presence-control information system to track remote labor force. Similarly, Halbouni, Obeid, and Garbou (2016) explored the role information technology and corporate governance play in fraud prevention. The researchers interviewed financial accountants and auditors for their perception regarding the effectiveness of audit committees, internal audit functions, corporate culture, and employee training as a prevention measure. The findings from the study showed that (a) corporate

governance plays a moderate role in fraud prevention, (b) information technology and traditional auditing play similar roles in fraud prevention and detection, and (c) both internal audits and external audits use similar technologies in fraud detection and prevention.

Researchers (Hess & Broughton, 2014; Soltani, 2014) argued otherwise, regarding Halbouni et al. (2016) corporate governance findings. Hess and Broughton (2014) posited that if the board of directors, chief executive officers, and the entire corporate leadership exhibit a strong ethical behavior, employees might emulate, mitigating fraudulent behavior. Gabbioneta et al. (2013) added that strong tone from the leadership of the organization plays a significant role in fraud prevention.

Contrary to Halbouni et al. (2016), Rikhardsson and Dull (2016) argued that continuous auditing plays an important role in fraud prevention and mitigation. Rikhardsson and Dull described continues auditing as an automated control system that companies design to monitor activities of the firm in an attempt to mitigate fraud risks. Rikhardsson and Dull explored the motivations and impact for adopting continuous auditing in seven businesses. The researchers found that companies with continuous auditing system apply it as transaction verification and process control. This system serves as preventive and detective mechanisms. In contrast, a 2016 study conducted by Fraud Risk Management Taskforce (Fraud Risk Management Guide) indicated that the mere existence of risk control systems does not solve fraud problems, rather, management reevaluation of those programs to test for new fraud threats remains effective approach.

To expand on fraud prevention strategies, I elaborate on three of the Rahman and Anwar's (2014) findings as follows:

Account reconciliation as fraud prevention strategy. Good business practices include avoiding circumstances where only one or two employees are responsible for both accounts reconciliation and write-offs (Nigrini & Mueller, 2014). Nathan Mueller, an employee of ING Reinsurance Company, gave a personal account of the consequences of firms having ineffective control systems. A U.S Federal court sentenced Mueller to a 97-month prison term for embezzling over \$8.5 million in a four-year period. In Mueller's account, frequent reconciliation of accounts should have prevented the embezzlement from occurring, or at least, could have mitigated the damages.

Staff ethics training. Hess and Cottrell (2016) stated that while motivational factors of committing fraud may differ, educating employees about the essence and implications of their moral behavior tends to mitigate fraud risk. Hess and Cottrell listed other internal control factors such as developing a code of conduct that aligns with the firm's mission and vision, establishing a fraud hotline for unanimous reporting of fraud suspicion, segregating duties, requiring mandatory vacation, and monitoring employees' online activities. Rahman and Anwar (2014) cited ethics training as one of the fraud prevention measures aimed at redirecting potential fraud perpetrators to ethical decision making.

Training programs are grounds to reinforce the essence of ethical conduct in the organizations and help to reemphasize on the employees' role in fraud prevention. Othman, Ishak, Arif, and Aris (2014) posited that unethical behavior of employees could affect the firm's profitability and image; therefore, establishing employees' code of conduct might help steer the business affairs towards the right direction. Hess and Broughton (2014) took an unusual dimension by exploring ethical leadership in fraud prevention from the "bottom up" approach.

The researchers emphasized on the essence of inculcating ethics education in the day-to-day operations of the business and making training available to every employee with emphasis on personal accountability. The significance of this approach, according to Hess and Broughton (2014) is the failure of the tone at the top approach, where the top organizational managers live an exemplary life for the lower employees to emulate.

Prospective employees' background checks. Employment background check processes involve past employment verification, criminal conviction checks, drug screening, professional reference checks, and credentials authentication before extending an offer of employment. The extent of the pre-employment background check is based on the nature of business, the existing laws, and the job responsibilities (Zeitler & Luisi, 2016). Kramer (2015) argued that several researchers have found fraudsters as first time offenders; therefore, the question is, how does pre-employment background checks help prevent fraud? Hess and Broughton (2014) asked a similar question stating that since few fraudsters have had a criminal background, how would pre-employment background checks solve fraud problems? The answer to the preceding question is, if employers fail to perform pre-employment background checks, they might be violating local and federal employment laws (Cavico, Mujtaba, & Muffler, 2014), they might not be doing their due diligence in protecting the firm's stakeholders (Petersen, 2015), they might not be mitigating their potential losses, and they might not be protecting their safety (Kramer, 2015).

Even though background checks remain an important tool for fraud prevention, Brody, Perri, and Vav Buren (2015) thought of the process as a pre-employment screening tool. Employers use background checking process to test for honesty and integrity of applicants, as well as select the right candidate for a job (Brody et al., 2015). Opponents of pre-employment

checks, especially criminal background checks, argue that if ex-offenders have already paid their price through the justice system, they must have equal opportunity for employment (Cavico et al., 2014). If ex-offenders cannot obtain employment, the risk of recidivism tends to rise (Pijoan, 2014). While the arguments against criminal background checks seem valid, Cavico et al. (2014) argued that employers have the obligation and legal responsibility to their stakeholders regarding the protection and safeguarding of their assets.

Pijoan (2014) posited that conducting background checks as a pre-employment process is partly based on the idea that past offense is a predictor of future crimes; therefore, employing exoffenders have the tendency of exposing firms to higher fraud risk. Contrary to Pigoan's assertion, Weissert (2016) argued that as of August 2014, an estimated 70 million adults in the U.S had a conviction history, making it difficult to attain a job. If clean background continues to remain a prerequisite for attaining a job, the labor force will diminish with an increase in recidivism (Weissert, 2016).

**Fraud detection.** Stage three of the fraud management lifecycle is detection (Wilhelm, 2004). Detection encompasses activities designed to identify fraud prior to, during, and after occurrence (Wilhelm, 2004). The author posited that detection stage in the FML supports other stages in the cycle by revealing the existence of fraud or potential fraud. Simba and Satyanarayan (2016) posited that fraud detection entails the process of finding the cause of fraud after its occurrence.

Albrecht et al. (2004) suggested the use of proactive fraud detection as a viable detection mechanism. Dilla and Raschke (2015) explored data visualization technique as a financial fraud detection strategy for companies. Dilla and Raschke (2015) converted a large and complex

dataset into graphs to study patterns and relationships of activities for identification and detection of potential fraudulent activities. In the arena of fraud detection, the investigator first propounds a theory or develops hypothesis, test the hypothesis by examining the available data, and employ the use of data mining software such as Excel, ACL, and CaseWare IDEA to determine if fraud has, in fact, occurred (Dilla & Rachke, 2015; Gray & Debreceny, 2014).

Contrary to Dilla and Rachke (2015) and Gray and Debreceny (2014) assertion, Sun, Cui, Yan, Li, and Wei (2015) found human behavior pattern technique inconclusive. Sun et alreiterated that behavior pattern method of detection is characterized by exiguousness and granularity of large data and may be subjected to generating false positive outcome. Based on the possibility of false fraud signal using human behavior patterns in fraud detection, Sun et al. (2015) proposed a hybrid method that combined human behavior patterns and outlier evidence to detect suspected fraud. The results from the experiment indicated a higher accuracy compared to the data visualization method. Verschoor (2014) listed six behaviors likely to signal fraud as, (a) living beyond one's means, (b) exhibiting financial difficulties, (c) having close associations with customers, (d) unwillingness to delegate duties, (e) sudden change in behavior, and (f) family problems. These six behaviors are analogous to Albrecht's (2004) contributions to the fraud triangle theory. Throckmorton, Mayew, Venkatachalam, and Collins (2015) contended that the current resources allocated to curbing fraud are insufficient, nevertheless, financial data, verbal, and non-verbal cues remains helpful.

van Capelleveen et al. (2016) contrasted the data mining analysis assertion suggested by Dilla and Raschke (2015). The researchers argued that because of the large number of Medicare claims submitted on daily basis, the traditional detection analysis method might not be effective;

however, the application of outlier detection method designed to flag unusual claim patterns for further expert evaluation remains the best option. van Capelleveen et al. explored effectiveness of the unsupervised outlier techniques to automatically detect fraud at post payment stage of health insurance. The authors used the technique to test 650,000 health care claims and 369 dentists claims of a single State. Two health care fraud experts analyzed the red flags and found 12 out of every 17 providers susceptible to submitting false health care claims that needed further investigations. The researchers further explained the impact of health care fraud on health insurance and reiterated the need to use all necessary resources for prevention

Similarly, Gray and Debreceny (2014), as well as West and Bhattacharya's (2014) study, outlined the importance of utilizing data mining techniques in detecting trends and outliers from financial transactions for further investigations. By using quantitative dataset, Debreceny (2014) developed a taxonomy characterized by patterns of observed fraud schemes and models to determine the applicability of data mining techniques in every suspected fraud situation. The researchers found data mining an effective technique in detecting possible instance of suspected fraudulent activities but stressed that the effectiveness of the technique depends on its interpretation by the investigator or the auditor. Kose, Gokturk, and Kilic (2015) drew similar conclusion when they investigated the usefulness of data mining software in health insurance fraud detection.

The question is what if the perpetrator divides the claims into several smaller claims to avoid outlier detection? The argument of fraud perpetrators' ability to divide claims into smaller pieces of claims sound logical and consistent with Lin, Chiu, Huang, and Yen's (2015) assertion of examining all elements of the fraud triangle, coupled with data mining technique in fraud

detection. Unlike Dilla and Raschke (2015), Gray and Debreceny (2014), and van Capelleveen et al. (2016), Lin et al. (2015) suggested the use of both quantitative and qualitative analysis in comparison with expert analysis for fraud detection. Similar to Sun, Cui, Yan, Li, and Wei's (2015) proposal about using a hybrid method, coupled with human behavior patterns and outlier evidence, Lin et al. (2015) argument was that a single fraud detection method might not be effective in detecting fraudulent activities.

Fraud detection has become an essential component of audit. Petraşcu and Tieanu (2014) used qualitative research method to explore the role of internal audits in detecting frauds. The authors posited that internal auditors review economic activities of an entity and assess its risk propensity for mitigation. The role of internal audits includes setting appropriate mechanisms to possibly reduce fraud risks. The researchers utilized the fraud triangle as a theoretical framework in designing a risk assessment questionnaire, focused on opportunity, rationalization, and pressure as the initial detection criteria.

Fraud mitigation. Next to fraud detection stage is fraud mitigation. Wilhelm (2004) defined mitigation as processes that are designed to ease the impact of fraud after detection. The author reiterated the importance of the timing of detection as a sine qua non for any fraud mitigation program. Several health care fraud mitigation strategies are already in place. For example, the enactment of the Health Insurance Portability Act (HIPAA) of 1996 allowed for the training of Medicare agency employees to identify and report health care fraud (Byrd et al., 2013). The promulgation of the Omnibus Consolidation Appropriation Act empowered retired accountants and other health care professionals to educate Medicare beneficiaries to identify and report suspected health care fraud (Byrd et al., 2013). The establishment of Health Care Fraud

Prevention and Enforcement Action Team (HEAT) in 2009 by the Department of Health and Human Services (HHS) and Department of Justice, aimed at curbing Medicare/Medicaid fraud (Murrin & General, 2015).

Fraud mitigation strategies are similar, irrespective of the nature of the fraud (Byrd et al., 2013). Despite the several State and Federal tasks force charged with the responsibility of fraud prevention, the improper Medicaid payments for the fiscal year 2015, according to the U.S. Office of Budget and Management, was estimated at \$29.12 million (CMS, 2015). Setting the appropriate tone at the top of the organizational ladder is a fraud risk mitigation strategy (Soltani, 2014). The dissemination of information and instilment of corporate culture, characterized by ethical behavior from the board of directors, chief executive officers, and other executive members of the organization, has the tendency of mitigating fraud risk (Hess & Broughton, 2014; Soltani, 2014). The assignment of seriousness to employees' code of conduct is contingent upon the ethical tone of the organizational leadership (Hess & Broughton, 2014).

Internal auditing as an element of corporate governance is a fraud mitigation strategy. Badea, Elefterie, and Spineanu-Georescu (2014) posited internal auditors assist the organization in designing fraud mitigation strategies through monitoring, controls, and risks assessments. Internal auditors achieve these objectives through recommendations to executive management and the board of directors for effective implementation of appropriate controls (Badea et al., 2014). Internal audits mitigate fraud risk by developing comprehensive fraud mitigation program (FMP) in response to identified fraud risks (Laxman et al., 2014). Laxman et al. (2014) studied internal audit project team designed in 2010 for fraud mitigation.

Laxman et al. (2014) identified five elements based on 2013 Committee of Sponsoring

Organizations of the Treadway Commission's (COSO) control-integrated framework as depicted in figure 1 below. The framework outlined 17 other sub principles of internal controls under these five major principles. Similar to the FML, Laxman et al. (2014) posited that fraud risk management works effectively with all the principles in synchrony.

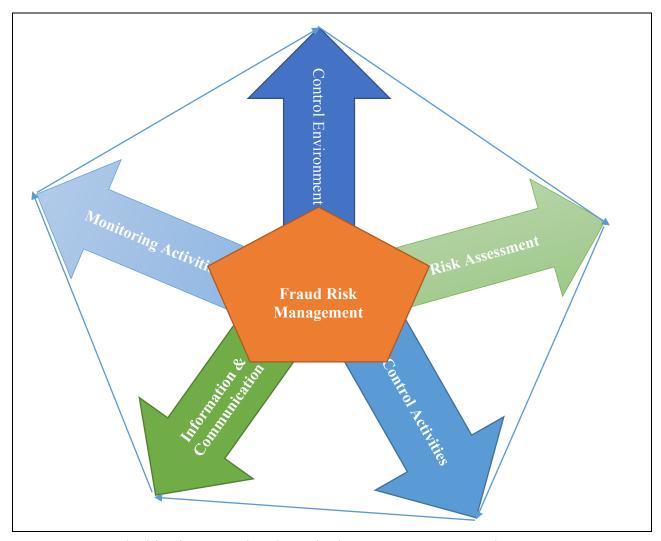


Figure 1. Fraud mitigation strategies, the revised 2013 COSO Framework

Similarly, the Fraud Risk Management Task Force (FRMTF) study organized by the COSO and the Association of Certified Fraud Examiners (ACFE) revealed that firms with solid fraud management system needs to continually upgrade their program. The FRMTF proposed six

fraud risk management strategies: (a) routine performance of fraud risk assessments, (b) design of fraud control policies, (c) monitoring of third party relationships in the supply chain, (d) employees' consistent training regarding fraud awareness, (e) establishment of fraud hotline, and (f) designing of fraud investigation plan. These fraud control strategies are in line with the fraud risk mitigation guidelines designed by the Institute of Internal Auditors (IIA), the ACFE, and the American Institute of Certified Public Accountants (AICPA).

Considering fraud mitigation strategies from different perspectives, Giovino (2015) suggested that companies buy crime insurance to mitigate unprecedented fraud impact on the business. While the insurance coverage idea remains a good mitigation concept, the problem is, the insurer might require proof of fraud and extensive documentation of assets loss (Giovino, 2015). Another issue with the crime insurance claim rests on the reputational loss associated with fraud reporting. Williams and Kollar (2013) argued that despite the damage that fraud causes, businesses, especially small businesses, fail to report fraud for fear of reputational loss. Davis and Pesch (2013) find fraud as hidden crime that remains unreported.

**Fraud analysis.** Fraud analysis is the fifth stage of the FML. With fraud analysis, investigators seek to understand the extent of the fraudulent activities, irrespective of deterrence, detection, prevention, and mitigation techniques (Wilhelm, 2014). Fraud analysis commences from auditing, followed by risk management (Power, 2013). The basic ideology of fraud analysis is the identification of critical vulnerabilities and definition of management responsivity for risk assessment (Padgett, 2015). An investigator could use data mining technique to extract and analyze the data to avoid future fraudulent activities (Rathore, Shipra, Kumar, & Deepak, 2015).

Joudaki et al. (2014) found traditional method of detecting health care fraud and abuse

inefficient and time-consuming. The researchers performed a literature review to explore the effectiveness of using statistical method and data automation as fraud analysis and detection criteria. In their analysis, they found data mining technique as an effective mechanism for fraud detection. Joudaki et al. and Padgett (2015) seemed to agree on the use of data mining technique for fraud analyses and detection. However, the problem with the data mining technique is the voluminous of the data and the complexity of the data interpretation (Shafique, Majeed, Qaiser, & Ul Mustafa, 2015). Health care providers in the U.S submit over five billion claims a day and if fraud examiners were to manually detect fraud, it may almost be impossible to do so. Van Capelleveen, et al. (2016) argued that investigators use fraud analysis software and outlier detection techniques to decipher through the suspicious data for prompt detection.

Methods of business operations have changed, so are fraudulent techniques. For this reason, Hipgrave (2013), Shafique et al. (2015), and van Capelleveen et al. (2016) are of the view that methods of fraud detection and analysis must also change. The researchers posited that fraud analysts must use complex analytical software to combat fraud. Hipgrave argued that this new business environment characterized by unconventional fraud schemes have compelled business leaders to design smarter tools in the prevention. Hipgrave suggested using data intelligence analytics to combat fraud.

Policy implementation. The tone at the highest level of the organizational ladder might be a fraud management strategy; the weakness the tone at the top of the organizational ladder, the higher the possibility of illegal activities (Gabbioneta, Greenwood, Mazzola, & Minoja, 2013). Gabbioneta et al. (2013) examined the relationship between institutional environment and corporate illegality. The researchers found an influence of corporate environment on corporate

illegality. Additionally, Alzeban (2015) used Hofstede's theoretical framework to determine the correlations between corporate or organizational culture and the quality of internal audit in an attempt to curb fraud. Alzeban found power distance inversely correlated to audit quality; thus, existing organizational culture and manager/employee interactions could influence organizational behavior.

Similarly, Davis and Pesch (2013) used an agent-based model to study fraud dynamics in organizations. The researchers found that an organization with a swift communication system between the top and the lower-level employees with emphasis on ethical behaviors, tend to have a positive impact on potential fraudsters. With better relationships between both parties, employees are better informed on what constitute fraud (Davis & Pesch, 2013). Callaway Dee, Durtschi, and Mindak (2014) argument about corporate culture dwelt on whether employees are pressurized to meet specific performance goals, whether the firm has open communication policies, or intimidated to freely communicate with management?

Considering other similar factors that contribute to corporate failures, Soltani (2014) presented six common characteristics, analogous to that of Davis and Pesch (2013), Alzeban (2015), and Gabbioneta et al. (2013). These factors include: (a) corporate ethical environment and management misbehavior, (b) the nature of the tone at the top and the kind of executive leadership, (c) market pressure and the zeal of staying competitive, (d) accountability, control mechanisms, audit process and corporate governance, (e) executive personal interest, compensation package and bonuses, and (f) fraudulent financial reporting and earnings management. These factors, according to Soltani, contributed to the failure of Enron, WorldCom, HealthSouth, Parmalat, Royal Ahold, and Vivendi Universal.

Fraud investigation. The U.S. Federal government has several anti-fraud laws governing the Medicare/Medicaid program. These laws include False Claims Act (FCA), Anti-Kickback Statute (AKS), Physician Self-Referral Law (Stark Law), Social Security Act, and United States Criminal Code (Department of Health and Human Services [DHHS], 2014). These laws give the U.S government the power to investigate suspected Medicare/Medicaid frauds, prosecute perpetrators, or seek restitutions. The creation of the Program Integrity Command Center under the auspices of the CMS, sought to evaluate and investigate suspected Medicare/Medicaid fraud cases through collaborative efforts of experts from the Federal Bureau of Investigations (FBI), the Office of Inspector General (OIG), and other law enforcement agencies (DHHS, 2014).

Fraud investigation stage prepares the grounds for restitution, prosecution, and to possibly, halt fraudulent activities (Wilhelm, 2004). The Greene and Marcus method for forensic accounting investigation suggest four steps for fraud investigation engagement: obtain an understanding of the business, brainstorm and hypothesize, plan the investigation, and execute the plan (Callaway et al., 2014).

**Prosecution.** The prosecution or punishment stage in the FML aims at deterring other fraudsters or potential fraudsters, seeks restitution, and recover lost resources (Wilhelm, 2004). In the initial stage of fraud investigation, law enforcement officers confer with accountants for technical support while gathering evidence for prosecution (Barrera & Elam, 2015). Prosecution stage aims at deterring, rehabilitating, incapacitating, restoring, and the act of retribution (Wilhelm, 2004). The magnitude of Medicare/Medicaid fraud since its inception has called for Federal and State laws, aimed at prosecuting fraud perpetrators. These laws include (a) the Criminal Health Care Fraud Statute, (b) the False Claims Act, (c) the Anti-Kickback Statute, (d)

the Exclusion Statute, and (e) the Physician Self-Referral Law.

The Criminal Health Care Fraud Statute. The Criminal Health Care Fraud Statute is a U.S. federal health care and abuse law promulgated to prosecute and fine any person or entity that defraud or attempt to defraud a health care program (CMS, 2014). Violation of this statute is punishable by imprisonment of up to 10 years and a fine of \$250,000.00 (CMS, 2014).

False Claims Act [31 U.S.C. § § 3729-3733]. Congress originally enacted the False Claims Act (FCA) in 1863 (U.S Department of Justice [DOJ], 2011). The essence of the original FCA sought to protect the Union Army from unscrupulous suppliers and contractors who claimed to have supplied goods or provided services to the government (DOJ, 2011). Since 1863, the U.S Federal government has amended the FCA several times; especially, in 1986, the fine for false claims was increased from \$2,000.00 to \$5,000.00 and then to \$10,000.00 per claim (DOJ, 2011). According to the U.S Department of Justice, the FCA has been amended at least three times since the major amendment in 1986.

The False Claims Act makes it illegal for providers to submit false Medicare/Medicaid claims for payment (CMS, 2014). According to the CMS, knowing or deliberate ignorance of, or reckless disregard of the truth pertaining to filing a false claim, is punishable by fines of up to three times of the damages suffered by the government, plus \$11,000.00 per claim. Johnston (2015) stated that the U.S government had recovered over \$27 billion dollars between 1987 and 2013.

The *qui tam* provision of the FCA, as amended in 1986, allows civilians or relators to file lawsuits against suspected fraudsters on behalf of the government (Johnston, 2015). These relators are entitled to a maximum of 30% of the recovery, should the suit becomes a success

(Johnston, 2015). The amendment of the FCA in 1986 made it lucrative and contributed to the exponential growth of FCA suits (Krause, 2013). According to the OIG, the court seals a qui tam complaint about 60 days while the government investigates. The government may decide to proceed with the investigation or decide to discontinue the lawsuit (OIG, 2016).

Anti-Kickback Statute [42 U.S.C. § 1320a-7b(b)]. Rewarding individuals or organizations for referring a person to Medicare/Medicaid services is illegal, under the Anti-Kickback Statute (AKS). The U.S Congress enacted the original AKS in 1972 to prohibit payment of kickbacks, bribes, or rebates for the referral of Medicare/Medicaid patients (Mannava, Bercovitch, & Grant-Kels, 2013). The original AKS drew several controversies which provoked an amendment in 1977 and in 1980 to include prosecution, punishment, or finding individuals or organizations for exchanging anything of value, to reward or influence the referral of patients for federal health care programs (Krause, 2013). According to the OIG, violating AKS is punishable by jail terms, exclusion from federal health care program, and or fines of up to \$50,000.00 per kickback, in addition to three times of the kickback amount.

Exclusion Statute [42 U.S.C. § 1320a-7]. Under this federal Statute, the OIG states: individuals and entities who are found guilty of (a) Medicare/Medicaid fraud, (b) patients abuse or neglect, (c) felony convictions for other health-care-related fraud, theft or other financial misappropriation, and (d) felony conviction of illegal manufacture, distribution, prescription, or dispensing of controlled substances, are excluded from participation in all federal health care programs. Based on this provision, approximately 1,337 health care providers lost their provider license to Medicare/Medicaid fraud in the fiscal year 2014 (Murrin & General, 2015).

Physician Self-Referral Law [42 U.S.C. § 1395nn]. The U.S Congress enacted Physician

Self-Referral Law (Stark Law) to prevent physicians from referring patients requiring certain specific health services to entities with which the physician or an immediate family has a financial interest (Adashi & Kocher, 2015). These designated services, according to the OIG, include (a) Clinical laboratory services, (b) therapy services, (d) imaging services, (e) medical supplies, (f) home health care services, and (g) inpatient and outpatient hospital services. The proliferation of out-of-hospital care and the discovery of new medical technologies triggered the financial involvement of physicians in mitigating their losses from the competitive marketplace (Diamond, 2014). Penalties for violating the Stark law include fines and exclusion from federal health care programs (CMS, 2014).

The opponents of the Stark law argue that the doctors' intent to refer patients requiring certain specific health services to entities they are familiar with is to facilitate authorization, scheduling, and quick services without necessarily having any criminal intent (Adashi & Kocher, 2015). Most physicians are committed to providing quality and affordable services to patients within a reasonable period in a coordinated fashion (Kapoor, 2015). On the contrary, proponents of Stark law are of the view that to present sanity in the medical profession, physicians must endeavor to avoid conflict of interest that might compromise their ethical responsibilities to the patients they serve (Adashi & Kocher, 2015). To address Adashi and Kocher's argument, O'Gara (2015) posited that rather than repealing the Stark Law, its successful application allows for the provision of patient-centered services in a coordinated and convenient manner.

In conclusion, considering the punishment leveled against violators of these health care fraud laws, one might be tempted to assume its effectiveness in fraud deterrence, prevention, detection, and mitigation; however, Mohdali, Isa, and Yusoff (2014) argued that threat of

punishment does not wholly influence behavior. Likewise, Skatova and Ferguson (2013) confirmed the threat of punishment to be ineffective in deterring illegal behaviors compared to actual punishment. In a study conducted by Cheng et al. (2014), the researchers concluded that fraud perpetrators do not think so much about the punishment associated with fraud before deciding to commit or not to commit.

#### **Transition**

Section 1 of this qualitative case study highlighted the history of Medicare/Medicaid program and the various enhancement projects since its inception in July 1965 until 2016. In line with the FML, I reviewed the academic literature to explore strategies some licensed and certified home health care business managers might use to mitigate Medicare/Medicaid fraud risk. Included in these strategies were internal controls, effective corporate governance, continues auditing, training of employees, as well as educating Medicare/Medicaid beneficiaries on fraud identification and reporting.

In Section 2 of this study, I described the researcher's role and the data collection and organization techniques. The purpose of this section was to describe the data collection techniques and instruments, as well as an explanation of my techniques to ensuring research quality.

In Section 3, I provided a detailed description of the research methodology, data collection processes, and analyses. I provided a detailed description of the interview process as well as the findings from the research. I indicated the applicability of the research findings to professional practice and the positive effects on social change. I further outlined my recommendations based on the findings and for future research.

### Section 2: The Project

Despite the growing concern to intensify efforts in curbing health care fraud and abuse, the problem persists (CMS, 2015; Hampton, 2015), causing an increase in the cost of healthcare delivery in the U.S. In this section, I highlighted on the rudiments of the research design, a discussion of the research method and design, as well as the data collection processes and analyses. This section also includes a discussion of the roles of the researcher and the participants, and how to ensure reliability and validity of the study.

## **Purpose Statement**

The purpose of this qualitative multiple case study was to explore strategies some licensed and certified home health care business managers use to mitigate Medicare/Medicaid fraud risk. The target population was licensed and certified home health care business managers located in Franklin County, Ohio who had developed and implemented fraud risk strategies to mitigate Medicare/Medicaid fraud risk. The implications for social change include (a) the potential to determine effective and efficient strategies and derivative processes to mitigate Medicare/Medicaid fraud risk and (b) avoid fraud cost to patients, families, and communities.

#### Role of the Researcher

My role as a researcher was a scholar-practitioner collecting, analyzing, and presenting data in a logical manner. Studying multiple cases from different perspectives is robust (Yin, 2014) and depends on the researchers', as well as respondents' epistemological traditions (Dasgupta, 2015). I explored multiple bounded fraud mitigation strategic systems from the viewpoint of the research participants, but not as an expert in the field of fraud management. Researchers' roles include facilitating interviews to gain an in-depth knowledge of a

phenomenon and experiences of participants and listening effectively for accurate interpretation (Roulston & Shelton, 2015).

My current occupation as a State Fiscal Auditor of government grants did not interfere with this study since I have no conflict of interest with the Medicare/Medicaid program.

However, as a former home health care worker, I understood the possibility of employees reporting hours worked, without physically present at their assigned work locations. I had no prior working relations with any of the research participants. Rather, I recognized my personal bias because of my student membership with the Association of Certified Fraud Examiners and my passion for helping in fraud reduction.

To mitigate my personal biases, I followed the research interview protocol (see Appendix A). Using interview protocol allows for consistency, comparison, and helps identify data saturation (Wang, Xiang, & Fesenmaier, 2014). Additionally, researchers mitigate their biases regarding prior knowledge and experiences by focusing on the responses of respondents (Doody & Nooman, 2013). Consistent with Doody and Nooman's assertion, I used transcript validation and review technique to have respondents read the transcript for an avoidance of any misinterpretation.

As a researcher, I completed an online ethical education and obtained a certificate of completion about the Belmont Report. The Belmont Reports are federal ethical standards, designed to protect human subjects from social, physical, or psychological risks as well as the violation of privacy and confidentiality (Hébert et al., 2015). Promulgated by the National Research Act of 1974, Belmont Report is a federal research standard for the ethical treatment of human subjects that are enforced by the various university institutional boards (Hébert et al.,

2015). In my role as a researcher, I followed the ethical standards and guidelines by respecting the rights and confidentiality of the participants. Adhering to the provisions of the Belmont report is indicative of ensuring respect for research participants, maintenance of justice, and ethical standards governing research involving human subjects (Brakewood & Poldrack, 2013).

### **Participants**

Research participants included business owners, business managers, and chief executive officers of three licensed and certified home health care businesses located in Franklin County, Ohio with direct experience of fraud mitigation strategies. Yin (2014) posited that participants of qualitative studies must have knowledge and experience about the research question. To select participants with this experience, I first searched and filtered the health care provider database of the Ohio Department of Developmental Disabilities (ODODD) to select a sample of the population. This provider database contains information such as the name of the company, contact information, number of years in business, and geographical area of all licensed and certified home health care businesses in Ohio. Selecting potential interview participants from a database did not indicate the demonstration of development and implementation of fraud risk strategies. Frels and Onwuegbuzie (2013) suggested that interview participants must represent the research population. Interview participants must have the requisite knowledge about the subject being investigated (McIntosh & Morse, 2015).

Strategies for gaining access to potential research participants and setting the stage for interview protocol included initial telephone calls to the potential research participants. From these initial telephone calls, I introduced myself, stated the purpose of the call, and tried to build initial working relations with the potential participants. Consistent with Doody and Noonan's

(2013) assertion, maintaining interactions with research participants promotes working relations. Marshall and Rossman (2014) contended that gaining access to research participants and building a relationship is a continuous process. I scheduled face-to-face pre-interview with participants to further explain the benefits of participation, confidentiality agreement, and obtained letters of cooperation and data use agreement for IRB's evaluation. Study participants participate in research interviews when the subject is attractive to them (Cacari-Stone, Wallerstein, & Minkler, 2014).

## **Research Method and Design**

The choice of research method depends on how researchers collect data, the coding methods, analysis, and interpretation of the data collected (Fassinger & Morrow, 2013). Research design aids the researcher to connect the theoretical framework with the central research question and the research method (Kahlke, 2014).

### **Research Method**

The research method for this study of mitigating Medicare/Medicaid fraud risk was qualitative. The commonly applied research methods are qualitative, quantitative, and the mixed methods (Fassinger & Morrow, 2013; Frels & Onwuegbuzie, 2013; Long, 2014; Zohrabi, 2013). Consequentially, using qualitative research method to explore strategies to mitigate fraud risk allowed for participants' input. Bernard (2013) posited that using qualitative research approach allows participants to provide a detailed description of a process within real-world settings. Researchers use a qualitative method when they have a pragmatic and interpretive worldview and optimistic that the method will help address their research question (Yin, 2014).

McLaughlin, Bush, and Zeeman (2016) described quantitative research method as a research approach characterized by numeric data in explaining a phenomenon in a controlled and standardized environment. Quantitative researchers determine whether specific variables influence or predict an outcome and examine relationships among variables (Cokley & Awad, 2013; Mertens, 2014). The mixed research method encompasses both qualitative and quantitative research methodologies and provides a more holistic approach to findings (Long, 2014; Zohrabi, 2013). While both quantitative and mixed method remains viable, exploring strategies for Medicare/Medicaid fraud mitigation from the perspective of respondents did not require hypothesis testing or statistical analysis; therefore, both quantitative and mixed method were not suitable for this study.

## **Research Design**

In this study, the preferred research design was a case study. Qualitative research is comprised of options that include narrative, ethnography, phenomenology, and case study designs (Bristowe et al., 2015; Erlingsson, & Brysiewicz, 2013). With narrative design, a researcher studies the biography of an individual (Safari & Thilenius, 2013). Narrative design was not appropriate for this study since I did not examine Medicare/Medicaid fraud perpetrators. Ethnography is a research design for exploring the way of life of a group of people (Bristowe, at al., 2015; Erlingsson, & Brysiewicz, 2013). With ethnography design, researchers describe and interpret language, values, and beliefs through observation, discussions, and emersion in the culture (Bristowe et al., 2015; Erlingsson, & Brysiewicz, 2013). Ethnography was not appropriate for this study because I did not examine the culture of a people. Phenomenology is a research design for exploring how an individual's experiences make sense of the world around

them (Erlingsson & Brysiewicz, 2013; Lewis, 2015). With phenomenological design, researchers explore experiences of research participants for a deeper understanding of a special phenomenon (Bristowe et al., 2015).

The appropriate research design for this study was case study because using a case study design provided me with the opportunity to study and understand the Medicare/Medicaid fraud mitigation process in detail within the context. Case study researchers explore real-world situations and apply the decisions or processes in perspective (Yin, 2014). I continued the interview process until I attained data saturation. Researchers reach data saturation when there is enough information to replicate the study in such a manner that additional coding or theme formulation might no longer be necessary (Fusch & Ness, 2015).

## **Population and Sampling**

The population for this study comprised of licensed and certified home health care business managers with businesses located in Franklin County, Ohio. The choice for this population was based on the proliferation of certified home health care businesses around Franklin County area. Interview participants included six business managers and three owners and chief executive officers (CEOs) of licensed and certified home health care businesses who had demonstrated the development and implementation of fraud risk strategies to mitigate Medicare/Medicaid fraud. The criteria for selection involved utilizing purposive sampling methodology to search and filter the ODODD database for potential respondents. Purposive sampling is characterized by selecting participants with knowledge and experience about the subject under investigation (Bristowe et al., 2015; Erlingsson & Brysiewicz, 2013). To confirm

that the sample met the research criteria of development and implementation of fraud mitigation strategies, I verified participants' receipt of an unqualified audit report issued by the ODODD.

To achieve data saturation, I used snowball sampling as a technique to recruit additional participants (interviewees) for the study until the themes became repetitive, with no relevance in new information. Bernard (2013) described snowball sampling as a qualitative research sampling technique where interviewer asks from current interviewees about other potential research participants. I achieved data saturation at the completion of nine interviews. Researchers reach data saturation when there is enough information to replicate the study in such a manner that additional coding or theme formulation might no longer be necessary (Fusch & Ness, 2015).

#### **Ethical Research**

Addressing ethical issues surrounding research allows cooperation, trusts, and integrity (Adams et al., 2013). I provided research participants with an informed consent form for their review and autograph. The information on this form include explanations pertaining to the objectives of the study, ethical concerns of the research, the benefits of research participation, and the right to withdraw from participation at any time through verbal or written notification to me. Researchers are required to incorporate ethical vocabulary in the research process by adhering to the principles of respect and trust that build interviewer-interviewee relationships (Alby & Fatigante, 2014).

Research participation was voluntary and did not require offering incentives or compensation. Voluntary informed consent is desirable to avoid coercion and undue influence (Dekking, van der Graaf, & van Delden, 2014). To ensure adequate protection of participants' privacy, I assigned codes to participants' names and stored all data and hard copies of research

materials in a safe location for at least 5 years before destruction. The IRB is strict about ensuring the protection of the rights and welfare of human subjects as research participants (Cook, Hoas, & Joyner, 2013). Additionally, I password-protected all electronic data files to protect participants' privacy.

As part of Walden University's Institutional Review Board (IRB) research guidelines, researchers could only collect data after receiving approval of their proposal. I collected data only after obtaining approval of my research proposal. The Walden IRB approval number is 02-03-17-0275249 and the approval expires on February 2, 2018. The role of the IRB includes ensuring conformity to required research criteria, applicable laws, and institutional guidelines and practices (Szanton, Taylor, & Terhaar, 2013; Tsurukiri, Mishima, & Ohta, 2013). Before obtaining approval for my proposal to collect data, I completed a National Institutes of Health (NIH) web-based training course to obtain a certificate of confidentiality. This certification was indicative of my knowledge about the rules governing research involving human subjects.

#### **Data Collection Instruments**

I served as the primary data collection instrument while exploring strategies licensed and certified home health care business managers used to mitigate Medicare/Medicaid fraud risk. In qualitative research, the primary data collection instrument is the researcher collecting data through interacting and intermingling with the respondents (Houghton, Casey, Shaw, & Mulphy, 2013). I conducted semistructured interviews to collect data. Additionally, I reviewed company's policies and procedures to verify strategies participants used to mitigate Medicare/Medicaid fraud. The research process is a data collection instrument (Seidman, 2013). Semistructured interview questionnaire allows for participants' detailed explanation of a process (McIntosh &

Morse, 2015). Semistructured questionnaire serves as a guide to avoid deviating from the subject matter (Seidman, 2013).

The interview process followed the required interview protocol (see Appendix A). Using acceptable protocol designed for case study research ensures reliability of the data (Yin, 2014). Doody and Noonam (2013) suggested that using interview protocol ensures consistency, structure, and reliability. In the interview protocol, I addressed participants' rights to review the consent form before signing, the right to withdraw from participation at any time, notice of recording respondents' answers, and participants' rights to review the transcripts. I used member checking and document review to increase the accuracy of the data. Member checking involves allowing respondents to review transcript to ensure accuracy of the data and mitigate the possibility of misinterpretation (Wang et al., 2014)

### **Data Collection Technique**

With the interview protocol as a guide, I collected the data using face-to-face interview technique to address the central research question: what strategies do some licensed and certified home health care business managers use to mitigate Medicare/Medicaid fraud risk? Unlike telephone interviews, face-to-face interview process promotes visual cues such us, nonverbal data collection, body language, and minimizes distortion (Irvine, Drew, & Sainsbury, 2013). Unlike telephone interviews, the face-to-face interview process is characterized by personal contact and rapport building; this is typical with qualitative research method (Vogl, 2013). However, the drawback of using face-to-face interview technique is the travel cost involved (Vogl, 2013).

The interview process included a brief introduction to set the stage. The use of interviews

as a data collection technique allow respondents to share privileged information about a process (Dilshad & Latif, 2013). Transcribing qualitative data allows for data validity (Morse et al., 2014). My actions at the stage of the interview included watching for non-verbal cues as respondents answered the questions, paraphrased the questions as needed, and asked follow-up probing questions as I obtained a detailed explanation of the fraud mitigation strategies.

Qualitative research interviews involve gathering detailed information, eliciting stories, learning about meanings, emotions, experiences, and building relationships (Rossetto, 2014). As I wrapped-up the interview with my expression of appreciation, I asked respondents to review the interview transcript for confirmation and appropriate wording. Ten days after the interviews, I presented research participants with the synthesized data to offer them the opportunity to clarify or expand their viewpoints.

#### **Data Organization Technique**

I used Nvivo 11 software to organize and analyze the research data. Nvivo software is a narrative analytical software researchers use for data organization and analysis (Franzosi, Doyle, Mclelland, Putnam Rankin, & Vicari, 2013). The use of data analytical software in qualitative research allows efficiency and accurate retrieval of coded data for analysis (Woods, Paulus, Atkins, & Macklin, 2015).

I assigned codes to participants using P1 to denote data from the first interview participant and P2 from the second participant until I attained data saturation. I organized the research documents by folders labelled with codes rather than names for the protection of participants right. For the electronic data, I created a folder titled *research data* on a password-protected flash drive, and stored, research transcripts, and other electronic data for safe-keeping.

I am saving these folders and the flash drive in a secure location for at least 5 years before destruction. Destroying research data before malicious use by others help maintain confidentiality (Leong, Bahl, Jiayan, Siang, & Lan, 2013).

## **Data Analysis**

Qualitative data analysis process involves assembling, structuring, and assigning meaning to the collected data (Hilal & Alabri, 2013). The process of data analysis, according to Yin (2014), involves: (a) gathering of data, (b) separating the data into distinct groups, (c) regrouping the data into common themes, (d) evaluating the themes, and (e) composing a report based on the results of the analysis. I analyzed the data gathered through interviewing nine research participants and reviewing peer-reviewed articles and company policies using Nvivo 11 software. Nvivo software is a narrative analytical software researcher's use for data organization and analysis (Franzosi, Doyle, Mclelland, Putnam Rankin, & Vicari, 2013). Drawing data from multiple sources enhance researchers' insight into the phenomena being studied from different perspectives, as well as ensuring methodological triangulation (Burau & Andersen, 2014).

Qualitative researchers use methodological triangulation when they use more than one method to study a phenomenon (Burau & Andersen, 2014).

I used 10 logical and sequential process to analyze the data by (a) reread the interview to understand the content in context, (b) narrating the interview transcript to the interviewee for validation, (c) filtering the data and extracting the major concepts as they relate to the overarching research question, (d) fitting the extracted concepts into the research framework, (e) performing forward-backwards and cross-case analysis to facilitate identification and mapping of common themes with the conceptual framework, (f) outlining a list of the concepts, (g) rereading

the interview and assigning codes to all the concepts and ideas using P1 to denote the first interview participant and P2 for the second participant until attained data saturation after interviewing the ninth participant, (h) entering the narratives with its corresponding themes and codes in the Nvivo 11 software database for analysis, (i) extracting findings from the Nvivo 11 software analysis, and (j) reporting the results by sharing with participants and the other stakeholders after approval.

### Reliability and Validity

## Reliability

Reliability of research is characterized by consistency, trustworthiness, and replicability (Fan, 2013; Zohrabi, 2013). To ensure the reliability of this study, I used a member-checking technique, peer-reviewed journal, and data triangulation. Member-checking technique seeks to mitigate possible misinterpretation because the interviewee reads the interview transcripts for confirmation (Harvey, 2015). Allowing respondents to review the interview transcript and assessing whether the created themes and concepts address the central research question have the tendency of ensuring reliability (Noble & Smith, 2015).

The consistency of applying the standardized data analytical procedures and the appropriate strategies in mitigating researchers' biases ensures reliability (Noble & Smith, 2015). I used Nvivo 11 software for the data analysis. Nvivo is an acceptable qualitative analytical program designed to help qualitative researchers to manage and improve the quality of qualitative research data (Hilal & Alabri, 2013). I mitigated my personal biases by following the standardized research interview protocol.

### Validity

Research validity refers to the accuracy of findings as a reflection of participants' perspectives (Lakshmi & Mohideen, 2013; Noble & Smith, 2015). To ensure precision of findings as a true reflection of the data, I interviewed respondents until I achieve data saturation. Researchers reach data saturation when there is enough information to replicate the study in such a manner that additional coding or theme formulation might not result in new findings (Fusch & Ness, 2015). Fusch (2015) synthesized the literature to explore how qualitative researchers reach data saturation. The researcher found that when qualitative researchers ask all participants the same questions, data saturation arises when collecting new data and creating new codes and new themes tend to duplicate the existing data. I achieved data saturation after the ninth interview.

Credibility. Researchers establish credibility of a study through member checking (Welch, Grossaint, Reid, & Walker, 2014), data triangulation (Firmin, Bouchard, Flexman, & Anderson, 2014), interview protocol (Wang, Xiang, & Fesenmaier, 2014), and respondents' review of the transcript (Morse et al., 2014). Therefore, to establish credibility for this study, I followed the standard interview protocol (see Appendix A) and offered respondents the opportunity to review the interview transcript.

Confirmability. Researchers enhance confirmability of a study when they use methodological triangulation (Gorissen, van Bruggen, & Jochems, 2013), member checking (Welch, Grossaint, Reid, & Walker, 2014), and subject the study through IRB quality assurance process. To achieve member checking quality criteria, I presented participants with the findings of the study for their confirmation. I used different data collection methods such as interviews and respondents' documents examination. Additionally, I adhered to the IRB quality assurance

and approval process.

**Transferability.** Determining the transferability of a study rests on other researchers (Marshall & Rossman, 2016) with a stake in this study. However, my role as a researcher was to follow the standard protocol for conducting quality research. Thorough documentation of data collection and analysis process remained my responsibility as a researcher.

## **Transition and Summary**

In Section 2, I presented the methods, strategies, and steps for conducting this doctoral study. This section included a discussion of my role as a researcher, selection criteria of research participants, research method utilized, research design, population and sampling techniques, ethical consideration, data collection instrument and techniques used, data analysis process, and reasonable assurance of validity and reliability of the study.

In Section 3 of this study, I will present my findings and identify the study's applicability to business practice and its implication for positive social change. Additionally, I will offer my recommendations for further studies, provide an overall reflection, as well as offer my concluding statement. My presentation of the findings will be based on a review of the literature, examination of respondents' documents, and analysis of the interview data as a reflection of my goal for exploring strategies some licensed and certified home health care business managers use to mitigate Medicare/Medicaid fraud risk.

#### Introduction

The purpose of this qualitative multiple case study was to explore strategies some licensed and certified home health care business managers use to mitigate Medicare/Medicaid fraud risk. Healthcare fraud is still significant, despite the application of modern fraud prevention and detection techniques (Hampton, 2015), causing an increase in the cost of healthcare delivery in the United States (Van Capelleveen et al., 2016). The fraud reduction campaign demands the collaborative efforts of all stakeholders of the healthcare system.

Findings from this study suggest that healthcare service providers could intensify their efforts by considering every aspect of their operations as vulnerable to fraud risk while remaining professionally skeptical. Findings from this study include (a) maintenance of integrity and strong culture, (b) training and educating both staff and clients about fraud reporting processes and the consequences of fraud (b) rotating staff on regular basis, (c) performing fraud risk assessments to evaluate objectives against actuals and addressing deficiencies, (d) remote timekeeping and monitoring system, and (e) compensating shift leaders to coordinate activities in the clients' residences. Research participants conceptualized that viewing Medicare/Medicaid fraud through the lens of its adverse effects on health care service providers might help draw the attention of the business community.

## **Presentation of the Findings**

Nine participants from three licensed and certified home healthcare companies participated in the research to address the overarching research question: what strategies do some licensed and certified home health care business managers use to mitigate Medicare/Medicaid fraud risk?

Through Nvivo 11 software data analyses, five themes emerged. The themes are (a) control environment, (b) control assessment, (c) control activities, (d) information and communication, and (v) monitoring activities. Figure 2 below represents the emerged themes identified through the data analysis process.

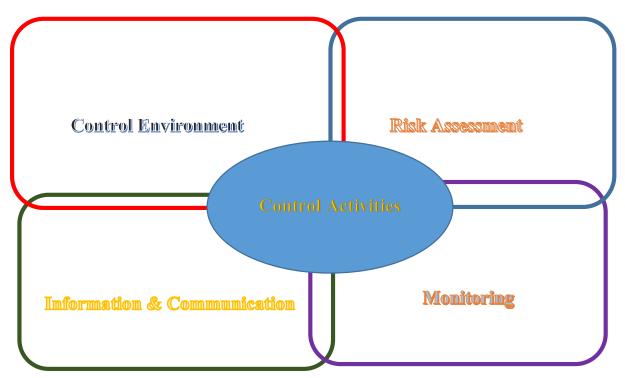


Figure 2. Four major themes

#### **Theme 1: Control Environment**

The first identified theme was control environment. Control environment is a set of standards, processes, and structures that provide a framework for the continuity of internal control system (Rizaldi, 2015). Six out of nine (67%) research participants (P1, P2, P3, P5, P6, and P7) indicated that maintaining the integrity and ethical values ensure sustainability of the firm. Integrity and ethical values are characterized by setting the right tone at the top, establishing standards of conduct, evaluating employees' performance based on the set standards, and correcting deviations in a timely fashion (Rizaldi, 2015). This theme emerged

because 67% of the respondents were of the view that home health care businesses are highly regulated and require strict adherence to the rules governing Medicare/Medicaid program.

The diagram below shows how many times participants used the word integrity as an attribute of interest.

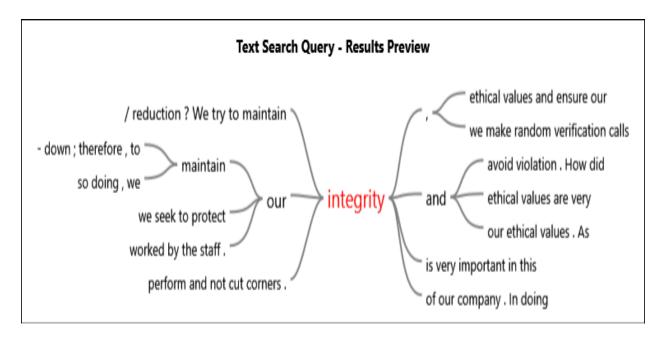


Figure 3. Frequency of integrity appearance

These participants were of the view that their companies' sustainability is dependent on building a high level of integrity and ethical values. The participants' use of "integrity" and maintenance of ethical value is consistent with COSO control fraud risk management framework. The other aspect of control environment deals with setting the appropriate tone at the top of the organizational ladder. Two research participants (P5 and P9) expressed similar opinions concerning setting the right deterrence system, reporting system, and the top-bottom flow of information. Both participants indicated their persistent disciplinary system, as well as their dialogue with both staff and clients, seemed to have become their organizational culture. In contrast, Rubasundram (2015) argued that the perceived misconception about good governance

as a fraud mitigation strategy could be deceptive. Having a good governance or appropriate tone at the top may not necessarily mitigate fraud risk.

In alignment with the first stage of Wilhelm's fraud management lifecycle theory, creating the fear of consequences through punishment or discipline is an effective fraud management strategy. Armenter and Mertens (2013) contended that punishment or the fear of it influences behavior. Six or 67% of the participants conceptualized that fraud is imminent, irrespective of the nature of internal controls. However, the providers' actions or inactions after fraud detection are even more important than what might have caused the fraud. These individuals explained that if employees are found circumventing timesheet to their benefit, for instance, what the management of the company does after the discovery is more important than the actual fraud.

#### Theme 2: Risk Assessment

The second identified theme dealt with the modalities of fraud risk assessments. Two of the participants (P1 and P9) expressed their random appearance at clients' residences as a test of control. These two participants explained that in their respective companies, their employees are aware of their unannounced visits at their remote posts, keeping them on task. This risk assessment assertion confirms one of Cressey's (1953) elements of fraud. Cressey contended that when an opportunity arises resulting from weak controls or lack of oversight, fraud likely occurs. The risk assessment process involves specifying objectives with clarity to enable identification of weaknesses (Rubasundram, 2015).

Figure 4 below shows the frequency of the word "risk" from the research responses.

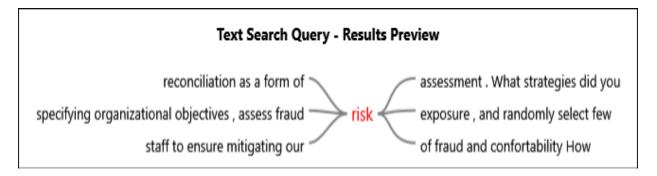


Figure 4. Frequency of risk appearance

During the interview process, "risk assessment" reoccurred to emphasize on periodic assessment of controls to evaluate its effectiveness. Quotes from participants include:

- (From P1) "As a CEO, I randomly call clients' residence to verify if assigned staff is at post. By so doing, I also secure the opportunity to interview the client to address any concerns or questions they might have. This serves as our risk assessment".
- (From P9) "We take a conscious effort specifying organizational objectives, assess fraud risk exposure, and randomly select few residences for testing and reconciliation of hours worked and billing data."

Fraud risk assessment involves examination of weaknesses and designing appropriate strategies for addressing vulnerabilities. Anwar (2014) conducted a study to determine the effectiveness of fraud prevention and detection programs in Malaysian banks. Findings from Anwar's study suggested account reconciliation as one of the fraud prevention and mitigating strategies. Consistent with the second stage of the fraud management lifecycle, Mansor (2015) argued that designing fraud prevention is less expensive. Mansor's argument was that preventing fraud is better for businesses than using resources to track and investigate fraud.

#### **Theme 3: Control Activities**

Business leaders can mitigate employee-related fraud by segregating duties and requiring annual leave (Hess & Cottrell, 2016). The third theme that emerged from the interview was control activities in the form of policies and procedures that management design to ensure their directives are carried out in a proper manner. As shown in Figure 2, the oval shape at the middle of the diagram represents the coordination of all the other fraud risk mitigation factors. Firm's management designs control activities in all areas of the organization as fraud mitigation strategies. All participants (P1-P9) described their control activities in their respective companies.

Quotes from research participants towards the control activities assertion include the following:

- (From P1) "As part of our fraud risk mitigation strategies we conduct periodic onsite trainings and State required trainings. I also change food stamp card numbers of clients unannounced to disorient unauthorized users"
- (From P2) "We start with staff training on how to report fraud and the consequences of fraud. We also make training a requirement."
- (From P3) "As part of my company's policy and as a condition of employment in this industry, our job application form includes a disclaimer that before one could be considered for employment, they would be subjected to background checks. With that in mind, applicants are aware ahead of time before applying for any position."

- (From P4) "We conduct eight hours of required training on an annual basis. We shiftrotate staff because people gets comfortable when work with same clients for several years."
- (From P5) "We offer regular in-service trainings to ensure all employees are aware of fraud risks and fraud reporting procedures."
- (From P6) "Train leaders and assigning them with responsibilities coupled with the right compensation to motivate them to ensure that proper documentation aligns with the services performed before billing."
- (From P7) "We provide staff training."
- (From P8) "We rotate staff."
- (From P9) "Policy formulation, education and setting the right tone at the top."

Figure 5 below shows the word cloud depicting the frequency of usage of the word "training" as participants described their control activities.

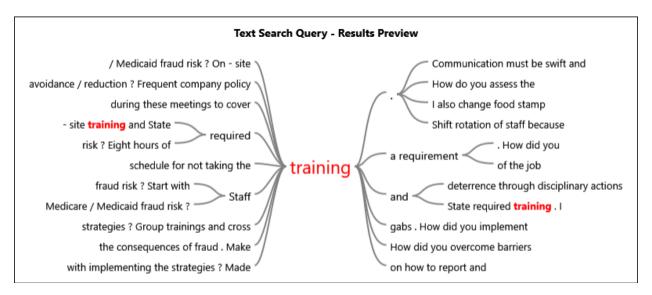


Figure 5. Word cloud, training

Consistent with the FML theory, Hess and Cottrell (2016) posited that educating

employees about the essence and implications of their moral behavior tends to mitigate fraud risk. Hess and Cottrell listed other internal control activities such as developing a code of conduct that aligns with the firm's mission and vision, establishing a fraud hotline for unanimous reporting of fraud suspicion, segregating duties, requiring mandatory vacation, and monitoring employees' online activities. Rahman and Anwar (2014) cited ethics training as one of the fraud prevention measures aimed at redirecting potential fraud perpetrators to ethical decision making.

### **Theme 4: Information and Communication**

Information systems enable swift communication within and outside the organization.

Three participants (P1, P2, and P3) mentioned their criteria in using information technology as communication and tracking tool. Research participant (P1) mentioned an internally designed software, which serves as timekeeping and tracking system. Employees log in this system through a computer or cell phone when present at their assigned work location. The software tracks the location at the time of login and generates a weekly report, only accessible to the upper management. Research participant (P1) reiterated that should any suspicion of fraud emerges, management and other external stakeholders could use the tracking report as an audit trail.

Similarly, P2 and P3 described apps used by their companies for timekeeping, clients' notes (charts), scheduling, and employee tracking. With these apps, employees could document their daily activities and observations in real time. Quotes from the three participants include the following:

• (From P2) "The company may lose its license if found fraudulent; therefore, we make every consented effort to make sure we bill the government for only services we perform

- and not cut corners. Even though we spent so much on our app, it worth it because it makes us efficient and trustworthy."
- (From P3) "We report unusual incidents to authorities. The authorities would usually interdict and investigate. Our tracking system serves as a deterrence to potential fraud perpetrators and also help us communicate information back and forth."

This information and communication theme confirms Ríos-Aguilar and Lloréns-Montes's (2014) research. The researchers investigated the feasibility of using employees' smartphones with a web application as a tracking device in establishing the physical presence of employees at their respective remote locations. The researchers found significant accuracy locating the device, indicating that employers could use the presence-control information system to track remote labor force.

# **Theme 5: Monitoring Activities**

Control activities and application of control procedures weaken over time. Management uses monitoring activities to evaluate the effectiveness of existing controls. Monitoring activities emerged through the interview because eight out of nine participants (89%) stated that management develops ongoing or separate programs to evaluate the proper functioning of the control activities. These monitoring activities include internal auditing, surprise or random checks, and external auditing. Participant P1, P2, P3, P4, P6, P7, and P8 described their company's monitoring activities where management require employees to use clients' home phone to call the company's office (call-in system) as an indication of their presence at the assigned location. The weaknesses with this call-in system are the eventual facing-out of home land lines. Both participants explained that although the proliferation of cellular phone systems

remains a threat, one must consider the embedded global positioning system as a means of tracking. Table 1 and Figure 6 below shows frequency of "monitoring" usage.

Table 1 Frequency of monitoring usage

Participant	References	Coverage	
P1	1	0.55%	
P2	1	0.56%	
P3	1	0.41%	
P4	1	0.62%	
P6	1	0.78%	
P7	1	0.83%	
P8	1	0.94%	

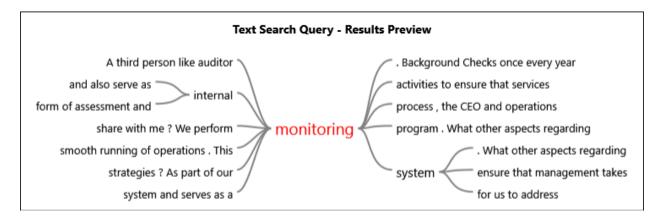


Figure 6. Frequency of monitoring usage

Quotes from the eight participants about monitoring process include the following:

- (From P1) "As a CEO, I personally visit the various clients' residences to address any concerns or problems they might have."
- (From P2) "Third persons like auditors perform monitoring procedures to ensure objectives are being met. We background-check direct care employees, once every year."

- (From P3) "Occasionally, I visit client's resident to interview them and also check for myself if services are being performed. I call clients to ask for their evaluation of the staff."
- (From P4) "We send out survey questionnaire on quarterly basses for both clients and staff to complete. This process helps us assess and monitor the effectiveness of our system."
- (From P6) "We conduct periodic satisfaction of services survey."
- (From P7) "The CEO and operations manager visits the various residents, at least once a month to ensure that the controls are working."
- (From P8) "Survey questionnaire are sent out to evaluate services and address concerns."

#### **Applications to Professional Practice**

Fraud, waste, and abuse (FWA) constitute approximately 30% of all health care cost, ranging from dishonest providers, dishonest employees, organized crime, and colluding patients (Murrin & General, 2015; Thornton et al., 2015). The data from this study is valuable to small business managers lacking antifraud resources or risk management strategies. The results from this study might contribute to developing and implementing effective and efficient methods to avoid fraud and increase business survival rate. These effective and efficient fraud mitigation methods include (a) proper training or education of both staff and clients about fraud reporting processes and the consequences of fraud, (b) rotating of staff on regular basis, (c) periodic fraud risk assessments to evaluate objectives against actual performance and addressing deficiencies, (d) implementing remote timekeeping and monitoring system, and (e) compensating shift leaders to coordinate activities in the clients' residences.

To adapt to the unpredictability of today's socio-dynamic economic environment, business operations go through changes (Pakdel, 2016). Effecting significant changes to inculcate fraud mitigation strategies in the day-to-day operations as suggested by the findings of this study might be met with resistance. However, looking at fraud mitigation strategies from the lens of its long-term benefits might help home health care business leaders gravitate away from existing ineffective strategies. The findings from this study might remind health care practitioners as to the seriousness of the health care fraud problem and the essence of addressing fraud as a matter of urgency.

## **Implications for Social Change**

Health care industry forms a significant portion of the U.S. economy (Byrd, Powell, & Smith, 2013). Researchers estimate a loss of \$700 billion attributable to fraud, waste, and abuse of the U.S. healthcare system (Thornton et al, 2013). Findings from this study might contribute to positive social change by (a) allowing for the provision of quality care to Medicare/Medicaid recipients through cost savings and (b) reducing health care premiums for all insurers (Bayerstadler, van Dijk, & Winter, 2016). With a reduction of Medicare/Medicaid fraud, the government might have enough resources to enhance the Medicare/Medicaid program or redirect resources to much-needed areas of the economy to benefit society.

Byrd et al. (2013) posited that while people measure losses caused by fraud in financial terms, the cost to human's health and life is immeasurable. While some health care fraud schemes are not willful attempt in causing harm to humanity, the adverse effect might be costly (Byrd et al., 2013). Following the intensity of government crackdowns in recent times, more home health care companies are shutting down with health care practitioners facing criminal

charges. If this trend continues, low skilled jobs such as home health care aides will be compromised; affecting people's standard of living and loss of tax revenues for the government.

### **Recommendations for Action**

The research participants described strategies they used to mitigate Medicare/Medicaid fraud risk. Despite the significant Medicare/Medicaid fraud violations in recent years, causing an increase in health care cost and compromising health care delivery, the State of Ohio does not require home health care practitioners to undergo fraud training. I recommend statutory requirement across U.S. for Medicare/Medicaid fraud and ethics training as part of the annual recertification program for both home health aides and their chief executive officers. Rahman and Anwar (2014) cited ethics training as one of the fraud prevention measures aimed at redirecting potential fraud perpetrators to ethical decision making.

Alternatively, community colleges offering State tested nursing assistant programs may include Medicare/Medicaid fraud prevention as part of their training curricula. The State of New York requires home health aide certification before one could work as a home health aide (HHA). The State of Ohio could emulate the HHA certification process in New York State and include fraud prevention in the training curricula. Currently, Ohio does not require HHA certification for home health aides, except working in a nursing home or long-term facility.

I will provide the research participants with a summary of the findings and ask them to disseminate the information through training and conferences. Home health care managers may apply the findings from this study as strategies to mitigate any type of fraud by seeing fraud from the lens of pressure, opportunity, and rationalization. I will publish the full doctoral study in

ProQuest/UMI dissertation database to make it accessible to other researchers and interested parties.

### **Recommendations for Further Research**

Conducting similar research using quantitative analysis to explore the cause and effects of Medicare/Medicaid fraud in home health care industry could add to the body of knowledge. One of the limitations of this study was the scope and the geographical boundaries.

Recommendation for further studies in other regions with different home health care rules for operations might result in different findings. Licensed and certified home health care business owners located in Franklin County, Ohio may not necessarily represent the entire home health care industry because fraud risk factors might differ based on geographical location of the business.

The findings from the study might not be transferable to the privately funded health care programs. Privately paid consumers may fund their services through out-of-pocket, long-term health insurance policy, or both. These consumers pay directly to the service provider without going through a home health care agency. I recommend qualitative or quantitative research to explore fraud risk at the privately-paid home health care settings for comparison.

Another limitation was that even though the sampled population demonstrated the development and implementation of fraud risk strategies, the respondents might not have necessarily been exposed to the appropriate fraud risks to test the validity of their respective fraud risk strategies. I recommend quantitative research to explore Medicare/Medicaid fraud risk strategies with a broader scope with many subjects. Findings from quantitative research are standardized and transferable.

#### Reflections

My interest in exploring strategies to mitigate health care fraud date back in 2003 when my family and I migrated to the U.S. I worked as a home health aide, assisting individuals with developmental or mental disabilities. I witnessed, first hand, what seemed to have been a culture of coworkers covering shifts for each other without the knowledge of the employer. At that time, I did not understand the Medicare/Medicaid system but was clever enough to know that certain rules were being violated.

The DBA Doctoral Study process gave me the opportunity to conduct an in-depth literature review and interviews to explore strategies successful home healthcare business managers use to address employee theft. I must admit that as I delved further into the existing literature, I refined my thinking and my topic. I brought no known biases to the research process; rather, my inspiration was derived from my skepticism in learning about how home health care practitioners address the issue of Medicare/Medicaid fraud in their firms.

My misconceptions as I started the research, were thwarted and had to approach the research process as a scholar-practitioner interacting and intermingling with the participants and not an expert on Medicare/Medicaid fraud. Experiences obtained through my interaction with the research participants helped change my perception. I have gained insights in both qualitative and quantitative research strategies and have attained confidence in conducting any form of research to help effect positive social change.

#### Conclusion

The purpose of this qualitative multiple case study was to explore strategies some licensed and certified home health care business managers use to mitigate Medicare/Medicaid

fraud risk. The conceptual framework underlying this study was the fraud management lifecycle theory propounded by Wilhelm (2004). I gathered data by reviewing peered reviewed articles, interviewed nine home health care business owners and managers, and reviewed participants companies' document.

Findings from this study suggest that Medicare/Medicaid fraud contributes to the rising cost of health care, economic downturn, and unemployment. Home health care practitioners, Medicare/Medicaid recipients, and home health care workers together with the public must be vigilant and aware of the consequences of these fraud risks. Educating employees and Medicare/Medicaid recipients about fraud reporting processes and the consequences of fraud might reduce or mitigate these fraud risks. Additionally, viewing Medicare/Medicaid fraud through the lens of its adverse effects on healthcare service providers might help draw the attention of the business community.

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## Appendix A: Interview Protocol

- Make a telephone call to the prospective participant after approval of the proposal to build professional relationships.
- 2. If potential participants express research participation interest, schedule a visit to their place of business or a place at their convenience.
- 3. At the interview location, introduce yourself to the participants and explain the purpose of your visit. Do not forget to verify an unqualified audit letter issued by a governmental entity.
- 4. Ask the participants to review the consent form and inquire about any questions or concerns they might have before signing.
- 5. Remind participants that participation is voluntary and they could withdraw by notifying the researcher in writing or verbally.
- 6. Seek permission from the participants before recording the interview and reiterate the essence of the recording.
- 7. Watch for non-verbal cues during the interview as you paraphrase the responses.
- 8. Ask follow-up questions to obtain more in-depth perspectives.
- 9. Wrap up the interview by thanking the participants and scheduling follow-up member checking interview.
- 10. At the follow-up member checking interview, review and interpret the interview transcript.
- 11. Write each question and succinct synthesis of participant's answer.
- 12. Provide participants with a copy of the synthesis.

- 13. Ask if the synthesis represents the participant's answer or if participants might wish to provide additional information.
- 14. Continue the member checking process until no new data is available.

# Appendix B: Interview Questions

- 1. How often and in what manner does your company assess fraud risk management for potential fraud exposure?
- 2. What strategies did you use to ensure Medicare/Medicaid fraud avoidance/reduction?
- 3. How did you implement strategies to mitigate Medicare/Medicaid fraud risk?
- 4. How did you overcome barriers associated with implementing the strategies?
- 5. How do you assess the effectiveness of the strategies?
- 6. What other aspects, regarding Medicare/Medicaid fraud risk mitigation can you share with me?