Walden University
A higher degree. A higher purpose.

Walden University
ScholarWorks

Walden Dissertations and Doctoral Studies

Walden Dissertations and Doctoral Studies Collection

2016

The Effect of Healthcare Reform on the Sustainability of Nonprofit Hospitals

Carmela Josephine Lynch
Walden University

Follow this and additional works at: https://scholarworks.waldenu.edu/dissertations

Part of the Business Administration, Management, and Operations Commons, and the Management Sciences and Quantitative Methods Commons

This Dissertation is brought to you for free and open access by the Walden Dissertations and Doctoral Studies Collection at ScholarWorks. It has been accepted for inclusion in Walden Dissertations and Doctoral Studies by an authorized administrator of ScholarWorks. For more information, please contact ScholarWorks@waldenu.edu.

<u>Walden University</u>

College of Management and Technology

This is to certify that the doctoral study by

Carmela J. Lynch

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.

Review Committee
Dr. Peter Anthony, Committee Chairperson, Doctor of Business Administration Faculty

Dr. Kenneth Gossett, Committee Member, Doctor of Business Administration Faculty

Dr. Lynn Szostek, University Reviewer, Doctor of Business Administration Faculty

Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2016

The Effect of Healthcare Reform on the Sustainability of Nonprofit Hospitals

by

Carmela J. Lynch

MA, College of Notre Dame of Maryland, 1991

BSN, College of Notre Dame of Maryland, 1981

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

February 2016

Abstract

Healthcare spending in the United States has continued to rise with annual healthcare cost of $3.8 trillion in 2014. While costs and the population continue to rise, resources continue to dwindle. Consequently, Congress has imposed various price controls and healthcare reform measures over the past 20 years, including the recent Patient Protection and Affordable Care Act (PPACA), which aims to decrease spending while enhancing quality and safety of care delivery. As a result of the implementation of the PPACA, 34 million additional Americans may be eligible for healthcare in a system already needing additional resources, increased access to care, and strategies to offset increasing operational and fiscal challenges. The purpose of this descriptive study was to explore what strategies and changes 10 executive leaders of the nonprofit hospitals in Maryland used to address the operational and fiscal challenges of the PPACA. The conceptual framework for this study was built upon the general systems theory. The data were collected through semistructured interviews, cataloged and coded, analyzed using a modified van Kaam method, and reviewed by participants as part of member checking process. The findings revealed 3 emergent themes: investment in IT resources to support an EMR system, strategies to address healthcare workforce challenges, and strategies for sustainability for managed care outpatient services and patient safety and quality of care. The findings impact social change by presenting policies and processes that medical professionals can use to support local and national health care reform.

The Effect of Healthcare Reform on the Sustainability of Nonprofit Hospitals

by

Carmela J. Lynch

MA, College of Notre Dame of Maryland, 1991

BSN, College of Notre Dame of Maryland, 1981

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

February 2016

Dedication

I dedicate this work to my colleagues in healthcare who continue to pursue tirelessly and diligently delivering safe, quality care to the millions of people seeking relief from disease and other medically related issues.

Acknowledgments

I wish to extend thanks first to my God for the grace and blessings granted to me in pursuit of this goal, and especially for the wisdom of the Holy Spirit in enlightening my mind. Secondly, I wish to extend thanks to my wonderful and forgiving husband and children who have supported me without question or complaint throughout this journey and the juggling of life's circumstances to make this journey's end a prized reality. I wish to extend further thanks to Dr. Peter Anthony, my Chairman, for his excellent wisdom and guidance; Drs. Gossett and Szostek, committee members; Drs. Berete and Weide for their editing expertise and sincere concern for student success; and my special friends who have endured my missing many enjoyable moments in their company and remain my friends. Special thanks to Dr. Jennifer Arfaa and Dr. Ruth Lee for their encouragement, assistance, and understanding of the difficulties associated with this journey. Their consistent support and leading by example have provided the best incentive for my purpose in attaining this coveted goal.

Last, but far from least, I wish to extend my heartfelt thanks to my dear friends, Patty and Bill Chmielewski, and my niece, Jessica, for lending their computer expertise, patience, and time in resolving many technical issues I encountered with each revision made during the preparation of this Doctoral Study.

Table of Contents

List of Tables iv

Section 1: Foundation of the Study 1

Background of the Problem 1

Problem Statement 4

Purpose Statement 5

Nature of the Study 5

Research Question 8

Interview Questions 8

Theoretical or Conceptual Framework 9

Operational Definitions 10

Assumptions, Limitations, and Delimitations 11

Assumptions 11

Limitations 12

Delimitations 12

Significance of the Study 13

Contribution to Business Practice 14

Implications for Social Change 15

A Review of the Professional and Academic Literature 16

Nursing Staff Shortages and the Effect on Patient Safety and Quality of Care 18

The Nursing Care Environment 21

Addressing the Nursing Shortage 24

Nursing Education and Recruitment ... 29

Changes in Nursing Dynamics ... 32

Physician Shortages ... 33

Complexity Theory in Medical Practice ... 37

Physician Recruitment and Retention ... 39

Sustainability of Nonprofit Hospitals ... 44

Health Systems Innovation ... 55

Organizational Leadership ... 57

Transition ... 64

Section 2: The Project ... 65

Purpose Statement ... 65

Role of the Researcher ... 66

Participants ... 67

Research Method and Design ... 69

Research Method ... 70

Research Design ... 72

Population and Sampling ... 74

Ethical Research ... 76

Data Collection Instruments ... 77

Data Collection Technique ... 80

Data Organization Technique ... 80

Data Analysis ... 81

Reliability and Validity.......82
Reliability.......82
Validity.......82
Transition and Summary.......83
Section 3: Application to Professional Practice and Implications for Change.......85
Introduction.......85
Presentation of the Findings.......87
Emergent Theme 1: Investment in IT Resources to Support An EMR System.....90
Emergent Theme 2: Strategies to Deal With Healthcare Workforce Challenges.......94
Emergent Theme 3: Strategies for Sustainability: Managed Care Outpatient Services and Patient Safety/Quality of Care Delivery.......100
Applications to Professional Practice.......104
Implications for Social Change.......107
Recommendations for Action.......108
Recommendations for Further Research.......110
Reflections.......111
Summary and Study Conclusions.......112
References.......114
Appendix A: Interview Instrument.......144
Appendix B: Consent Form.......145

List of Tables

Table 1. Frequency of Primary Themes From Data Collected From Semistructured Interviews 90

Section 1: Foundation of the Study

The intent of this approved qualitative descriptive study IRB 05-12-15-0163080 was to explore the sustainability of nonprofit hospitals in Maryland. Subjects for exploration included sustainability of nonprofit organizations, federal healthcare reform measures, and dwindling resources available. The dwindling resources related to the nursing shortage and projected physician shortages in the United States have further affected executive leadership of hospitals' responses to federal healthcare reform measures as well as the sustainability of nonprofit hospitals in Maryland. National and surgical expenditures continue to rise, and state, federal, and private programs have not, over the past 50 years, been able to curb this growth in national and surgical expenditures (Munoz, Munoz, & Wise, 2010). The most recent government data per the United States Department of Health and Human Services noted that federal healthcare reform measures are working supporting affordability, access to care, and quality of care (Jost, 2013; U. S. Department of Health & Human Services, 2014). However, there are still many questions to be answered as to the effect the Patient Protection and Affordable Care Act (PPACA) will have on the healthcare management and expenditures (Groszkruger, 2011). I explored the strategies and processes used by executive leaders of nonprofit hospitals in the state of Maryland for sustainability of their operations under such constraints of dwindling resources and operational and fiscal challenges of federal healthcare reform measures enacted with the PPACA.

Background of the Problem

Many attempts to change the model of healthcare in the United States have

occurred since the early 1990s. The PPACA of 2010 is the most recent federal legislation for healthcare reform and contains nine essential components of reform. Six of those nine essential components of reform posing possible broad reaching implications for hospitals' leadership include (a) provision of quality, affordable care for all Americans; (b) improvement in efficient quality health care delivery; (c) assurance of a competent, diverse, workforce and innovations in training, recruitment, and retention; (d) improvement in innovative therapies' access; (e) assistance to community services and support networks; and (f) regulation of revenue from Medicare and Medicaid programs for services provided based on reported data of quality care measures (U.S. Department of Health & Human Services, 2010; U.S. Senate, 2010). Approximately, 34 million Americans are uninsured or underinsured and became eligible for full hospital and physician care health insurance benefits beginning in 2014 (Anderson, 2014).

The economic effect of the federal regulations imposed by the implementation of the PPACA may be placing the sustainability of United States hospitals at significant risk (Cohen et al., 2010; D'Aquila et al., 2013; Davis & Robinson, 2010). Related issues of diminishing resources in physician and nurse staffing, closings and mergers of hospitals resulting in reduced access to care, and increased hospital healthcare delivery expenditures on hospitals' leadership may add to this sustainability risk for hospitals. This risk to sustainability may be further increased for nonprofit hospitals in the United States (D'Aquila et al., 2013). Cutler and Morton (2013) noted that significant consolidation of hospitals is typical in some regions where large academic medical centers exist while there are few to none in remote regions. These consolidations may

generate benefit of increased market power and patient and community benefits (Guerin & Maki, 2014) but may also increase costs while decreasing access to care. The expectation of the Alliance for Academic Internal Medicine is that the trend of mergers, closings, acquisitions, and integrations will continue to increase with new sets of buyers and sellers changing the healthcare industry market (D'Aquila et al., 2013).

The American Hospital Association (2010) noted that 2010 represented the highest level of activity for mergers and acquisitions since 2001 and overall expenses of greater than $83 billion dollars, increasing health care expenditures and decreasing access to care in some areas. Emergency rooms (ERs) in hospitals were noted at high risk for closure. Since ERs are federally regulated and obligated to service all patients seeking care and service most poverty level patients, access to care for these patients would be further decreased (Hsia et al., 2011). The negative effects of these complications include decreased economies of scale, increased health care delivery costs, lack of hospital capacity, decreased access to care, and an increase in numbers of newly insured patients seeking care as a result of the PPACA regulations and incentives. These negative effects resulting from these complications is noted as the situation when government fails to provide a public service desired by shareholders, when access to some goods are over restricted, or when there is decreasing availability of funds and other resources (Hsia et al., 2011).

The primary focus of this study was to explore what strategies and changes executive leaders of the nonprofit hospitals in the state of Maryland use to address the

operational and fiscal challenges presented by the implementation of the PPACA. Strategies garnered as effective in sustaining operations for these organizations studied may serve to increase the level of knowledge concerning successful operational and fiscal strategies for organizational sustainability in health care organizations. These strategies could advance and influence design of business practices for providing quality healthcare delivery, increasing economies of scale and market share, and optimization of resource utilization for continued sustainability in a complex and highly challenged healthcare industry.

Problem Statement

As a result of the implementation of the PPACA, 34 million additional Americans were eligible for acquiring healthcare (Anderson, 2014) in a system already taxed with needing a projected 52,000 additional providers to support approximately 103 million additional physician visits (United States Health and Human Services [USHHS], 2013). The anticipated shortage of 1 million nurses by 2020 (Juraschek et al., 2012); reduced access to care from hospital consolidations, expending $83 billion since 2001(American Hospital Association [AHA], 2010; Maryland Department of Health and Mental Hygiene [MD DHMH], 2010); and increasing operational and fiscal challenges continue to threaten organizational sustainability (Blumenthal et al., 2015). The general business problem is that nonprofit hospital executive leaders are negatively affected by challenges that influence healthcare industry sustainability. The specific business problem is that some nonprofit hospital executive leaders in Maryland lack strategies to address the operational and fiscal challenges presented by the PPACA implementation.

Purpose Statement

The purpose of this qualitative descriptive study was to explore strategies executive leaders of nonprofit hospitals in Maryland use to address the operational and fiscal challenges presented by the implementation of the PPACA. The population included participants purposefully selected from three levels of executive leadership of 10 nonprofit hospitals in Maryland to include CEOs, executive management, and members of the board who have a minimum of 5 years of work experience in the nonprofit hospital setting and who have had experience in developing strategies. Study findings may provide executive hospital leaders with business strategies and practices for sustainability. The results of the study may allow executive leadership in nonprofit hospitals to develop effective strategic planning for appropriate redesign of their organizational environments, focusing on change initiatives to provide efficiency, adaptability, and social cohesion in their complex healthcare systems. The results of the study may further identify recurring themes that may provide valuable information for social change in medical practice focusing on collaborative patient care, increased staff educational opportunities, and increased focus on further research and policy development and processes to support local and national health care reform regulations (Metcalf & Benn, 2013; York, Kaufman, & Grube, 2013).

Nature of the Study

I analyzed the data obtained from participant in-depth interviews, using the qualitative method and descriptive design, to explore possible business strategies for the sustainability of nonprofit hospitals. The qualitative method and descriptive design

involves the exploration of the causes and consequences of things happening in a phenomena looking through other persons' eyes (Bernard, 2013). Qualitative research uses data collected from semistructured or unstructured interviews, focus groups, and observations. These methods plus written documents are also used to develop a deep understanding of a phenomenon using inductive data analysis allowing themes to emerge (Kisely & Kendall, 2011; Ozaki, 2011). Bernard (2013) as well as Cronin (2014) and Taylor, Dossick, and Garvin (2011) stated further that all scientific study relies primarily on qualitative data and that this method existed prior to the application of mathematics used in the quantitative method or the use of triangulated methods of research as seen in mixed methods or the case study approach. None of these approaches were applicable to this particular study using personal semistructured interviews to explore the effects of healthcare reform phenomena on organizational sustainability of the nonprofit hospital industry. Quantitative research, unlike qualitative that produces in-depth understanding and interpretation of the phenomena under study, uses a hypothetical deductive approach with numerical and statistical processes to state the relationship between variables (Chenail, 2011; Hays & Wood, 2011). Grounded theory was also not an applicable approach for this study since it is used primarily for the development of new theories to explain a phenomenon in a particular setting (O'Reilly, Paper, & Marx, 2012); Ethnography which explores group relationships, beliefs, perceptions, and the knowledge base of all participants to identify social or cultural patterns that occur within the context of group interactions (Kisely & Kendall, 2011) and historical design analysis of past

events and the traces they leave behind (Gardner, 2006) were not appropriate designs for this qualitative study of this current phenomena.

Baxter and Jack (2008) recommended a descriptive study design when the primary study goal is provision of a rich phenomenon description at one specific point in time without trying to make inferences or causal statements. There is a focus on wholeness of experience rather than solely on its parts, regarding the data obtained as imperative in understanding the phenomena and as scientific evidence of investigation (Bernard, 2013). Merriam (2014) further stated that the final study product is a rich, thick description of the phenomenon being investigated, and the more detailed the interview questions, the richer the descriptive data obtained. Quotes, excerpts, themes, and categories determined in the analysis of the data contribute to the descriptive nature of the qualitative research. Understanding their voices and experiences thoroughly in order to tell their stories allows for an accurate representation of the views of participants and their experiences (Aluwihare-Samaranayoke, 2012). Insights from selected study participants could be helpful in defining potential solutions used for correcting identified issues in organizations, including those faced by executive leaders of nonprofit hospitals in the complex health care industry (Harrison et al., 2013; Nuttall, Shankar, Beverland, & Hooper, 2011). Using a descriptive design for this qualitative research study assists in understanding, analyzing, explaining complexity, and transforming management phenomena and actors’ behaviors at a social or organizational level for solving the challenging issues faced in health care over 20 years of change (Bailey, 2014**).**

Thus, the qualitative method and descriptive design rather than quantitative, ethnography, grounded theory, case study, historical analysis, narrative case study designs, or mixed methodology was used for this study. The qualitative method and descriptive design is better suited to explore the health care delivery system complexities through the personal experiences of individual organization leaders dealing with the challenges of organizational sustainability from changes in the health care industry (Curry et al., 2013).

Research Question

The focus of this qualitative descriptive study was to explore what strategies and changes the executive leaders of nonprofit hospitals in Maryland use to address the operational and fiscal challenges presented by the implementation of the PPACA. The research question for this study was: What strategies and changes can the executive leaders of the nonprofit hospitals in the state of Maryland use to address the operational and fiscal challenges presented by the implementation of the PPACA?

Interview Questions

The interview instrument (see Appendix A) includes the following semistructured, open-ended questions:

1. How have the health care reforms impacted operational systems in your organization over the past 5 to 10 years?
2. How have the health care reforms initiated in 2010 affected sustainability in your organization?

3. What strategies have the hospitals' leaders used to deal with systematic adjustment of processes to reduce the impact, if any, of staff shortages of nurses and primary care physicians in your organization?
4. How has the overall business operations of your organization changed in the past 5 to 10 years, as changes in reimbursement have occurred?
5. What strategies have your hospital leaders used to meet the regulations imposed by the new health care reform legislation?
6. What strategies have your hospital leaders used to reduce costs associated with business operations?
7. What else would you like to add pertaining to the purpose of this study or concerning an issue not covered in the interview questions?

Conceptual Framework

The general systems theory (GST) offers appropriate framing to this qualitative study. Systems theory, as originally introduced by von Bertalanffy in 1948, postulated that GST is applicable to all sciences concerned with systems. Every living thing is a self-maintaining open system. This system is in a continuous inflow and outflow never being in equilibrium where there is an equal balance between reversible processes occurring at the same rate, but maintaining itself in a steady state where some of the processes are not reversible nor occurring at equal rates (von Bertalanffy, 1948). Von Bertalanffy presented the concepts of wholeness, directiveness, and differentiation as indispensable variables in dealing with groups.

GST is applicable in many business arenas, including health care. Luke and Stamatakis (2012) explored GST and systems thinking in the public health arena in dealing with complex health issues, noting this theory and thought process to be integrative, solution-oriented, and nonlinear allowing for the integration of large amounts of data. This integration allows the formulation of detailed views of all aspects of complex systems. Peters (2014) echoed this belief but noted further that the methods used in systems thinking in addressing complex problems examines the interaction within and between levels within its parts that are consistently changing, are nonlinear, and able to learn and create new patterns over time. Through use of this process, the relationship between the varied components of complex health systems can explain phenomena affecting those systems. Therefore, systems theory and its extended theories as noted above are ideally related to hospital systems, their environments, and positioning in the health care industry. The data obtained through the participant interviews and analyzed for recurring themes and the effects of the practices used on all interdependent components of the operational systems of these organizations, extending to their organizational cultures and the communities they serve, will determine best strategies for effective decision-making by hospitals' executive leadership.

Operational Definitions

Clinical errors: Clinical errors are incorrect medication, dose, time given, untoward clinical incidents, such as patient injury, staff injury, and patient acquired infection (Blegen et al., 2011).

For profit organization: A for profit organization, under the Internal Revenue Code is organized and operated for the benefit of private interests, focuses on short-term financial performance, does not receive tax subsidies for charitable contributions, and inures net earnings to shareholders (Internal Revenue Service [IRS], 2014).

Nonprofit organization: A nonprofit, referred to as a charitable organization under the Internal Revenue Code, must not be organized or operated for the benefit of private interests, have no net earnings inured to the benefit of any individual or shareholder, nor attempt to influence legislation or participate in campaigns of political candidates, and are eligible to receive tax-deductible contributions for enhancing social betterment (IRS, 2014).

Nosocomial infection: A nosocomial infection is a hospital-acquired infection (Blegen et al., 2011).

Nurse practitioner: A nurse practitioner is an advanced registered nurse who provides care services to individuals of all ages (Moote et al., 2011).

Physician assistant: A physician assistant is a healthcare professional licensed to practice medicine as part of a team with physicians (Moote et al., 2011).

Assumptions, Limitations, and Delimitations

Assumptions

Assumptions in research are described by Ellis and Levy (2009) as the believed truths that the researcher brings to the study. The first assumption of this study was that responses gathered from participants would be accurate concerning the health care challenges affecting their organizations because the participants are members of

executive leadership and are knowledgeable of the health care requirements and challenges. The second assumption of the study is that participants, vested in their organizations' leaders' abilities to sustain operations, have the best interests of the organizations as their goal as they are all facing the stated problem.

Limitations

Limitations are the constraints of a research study that arise from the researcher's methodological approach used (Ellis & Levy, 2009). Since the introduction of this act did not occur until April 2010, there are only minimal impact data for complex hospital systems available from 2010 when the PPACA was implemented until 2013, posing limitations on the study. All other information in the literature is concerning what might occur in the health care industry because of its implementation. Documentation of actual impact may not occur for several more years. Researcher bias could pose limitations on the study since I presently work in a nonprofit hospital environment and have been a nurse over a period of 40 years, dealing with the challenges posed in a complex healthcare delivery system. However, use of the semistructured survey instrument assisted in reducing such bias, allowing the participants to express their personal views and experiences and elaborate further, through additional probing, on their initial responses to the interview questions posed without deliberate guidance to a specific preformed conclusion (Stuckey, 2013).

Delimitations

Delimitations are defined by Ellis and Levy (2009) as the factors that the researcher is not going to address in the study. Selected participants are from nonprofit

hospitals of a similar operation and scope of practice. Generalizations from the study results could extend to similar nonprofit hospitals in the Maryland region. The results of the research may or may not be able to generalize to past or future similar situations.

Significance of the Study

Nonprofit hospitals are complex organizations having multiple missions and stakeholders. However, hospital leaders must also face challenges of complicated regulatory, reimbursement, and expansion of services issues (Alexander, Lee, Wang, & Margolin, 2009). Extensive financial, medical, surgical, and technological issues pose additional challenges. Hardy (2012) recommended in his studies that to deal effectively with these challenges, partnerships must evolve between hospital boards, CEOs, management, providers of care, and the communities they serve. Such partnerships provide hospitals with a strategic plan toward sustainability while providing for quality care and client needs. Crossan, Gang, and Seyta (2013) and Froelich (2012) agreed and further recommended that the focus for nonprofit organizations is to operate more like for-profit ones, monitoring their thinking, actions, and structures, seeking competitive advantage as masters of creative destruction built for discontinuity to allow for increasing change and support of adaptive capacity at the individual, group, and organizational levels supporting the mission and sustainability of operations. Results of the study by Soo, Tran, and Cordery (2012) confirmed the use of creation of knowledge and absorptive capacity through enhancement of human capital in organizations to be the direct driving force of innovation in organizations leading to effective sustainability. Corwin, Corbin, and Mittelmark (2012) agreed with recommendations that nonprofit

organizations' leadership should seek competitive advantage through novel approaches in strategic development, learning, and adoption of innovations. However, these authors also recommended that this accomplishment must progress concurrently while satisfying the needs of their clients not met by the private or public sectors (Corwin et al., 2012). This qualitative descriptive study and the data collected might allow for further, in-depth exploration of the critical issues affecting operations of executive leadership of nonprofit hospitals and their ability to meet client needs, maintain viability, and effect social change. Strategies revealed as effective by the executive hospital leadership of the participating sites may inform present and future problem solving, strategic decision-making, and policy formation.

Contribution to Business Practice

Systems theory was used as this study's conceptual framework since hospitals are complex, adaptive systems with many interrelated units. Interactionism theory applies to this study since it could contribute to policy and practice development, professional ethics, and healthcare organizations' approaches to dealing with sustainability challenges from drawing on the experiences of patients they serve but does not provide for experiences of hospitals' leadership (Tower, Rowe, & Wallis, 2012). Kolcaba's comfort theory may also be applicable to this study if modified, as promoted by Krinsky, Murillo, and Johnson (2014), guiding the thinking and work of all healthcare disciplines within an institution for interprofessional collaboration as an approach to the provision of models for appropriate patient care, safety, satisfaction, and community health. However, this theory again does not encompass the realm of hospitals' leadership and sustainability of

their organizations. The analysis of the data presented from this study might serve to tighten the knowledge gap of executive hospital leadership on the use of strategic thinking, planning, and decision making when encountering the short-term effects on nonprofit hospitals' sustainability when dealing with the industry challenges imposed and enforcement of the PPACA. This reduction in knowledge gap could result through the discovery of effective strategies used by organizational leaders participating in the study to meet the identified challenges faced by nonprofit hospitals' organizational leadership. Although there is a general awareness of the identified issues affecting sustainability of these organizations, there is still a lack of full awareness of the magnitude of the challenges. This lack of full awareness of these challenges adds to the need for leadership, professional staff, educators, and legislators to find strategies to meet the demands of providing affordable access to care for all individuals. In addition, strategies are needed for recruiting and retaining educated, capable personnel to service patients and establish processes for safe, quality medical care. The results of the analysis of the study data might further enhance the understanding of the need for increasing educational opportunities for nurses and physician providers in an effort to decrease professional staffing shortages and maintain effective safety and quality controls.

Implications for Social Change

The findings represent data from hospital CEOs, executive teams, and the board of directors responsible for operations and organizational sustainability and adequate provision and delivery of health care for their clients and staff as stakeholders. The findings might encourage all of these stakeholders to closely examine the need for

adequate resources, developing better educational opportunities for professional clinical staff, developing business strategies and processes for delivery of safe, quality patient care and staff and patient satisfaction, and developing appropriate policies and processes to support local and national health care reform regulations.

A Review of the Professional and Academic Literature

The purpose of this qualitative descriptive study was to explore strategies executive leaders of nonprofit hospitals in Maryland use to address the operational and fiscal challenges presented by the implementation of the PPACA. Issues identified in the literature included increases in numbers of uninsured and underinsured; care denials; increased expenses; staffing shortages; hospital closings, mergers, and acquisitions secondary to loss of sustainability; and government leaders' mandated reform measures of the PPACA (Aiken et al., 2012; Hardy, 2012; Hsia, Kellermann, & Shen, 2011). Many of these identified issues found in the literature review, particularly diminishing resources and revenues to meet multiple challenges and federal regulations of the PPACA, fall on executive hospital leaders (Woolhandler & Himmelstein, 2011).

The literature review includes historical data reflecting the continuing changes in the health care industry. The review further includes data concerning the rising costs of providing appropriate health care by nonprofit hospitals and the challenges confronting hospital leadership in maintaining sustainability of their hospital operations under the mandates of the PPACA. Reports from the Health Services Cost Review Commission (HSCRC), Health Affairs government data, and the requirements of the PPACA of 2010 examined the effect of changes in the health care industry and health care reform

historically. I used historical data: (a) HSCRC reports, (b) other government data, and (c) reports concerning the implementation of the requirements of the PPACA to explore this effect as the health care industry moves through continuing changes and compliance with reform measures in the present period of diminishing resources and increasing operational expenditures. Other peer-reviewed articles and books from academic, business, and social science databases provided the basis for an exploration of the ability of nonprofit hospitals' leadership to continue to sustain operations in light of these factors. Additional review of leadership, management strategies, and business sustainability in the 21st century was also included.

Major developments included concepts of complex adaptive systems, founded in the theoretical framework of systems theory chosen for this study to explain phenomena affecting the complex hospital system. Studies exploring systems thinking and systems analysis to address complex problems, integration of large amounts of data, and processing of inputs to produce outputs that are greater than the total interactions of its components were further identified in the literature. Since hospitals are complex, adaptive systems with many interrelated units, interactionism theory and a modified Kolcaba's comfort theory were reviewed as possible theoretical framework theories for this study, but related more to direct patient experiences and interprofessional staff collaboration rather than hospitals' leadership issues with sustainability of their organizations. Other concepts included in this development were education of staff; strategic planning and alliance formation; competitive advantage for market share, innovation, and global expansion; and stakeholder involvement and satisfaction.

Multiple databases used in providing literature for this study included ABI/Inform Complete, Business Source Complete, Walden Library DBA dissertations, and Google Scholar and Google Books. A review of articles from multiple journals using key words of nonprofits, sustainability, and healthcare reform focusing on nursing staff shortages, projected physician shortages, and access to health care was included. Following this review is a further examination of the sustainability of nonprofit hospitals because of these staffing shortages, diminishing available resources, and other changes affecting the health care industry. References used totaled 206, of which 182 (88%) were current peer-reviewed resources within the last 5 years.

Nursing Staff Shortages and the Effect on Patient Safety and Quality of Care

Many researchers agree that issues of diminished hospital nurse staffing contribute to increased patient mortality, staff burnout, and job dissatisfaction. These issues have resulted in unsafe nurse-to-patient ratios, decreased patient safety and quality care provided, diminished patient care outcomes, and decreased staff and patient satisfaction (Aiken et al., 2012; McHugh, 2011; McHugh, Kutney-Lee, Cimiotti, Sloane, & Aiken, 2011; Richardson, 2011). The research of McHugh (2011) has related issues of diminished hospital nurse staffing to increased mortality, staff burnout, and staff dissatisfaction. Staff shortages of nurses have resulted in unsafe nurse-to-patient ratios and decreased patient safety. Patient care quality was also affected negatively (McHugh, 2011). Additionally, decreased staff and patient satisfaction levels occurred both in the United States and foreign countries (Aiken et al., 2012; Benson, 2012; Cimiotti et al., 2012; McHugh et al., 2011). Hussain, Rivers, Glover, and Fottler's (2012) results

confirmed this lack of nurses but further noted as well that a lack of attention by organizational leaders to nurses' needs within their workplace environments increased reports of adverse events concerning patient care. The dynamics of nursing as a profession is also changing dramatically due to increased demands from government leaders and the public for increased levels of performance and the drive for cost effectiveness in delivery of patient care (Bae, 2013; Bae, Brewer, & Kovner, 2012; Bae & Fabry, 2014; Brewer, Kovner, Obeidat, & Budin, 2013).

Adverse events in patient care confirming the need for adequate nurse-to-patient ratios on hospital units were studied by Needleman, Buerhaus, Pankistz, Liebson, and Harris (2011), Blegen, Goode, Spetz, Vaughn, and Park (2011), and Cimiotti et al., (2012). All three studies' results indicated that decreased nurse staffing was directly related to increased mortality, failure-to-rescue incidents, and hospital acquired infections (Dorland, 2012). Secondarily, hospital length of stay, quality of patient care, and nurse burnout were also increased in the units studied. Thus, there was a significant relationship between nurse numbers and mix and their effects on outcomes of care (Blegen, 2011; Cimiotti et al., 2012; Needleman et al., 2011).

While these studies focused primarily on decreased quality of patient care delivery and decreased patient satisfaction due to nurse frustration and dissatisfaction related to the nursing shortage, other researchers determined that costs of nurse turnover have an even greater impact on general quality of patient care. Researchers noted that this impact has resulted in increased complications, extended length of stay during

hospitalizations, failure to rescue, and prediction of nurses' intentions to leave their jobs (Brewer, Kovner, Yingrengreung & Dujik, 2012; Williams, Lopez, & Lewis, 2013).

Juraschek, Zang, Ranganathan, and Lin (2012) agreed with these researchers that the cost of nurse turnover has an extensive impact on the quality of patient care, but they examined turnover rates due to the retirement of nurses of the Baby Boomer generation, which comprise presently 40% of the United States nursing workforce. The predicted shortage because of these nurses retiring within the next several years varies from 300,000 to 1 million RNs by 2020. Several other authors opined that this aging workforce of nurses will affect the number of direct care nurses but will also cause a shortage of talented, key hospital professionals in executive and management positions at a time when the demand for services as a result of the health care reform directives is increasing (Collins-McNeil, Sharpe, & Benleau, 2012; Juraschek et al., 2012).

A slightly different approach to researching the cost of increasing turnover rates of nurses by Williams et al. (2013) found that hospitals face an additional financial burden as a result. This financial burden occurs through direct and indirect costs such as advertising for the position, possible relocation or travel costs, lost productivity, increase in overtime hours, orientation and training, and increased stress on the remaining nurses in the workforce (Williams et al., 2013). There is further agreement throughout the literature that nursing staff shortages are associated with nurse burnout and dissatisfaction, decreases in quality of patient care, and increased hospitalization length of stay, all significant findings for decreases in positive patient outcomes and increased expense (Collins-McNeil et al., 2012; Williams et al., 2013). Although nursing positions

are recently showing growth higher than any other occupation, results of all of the current research on the nursing shortage reviewed for this study confirmed that RN positions would remain unfilled and the nursing shortage will continue (Juraschek et al., 2012; Staiger, Auerbach, & Buerhaus, 2012).

The Nursing Care Environment

The lack of nurses in the workforce; lack of patient quality of care, patient and staff safety; and the nurse perspective of the nursing shortage experienced by nursing staff have further affected the nursing care environment (Bae, 2013; Bae, Brewer, & Kovner, 2012; Bae & Fabry, 2014; Pittman, 2013). Other researchers indicated agreement that there are many areas needing improvement in the work environment and patient care quality and safety that the nursing shortage directly affects (Bae & Fabry, 2014; McHugh & Ma, 2014; Needleman et al., 2011). In addition, results indicated that a positive perception of nurses of their work environment increased job satisfaction, motivation, productivity, and effectiveness of health care services provided, and decreased absenteeism, turnover rates, and overtime hours worked (Bae & Fabry, 2014; Zhang, Lapine, Buckman, & Feng, 2014).

Aiken et al. (2012) and McHugh et al. (2011) examined nurse workforce stability and hospital patient safety, satisfaction, and quality care based on conditions affecting the nurse work environment, but from a broader perspective and geographical area. Extraction of survey data spanned 12 European countries and the United States. Results of participants' responses were very similar across all countries surveyed, including the United States, indicating high rates of nurse burnout. Intention to leave their positions

and job dissatisfaction were further increased. Overall, positive changes in work environments resulted in increased quality and satisfaction rates. Reduced nurse-patient ratios were also linked to these same outcomes (McHugh et al., 2011). Problems with delivery of quality patient care were found related as well to nurse frustration with health benefits, higher dissatisfaction, and burnout for those working in hospitals and long-term care skilled facilities in direct care of patients rather than for those working in other settings outside of the hospital environment (McHugh et al., 2011). Researchers determined that hospitals having increased dissatisfied nurses or those suffering burnout had decreased patient satisfaction scores, and nurses were significantly dissatisfied with their health benefits in comparison to other white-collar employees (McHugh et al., 2011).

Many of the studies discussed nurse dissatisfaction and burnout. Only a few of these researchers determined that this dissatisfaction and burnout was due to negative interactions with management, inadequate supplies with which to perform their jobs, poor management, no recognition for expertise, and inflexibility of work schedules, indicating that the work environment further influences the decision by nurses to leave the workforce (Brewer et al., 2012).

In comparison, unlike much research concerning the nursing shortage that uses staffing indicators to measure care delivery, Meyer and O'Brien-Pallas (2010) presented the nursing services delivery theory (NSDT). The NSDT provides a different theory of the complex healthcare organization, situating and integrating nursing work design and organization into the complex delivery health system. The NSDT examines nursing as

another subsystem rising from the management subsystem's decisions about the capacity of the organization to produce services. Role design, staffing practices, and care delivery models are examined in an effort to standardize skills and work processes. The NSDT offers management recommendations for new insights for prioritizing and evaluating concurrent organizational strategies for increasing the delivery of nursing services' efficiency, effectiveness, and sustainability. Benson (2012) researched labor and market trends in relation to the nursing shortage from 2008 through 2011 finding similarly that effective management of nursing work force, practices, and work processes might stabilize the nursing environment and shortage.

However, organizational leadership strategies for staffing practices and the work environment of many hospitals continue to wreak havoc on the nursing profession. Nurses, faced with understaffing and overwhelmed with paperwork and other tasks taking them away from the core of caring for patients, reported concerns of decreased job satisfaction, patient care quality, and patient safety they can provide (Kalisih, Tschannen, Lee, & Friese, 2011). Several other studies cited poor work environment and decreased compensation as the main reason for exiting the profession, causing under availability of bedside nurses, decreased quality of patient care, and cost to the economy (Kalisih et al., 2011). The intergenerational workforce of nurses poses a continual problem in the balancing of the workplace environment and recruitment and retention of nurses, although very few researchers have examined this link of turnover of nurses to their generational profiles (Collins-McNeil et al., 2012). However, in a comparison study of the aging workforce and the retention of older nurses, Collins-McNeil et al. (2012)

concluded that there was intergenerational tension experienced by nurses over 50 years of age and that in order to retain these aging nurses, nursing administration needs to show that they are valued as well as provide a workplace that supports and assists intergenerational respect and understanding. The need for the retention of these nurses was further confirmed by Hairr, Salisbury, Johannsson, and Redfern-Vance (2014) in their study of nurse staffing. Nurse-to-patient ratios leading to increased levels of staff satisfaction proved as the main indicator for nurse retention. Tellez (2012) expanded on the need for retention noting that the cost to retrain a specialized RN is approximately $80,000, making fiscal sense to retain these nurses through the provision of adequate nurse to patient ratios that lead to increased job satisfaction. Other researchers have further examined the need for effective management and employers who exhibit caring for their nursing staff and empowering them to perform their jobs, rewarding them for their expertise. Unlike previous research that simply identified these issues related to the nursing shortage, current researchers have stressed the recommendation that employers must employ these strategies for retention and recruitment to avoid a surge in nurse turnover rates, ensure adequate future staffing availability, and prevent a negative financial effect for the organization (Brewer et al., 2012).

Addressing the Nursing Shortage

One strategy used to address the United States shortage has been foreign nurse recruiting to fill immediate vacancies, offering incentives of low rental housing or homebuyers' assistance, and waiving the United States National Council Nurse Licensing Examination. Researchers have examined the effect of the nursing shortage on global

migration. This effect was studied within the United States as well as international markets. Originally, the largest source of nonnative nurses was the Philippines (Pittman, 2013). Now Jamaica, Zambia, the United Kingdom, Japan, and others have entered the international market for nurse recruitment (Pittman, 2013). The shift in migration has resulted in the fact that these countries are now facing the same issues of balancing the demand and supply for nurses as is the United States (Pittman, 2013). Pittman (2013) asserted that these changes in nurse migration have occurred due to the varied strategies used to manage it. Additionally, the creation of independent recruitment agencies has increased. Pittman opined that countries may lose their ability to provide quality health care. Thus, leaders need to devote more resources for improving working conditions, education, professional growth and development opportunities, and policymaking opportunities for nurses. Strategic measures recommended for dealing with this issue include fostering the development of coordinated efforts among nations and government regulation rather than private industry regulation. The American Nursing Association is calling for a national solution that does not rely on expatriation of nurses to fill nurse vacancies (Pittman, 2013).

Other researchers explored societal issues and government interventions applied to resolve nurse staffing shortfall but from the perspective of the burden placed on the United States healthcare system and those of developing nations further influencing the nursing shortage (Anderson, 2014; Buerhaus & Auerbach, 2011; Pittman, 2013). These authors disagreed with the strategy that government interventions such as the provision of monies for continued education for nurses and mandated nurse-to-patient ratios that place

a consistent burden on nurses for extended work hours often leading to excessive fatigue are successful measures. Immigration laws supporting the migration of foreign nurses into the United States actually depressed nurse wages, while not resolving core causes or developing long-standing solutions for the United States nursing shortage (Cortes & Pan, 2014). The opinion formed by these authors was that any government intervention focusing on only one affected issue, such as inadequate wages, high stress, or lack of respect, of the many studied, would fail (Cortes & Pan, 2014).

There has been a gap in the research examining realistically the number of nurses needed to provide quality care in a successful cost-reducing strategy in the United States. The authors of the United States Registered Nurse Workforce Report Card and Shortage Forecast (2012) determined that the nursing shortage is a reality. Researchers using a state-by-state analysis determined that the nursing shortage is projected to spread throughout the nation from 2009 through 2030, with the worst shortages forecast for territories in the South and the West United States. Although the nursing shortage has lessened since 2007 with hiring of 250,000 fulltime nurses across the United States, there is also a resurgence of higher turnover rates as Baby Boomer nurses finally retire and the economic recession begins to ease (Williams et al., 2013). New graduate RNs are unable to enter the nursing workforce because of the lack of available positions resulting from the challenges faced by hospitals secondary to health care reform requirements and the financial burdens applied (Brewer et al., 2012; Kovner et al., 2011). Thus, the researchers' findings confirmed that there still exists a depletion of new graduates in the pool of hired nurses.

Contrary to the views of Brewer et al., (2012), researchers Fox & Abrahamson (2009) posited that since nursing care provides for the good of the general populace, it is a general civic safety issue. Thus, government involvement is required to address the nursing shortage issue. When government intervention occurs in a free market system as in the United States, the assumption is that use of other means could not solve such an issue as the nursing shortage (Fox & Abrahamson, 2009). These authors posited that government policy-makers need increased participation in resolving the issue through encouragement of adequate staffing levels and the development of policies that incentivize placing monetary value on quality of care delivery (Fox & Abrahamson, 2009). Support for the materialization of Pay for Performance initiatives by which healthcare organizations' leadership reimbursement occurs for providing increased quality care is encouraged (Fox & Abrahamson, 2009). Addressing of this measure occurs in the present healthcare reform regulations of the PPACA. Establishment of several government initiated programs such as the Nurse Shortage Reduction and Education Extension Act, Immigration Nursing Relief Act, and the Nurse Reinvestment Act, to name but a few, occurred to retain and recruit nurses and nursing faculty to meet these needs (Rossman, 2011).

Differences in socioeconomic and healthcare needs between industrialized countries and developing countries; and, the urgency for better policy formation addressing these needs is apparent. The need for increasing numbers of nurses to provide long-term care comes at the same period as that of severe predictions of nursing shortages in the United States as well as around the globe. Planning for long-term care of clients is

a nursing responsibility. MacDonald, Edwards, Davies, Mark, and Guerney (2012) agreed that policy formation aimed at the growing public health challenges is necessary, but stressed the opinion that nursing, nongovernmental, and nonprofit associations and organizations have a political and moral responsibility to have a voice regarding government policy formation. MacDonald et al. further stressed that internal and external factors such as governance structures, legislative, professional, and jurisdictional mandates shape organizational leaderships' policy choices and actions.

The American Nurses Association (ANA) conducted a repeat survey of nurses in 2011 concerning health and safety of nurses in the workplace that reestablished the role of the supportive work environment and the need for improved strategizing by hospitals' leadership and government policymakers as did Fox and Abrahamson (2009), MacDonald et al., (2011), and Rossman (2011). Respondents totaled 4,614 nurses. Although some improvements were noted overall since the prior survey, two major issues of stress and overwork (74%) and musculoskeletal injury (62%) remained. Concerns of on-the-job assault also increased by 9% (ANA, 2015).

Williams et al. (2013) recommended that organizations must support nurse retention to minimize the cost of turnover and support recruitment and training to minimize cost. These authors further recommended that managers also need training and support in use of appropriate interviewing techniques and in making personnel decisions that will support nurse retention and add strength to the organization (Williams et al., 2013). Several researchers agreed that retention and hiring of nurses certified in their specialty of nursing yields a workforce of increased expertise, demonstration of life-long

commitment to learning, motivation, professionalism, and commitment to their careers. Certification further promotes recognition by others and enhances professional autonomy of the nursing workforce, factors found to influence nurse turnover rates (Williams et al., 2013).

Nursing Education and Recruitment

The strategy of expanding nursing educational program enrollments in an effort to recruit more nurses and decrease the nursing shortage has presented many issues for the profession. One of the greatest areas of concern noted in the literature is that nursing educators fear that they are often unable to increase enrollment capacity in nursing educational programs. This fear is due primarily to an increasing shortage of nurse faculty. However, limited clinical practice sites and diminished financial resources due to deep cuts in program budgets also contribute to these concerns (Beal, 2012; Lewis, 2010a). As a result, many hospital organizations, colleges, and universities are collaborating through innovative practice-education partnerships (Beal, 2012). These collaborative practice-education projects between public universities' college of nursing baccalaureate programs and major hospitals in the state to expand educational capacity are occurring in response (Beal, 2012; Lewis, 2010a). Despite critical shortages of nurses, many nursing school executives are turning qualified applicants away due to the lack of qualified clinical faculty. There are also insufficient classrooms and skills laboratory spaces for students in many schools. The results of these partnerships included a significant increase in student capacity in partnerships that measured outcomes, increased faculty through use of hospital senior nursing staff, use of hospital classroom and clinical

laboratory space, and sharing of development of curriculums (Beal, 2012; Lewis, 2010a). There is a gap in the literature concerning the measurement of successful outcomes of these partnerships since measurement has only occurred in a few sites.

Another similar study conducted for the Carilion Clinic in Roanoke, Virginia, and its affiliate, Jefferson College of Health Sciences (JCHS) demonstrated further outcomes of collaboration strategies to increase capacities of nurses (Clark & Allison-Jones, 2011). Faced with only 25.9% of their nursing staff having baccalaureate nursing degrees (BSN) or higher, Carilion executive management provided educational benefits to staff members in an effort to meet or exceed the national average of 36%. Development of a master in nursing (MSN) degree program as well as a doctorate in nursing practice (DNP) program in collaboration with Case Western Reserve University Francis Payne Bolton School of Nursing came to fruition. The college was able to add faculty and support services, and the percentage of bedside nurses increased, as did levels of educational preparation as a result (Clark & Allison-Jones, 2011).

Various other researchers confirmed many key factors identified as associated with the nursing shortage, including factors associated with nursing education. These researchers identified and categorized reasons for the nursing shortage as nurses leaving hospital practice and lack of educational opportunities. Reasons for nurses leaving hospital practice included: (a) management issues, (b) job design, (c) job stress, (d) physical demands, and (e) failure to nurture new nurses who have entered the profession. Lack of educational opportunities included inadequate numbers of qualified faculty needed to support new students accepted into nursing programs as well as additional sites

for clinical practice programs (Kalisih et al., 2011; Lewis, 2010b; Zinn, Guglielmi, Davis, & Moses, 2012; Rosseter, 2014).

Further research examining the nursing shortage and redesign of nursing education programs in preparing the future nursing workforce in the literature broadened this scope studying why students failed to complete nursing school once they had entered nursing programs and barriers to hiring and retaining nursing faculty (Lewis, 2010b). Most important barriers to completion found included lack of financial support, inability to balance family and school, and inability to work and attend school simultaneously. Barriers causing faculty shortages included noncompetitive salaries, retirement, and resignations. Major stakeholders developed strategies to address these issues through development of funding for students in the workforce; informational websites for students needing assistance with childcare, transportation, finances, stress management, and legal services; and legislation approving raises for nurse educators in state nursing schools (Lewis, 2010b). Attempting to address these same issues, the Maryland Health Services Cost Review Commission (HSCRC) initiated nurse education support funding (NESP) in collaboration with 50 hospitals, payers, and nursing representatives from across Maryland. Initiatives included student scholarships, internships, mentoring and high school outreach programs, international recruitment, and retention initiatives. The HSCRC extended this program until 2012. Thus far, $36 million in NSP funds have been distributed (HSCRC, 2011b).

Changes in Nursing Dynamics

The dynamics of nursing as a profession are changing dramatically due to increased demands from government and the public for increased levels of performance and the drive for cost effectiveness through increased efficiencies, patient safety, and quality of care delivery (AACN, 2014). The contribution of nurses as health professionals has been essential in meeting these demands, although many issues affect the provision of care and there are changing dynamics in nursing noted since 1990. Federal agencies, the military, healthcare organizations, and policy makers have recognized the need for nurses having increased levels of education of at minimum a BSN degree as playing a vital role in making a difference in nursing and care delivery outcomes (AACN, 2014; RJWF, 2013). BSN prepared nurses are now being recognized for their broadened skillset of critical thinking, leadership, and care management and coordination. Additional recognition is noted for their ability to promote health and work in varied settings across the healthcare industry (AACN, 2014). The Institute of Medicine report on the future of nursing recommended increasing the percentage of BSN nurses to 80% by 2020 in order to respond to the increasing challenges of the changing health system and meet the health care needs of patients (RWJF, 2013). This increased educational level and broadened scope of practice for nurses is recommended throughout the research to decrease future health risk (ANA, 2015). Organizations should increase their efforts to foster a continuing environment of learning for nurses (AACN, 2014).

Physician Shortages

Physician shortages, expected to increase through 2025, are further affecting access to health care (Murphy, 2011; Petterson et al., 2012). Faced with demographic pressures, aging populations, and physician desire for increased work-life balance, it is recommended that hospital leadership search for innovative methods to attract and retain physicians to maintain adequate access to healthcare in a competitive market (Chang, Stukel, Flood, & Goodman, 2011). Furthermore, there are a significant number of physicians who are inactive for other reasons (Varjavand, Novack, & Schindler, 2012). These changes in practice are indicative of a continued increase with physicians reducing their work hours for personal reasons (Varjavand et al., 2012). The recommendation made by Varjavand et al. is that healthcare organizations' leadership need to develop processes for incentivizing physician return to the workforce as part of their strategic measures in dealing with the challenge of physician shortages.

Shortages of physicians, especially primary care physicians, are affecting access to care and patient safety and care quality delivered. Johnson (2013) agreed with Murphy (2011) that the estimated shortage will result in a need for 250,000 additional physicians in primary and specialty practices, with 35,000 to 44,000 being in primary care. Review of the literature further documented generalist and specialized physician shortages due to facing demographic pressures of greater work-life balance, aging population, and healthcare reform in a study done by Kneeland et al., (2010). Recommendations of these authors included a strategy called talent facilitation that highlighted four actions of attracting, engaging, developing, and retaining physicians. Other strategies offered for

dealing with the physician shortage highlighted increasing medical schools and payments for primary care physicians to meet the needs of the organization and the patients.

Faced with these challenges of work-life balances and healthcare reform, many physicians are deciding to leave their practices (Gray, Stockley, & Zuckerman, 2012). Data analyzed from a 2009 Commonwealth Fund survey of American physicians indicated that 53% of physicians greater than age 50 and 30% between the ages of 35 and 49 might plan to leave their practices within a 5-year period. The most significant predictor was time coordinating care for patients. This task was highly indicative of physician dissatisfaction since it could be performed by nonprofessional staff. Furthermore, physicians are not routinely paid for these types of tasks under the fee-for-services payment system (Gray et al., 2012). Most primary care physicians employed in the ambulatory arena serve as the foundation of United States healthcare since they presently provide 52% of all ambulatory care visits and inpatient care (Petterson et al., 2012). The availability of primary care physicians threatened with a projected increase of 15.2% in the population between 2010 and 2025, equates to an increase from 462 million to 565 million visits per year, and the above 65 years of age population increasing by 60% for this same period (Petterson et al., 2012). There are further predicted shortages of 51, 880 primary care physicians and parallel shortages of NPs and PAs to supplement the physician shortage if interventions do not occur now (ACNP, 2011; ASPA, 2011; Jewett, Brotherton, & Ruch-Ross, 2011). Correction of this predicted shortage could occur if health system flexibility is fostered and incentives and resources are developed for return to practice (Jewett et al., 2011). Decreasing career satisfaction threatens the retention of

physicians currently practicing in the healthcare workforce. Data from the 2008 Health Tracking Physician Survey indicated that type of physician specialty, amount of physician autonomy, and amount of compensation were primary factors cited for intent to leave the practice (Chen et al., 2011). These authors agreed with Jewett et al. (2011) that in light of the predicted shortages, issues surrounding career satisfaction are significantly relative to supporting and maintaining an adequate physician workforce. Fortney, Luchterband, Zoklelskaia, Zgierska, and Rakel (2013) further testified that physician burnout is an increasing health problem and is more common among physicians than any other professional group, with 60% reporting having experienced burnout. The new challenge of providing care to an additional 32-34 million patients secondary to the implementation of the PPACA will increase demand on physicians. Landry et al. (2015) and Robboy et al. (2015) noted that provider shortages are extending beyond physicians to other medical providers as well (i.e., physical therapists, pathologists) on whom patient services also depend. Fortney et al. (2013) agree with Chen et al. (2013) that understanding these complex issues will assist healthcare organizations' leaders in retaining clinicians while improving satisfaction, quality of life, and patient care.

Utilization of NPs and PAs to assist in alleviating projected physician shortages has continued to be an intervention discussed throughout the literature. Utilization of NPs and PAs in academic medical centers as physician surrogates for most patient services were felt to provide value to these organizations (Moote, Krsek, Kleinpeil, & Todd, 2011). NPs provide 80% of primary care delivery in the United States. However, 28 states have introduced legislation for expansion of their role as primary care providers

(Murphy, 2011). NPs licensed by nursing boards may practice independently in many states and have directed nurse-managed health centers (NHMCs) providing high quality, cost-effective care, and increased patient satisfaction (AANP, 2011; Wilson et al., 2012). The workforce of PAs consists of greater than 80,000 with 93% working in clinical practice (AAPA, 2011; Halter, et al., 2013; USHHS, 2014). PAs, licensed by medical boards, are dependent practitioners. Projections of physician shortages have also extended to the specialty of emergency medicine, which continues to have a significant shortage of emergency physicians and nurses as the demand for emergency care increases (USHHS, 2014). The primary responsibilities of PAs and NPs included: decreasing patient waits for evaluation; increasing access, safety, and quality; improving care continuity; reducing length of stay of hospitalizations; and reducing costs associated with hiring of more physicians (Moote et al., 2011; Riley & Janosky, 2012). Growth in use of these professionals in providing healthcare services suggests that changes in models of delivery of patient care is shifting in the United States. The projected growth rates are now greater than that for physicians. The projected physician shortages and changes in healthcare delivery directed at improved efficiency and innovations using a team-based approach to care, have led to this growth and reliance on NPs and PAs (Dill, Pankow, Erikson, & Shipman., 2013). Many of the same reasons for employment of these professionals as noted by Moote et al., (2011) and Riley and Janosky (2012) were in agreement with the study findings noted by Dill et al., 2013. However, this study noted responses from patients who had indicated a preference for care provided by a NP or PA to include additional reasons of increased quality of care, more personalized and

compassionate care, greater levels in communication, and good previous experiences in care provided by these professionals. If effectively used as providers in the United States, the projected primary care physician shortage of 20,400 noted in 2010 may dwindle. The resulting projection is 6,400 physicians if the same proportion of services exists by 2020 with primary care services increasing by 5% (USHHS, 2014).

Complexity Theory in Medical Practice

Hospitals are integrated complex adaptive systems (Sturmberg & Martin, 2012). Hospital leadership for sustainable decision-making should incorporate systems thinking and complexity theory (Sturmberg & Martin, 2012). Several authors in the literature noted that creation and maintenance of synergistic relationships with the environment, stakeholders, and the global community as well as the ability to think strategically are primary leadership requirements and intrinsic to sustainability success (Visser, 2011). Clark & Allison-Jones (2011) recommended that the challenges facing hospitals' leadership, such as that of staffing shortages of nurses and physicians need further addressing through use of sustainability strategies exploring recruiting and retaining efforts. Several authors also noted that planning and evaluation of activities contributing to sustainability, as well as exploration of policy changes affecting health care reform and payment systems, need further addressing. These authors recommended measures by hospital leadership for sustainable decision-making as strategies used for working toward a holistic and proactive model of management and health care delivery (Martin, Weaver, Currie, Finn, & McDonald, 2012; Sloper & Hall, 2011).

Complexity theory, as identified in the literature, is significant in gaining a greater perspective of the medical systems and how medical staff must maneuver within the system to provide quality and safe patient care (Kannampallil, Schauer, Cohen, and Patel., 2011). The complexity theory serves as the lens for understanding how health care practices can successfully adapt to changes as well as create changes in their environments in an effort to develop strategies that improve primary health care delivery (Crabtree et al., 2011). Primary practices are complex adaptive systems and possess *agents* that have learning capability and act in unpredictable ways (Crabtree et al., 2011). Tsasis, Evans, and Owen (2012) researched the difficulties of integrated care required for health reform from a complex systems viewpoint and found that primary care practices must coordinate services across multiple health care entities, share information systems, conduct interprofessional teamwork and collaborative efforts, and have shared accountability for the care of the patient (Harle, Harman, & Yang, 2013). Use of integration strategies is the focus of change in system design to meet the needs and preferences of the patient (Tsasis et al., 2012). There is a need for furthering the study of complexity theory and systems in medicine and health care as observed by Lipsitz (2012). Humans are innately complex. This complexity harnesses body, mind, spirit, and social circumstance. Then, these complex individuals enter at many points into an inherently complex organizational infrastructure of health care that is complicated in design, is nonlinear, dynamic, and unpredictable in nature (Martin et al., 2011).

Due to this complexity of humans and the health care infrastructure, clinicians, healthcare scientists, and managers have many concerns related to dealing with complex

clinical scenarios. Martin et al. (2011) further noted that meeting the challenging organizational issues resulting from these complex clinical scenarios successfully is not occurring without developing different interventions and strategies to be adaptive to changing complexities of patients' illnesses and care needs.

Physician Recruitment and Retention

Several studies in the literature indicate a direct relationship between physicians choosing to work in underserved areas and nonunderserved areas and personal needs for work-life balance. Studies of recruitment and retention of primary physicians in urban underserved communities in Los Angeles County, California evolved into themes involving personal and career motivators and clinic support (Walker et al., 2010). Physicians in underserved areas chose their practices based on personal mission and self-identity. Physicians in nonunderserved areas cited different reasons for choosing their practices. These reasons included work hours and lifestyle (Walker et al., 2010). Grace, Korinek, Weitzel, and Wentz (2011) and Walker et al. (2010) agreed that medical schools and clinical practices experiencing physician shortages might enhance strategies for recruitment of primary care physicians. These strategies would identify key personal motivators primarily. Secondarily, strategies would promote long-term retention of physicians through maintenance of work-life balance. Murphy (2011) further noted that many new doctors continue to choose specialty practices offering increased pay and balanced lifestyle rather than primary practices, which results in other issues of long waits, decreased access to care, and postponed care for patients.

The Association of American Medical Colleges (AAMC) and 39 other medical academies and societies recently addressed the Joint Select Committee on Deficit Reduction urging them to protect Medicare beneficiary access to healthcare services (Zigmond, 2011). This protection would occur through protection of existing financing for graduate medical education (Zigmond, 2011). Recognition was given of the need for taking action to ensure national long-term fiscal sustainability as per the healthcare reform measures enacted in 2010. Nevertheless, concern was expressed that reduction in Medicare's support of GME will possibly increase the physician shortage (Iglehart, 2012; Nasco et al., 2011; Zigmond, 2011). Although existing medical schools are expanding student enrollment, there are still issues. Medicare's current cap on tuition for GME prevents new United States hospitals from expanding teaching programs as well as the number of faculty. These authors felt that this exacerbates the present and expected continuing physician shortage. While the physician community is striving to improve efficiency and quality care it provides, Medicare GME cuts limiting training threaten access to care for millions of patients (Iglehart, 2012; Nasco et al., 2011; Zigmond, 2011).

In contrast, Chang et al. (2011) examined primary physician workforce and health outcomes of Medicare beneficiaries. An outcomes analysis of a 20% sample of fee-for-service beneficiaries across primary care service areas was performed. A higher caliber primary care workforce, especially those working in the ambulatory care setting, was generally associated with positive patient outcomes, thus giving credence to the continued need for increased numbers of primary care physicians in the workforce as

noted in the previous studies cited (Chang et al., 2011). Decreased mortality rates and hospitalizations resulted in decreased Medicare spending for those patients living in territories with these higher caliber physicians per population (Chang et al., 2011).

However, with the diminishing pursuit of primary care practice by medical school graduates in the United States, there would be an increased shortage of primary and family practice physicians to handle the needs of increasing elderly patients (Chang et al., 2011). Strengthening the role of primary care physicians as recommended by these authors is vital to improving outcomes and efficiency of health care delivery.

The increasing difficulty to convince United States medical school graduates to choose primary care careers affects this increase in demand for primary care physicians secondary to healthcare reform and the resulting increased number of insured Americans (Petterson et al., 2011). Dorsey, Nicholson, and Frist (2011) noted that there is an unequal distribution of primary care physicians geographically in United States medical schools, especially in rural areas secondary to financial barriers and government physician payment policies that dissuade physicians from entering primary care practice. Recommendations for reversal of this issue were presented to include decreases in present financial barriers to education, provision of financial incentives for entering primary care practices, and increasing of reimbursement to primary care physicians (Dorsey et al., 2011). Medical school graduates in the United States in 2010 chose only 44.8% of family medicine residency positions available and 54.5% residency positions in internal medicine. Two reasons predominately offered were scope of practice and salary. Brook and Young (2010) noted that the salary gap between primary care physicians and

specialists needs to close, and redefining the role of the primary care physician needs to occur in order to produce a healthcare system that provides high quality and affordable care.

Brook and Young (2010), in contrast to Chang et al. (2011), discussed the potential shortage of 1300 general surgeons by 2011 and 32.9% overall shortage of surgeons by 2025. Overall, surgeries needed may increase by 14% to 47% between 2010 and 2020, even if surgical utilization rates remain constant (Brook & Young, 2010). The trend toward specialization has also affected this decrease, with the work of general surgeons becoming more narrow. The proposed healthcare reform measures include incentives for primary care physicians, but none specifically for surgeons (Brook & Young, 2010). The American College of Surgeons (ACS) is urging a change in the Balanced Budget Act caps. These caps affect GME funding primarily. In addition, these caps limit insurance restructuring and increased medical school and residency program enrollments. Other needed changes discussed may include increasing the numbers of physician assistants and nurse practitioners involved in surgical procedures, and having multiple surgeons in rural areas share on-call responsibilities as short-term solutions (Brook & Young, 2010).

The PPACA, aiming to expand medical insurance to 32-34 million uninsured individuals, affects future physician response (Jacobson & Jazowski, 2011). The fear expressed by these authors is that once there is full implementation of the act, physicians who presently provide care for the uninsured and supplement that care with payments from insured patients will not continue to provide care for the uninsured. Steadily

declining insurance reimbursement and rising operational costs are pressuring physicians (Jacobson & Jazowski, 2011). The new law includes provisions and decreases in payment that will undermine physicians' ability to care for patients under the expanding Medicaid eligibility guidelines and decreasing reimbursement rates.

Physician migration has occurred, as nursing migration has occurred, due to the physician shortage in both developing and developed countries (Chen et al., 2013; Tankwanchi et al., 2013). Many countries have lost physicians emigrating to better health systems in the United States, Canada, Australia, and Great Britain. This emigration is indicative of a positive correlation between higher physician migration density and improved health systems, increased economic and health progress, and improved health status (Chen et al., 2013; Tankwanchi et al., 2013). Thus, physician retention is more important for countries growing richer rather than for poorer countries that often train better quality physicians, but then lose them to residency programs within major destination countries (Chen et al., 2013; Tankwanchi et al., 2013). As a result of this lack of or overextended use of physician resources, significant investments are being made by health care organizations to integrate established physician practices into their health systems; to recruit established, independent physicians from private practice; and consolidate systems further through mergers and acquisitions (Zismer, 2013).

Accountable Care Organizations (ACOs) and Patient Centered Medical Homes (PCMHs) are being created as organizational models to provide team-based health care delivered by a diverse group of clinicians as a solution to the primary care physician shortage, decreasing costs of health care delivery, and provision of the complex care of

patients in increasing numbers (Barnes et al., 2014; Chrikmaitov, et al., 2014; STFM & PAEA, 2012). Recommendation of the Society of Teachers of Family Medicine (STFM) and the Physician Assistant Education Association (PAEA), representing primary care educators, is for increased educational collaboration between these educators. Their primary goal is growth of primary care teams. These teams would train and then practice together in these ACOs and PCMH types of organizations (STFM & PAEA, 2012).

Sustainability of Nonprofit Hospitals

Hospitals are facing many growing challenges within the health care industry because of decreased availability of resources, increasing care delivery costs, and effects of the newly signed federal health care reform package. Administrative expenses are significant secondary to the increasing demand for health care with fixed supplies of providers and services, excise taxes placed on drugs, and a new tax on investment revenue posed by the PPACA (Cohen et al., 2010). These challenges pose an increased threat to the sustainability of nonprofit hospitals. As a result of the population having eligibility for health insurance for the uninsured and underinsured Americans under the auspices of the PPACA, increased patient volumes may result. These increased patient volumes may overburden bed capacity of hospitals; outpatient services; physical, operating, and staff limitations; and operating margins if reimbursements are insufficient (Cohen et al., 2010). Medicaid expansion for eligibility for lower income persons as of 2011 and simplification of Medicaid enrollment processes may further decrease reimbursements for hospitals' leadership (Cohen et al., 2010). Though it appeared that eligibility for these Medicaid patients gaining insurance under the benefits of the health

care reform measures would bring new revenue to hospitals' leadership, a major concern is that this influx of patients will impose additional demands on an already overburdened health delivery system (Rajkumar et al., 2014).

Hospitals' leadership may no longer be able to shift cost from lower paying public government sources of Medicare, Medicaid, and uncompensated care that have set charging rates to higher paying nongovernmental private insurance payers (Cohen et al., 2010). Leaders of nongovernmental private insurance companies allow increased reimbursement rates for the same services rendered by hospitals (Cohen et al., 2010). These increased private payer reimbursement rates set by leaders of nongovernmental private insurance companies may offset losses in revenue for hospitals' leadership (Cohen et al., 2010).

Executive leadership in hospitals in Maryland faces another issue that affects their sustainability. Unlike most other states in the United States, the Health Services Cost Review Commission (HSCRC), an independent entity, sets hospital rates in Maryland. In 1977, Maryland was the first of five states granted a waiver by the federal government. The waiver exempted Maryland from national Medicare and Medicaid set rates for services (HSCRC, 2011a). Since 1977, all insurance carriers pay Maryland hospitals based on rates established by the HSCRC. The HSCRC sets rates for 47 acute general, three specialty, and three private psychiatric hospitals with revenues of greater than $13 billion annually. The goals of the HSCRC are to constrain hospital cost growth, ensure that hospitals' leadership have the ability to finance efficient and high quality services to all residents, and increase equity of hospital financing throughout the State (HSCRC,

2011b). The Pay for Performance (P4P) system established by the HSCRC, links providers' payments to their performance with reimbursement adjustments, and a system of financial incentives established based on a comprehensive set of quality of care measurements, efficiency, evidence-based research, and enhanced positive patient outcomes (HSCRC, 2011a). There is a gap in the literature noted since researchers have not yet explored these issues in relation to the nonprofit hospitals versus the for-profit hospitals in Maryland or elsewhere in the United States. Nonprofits' leadership is susceptible to market failure; and, the decreasing availability of funds could result in closures.

Johnson (2013) recommended that nonprofits' leadership mentality must change to incorporate thinking and strategies of for-profit organizations to implement sustainable practices. Bai (2013) examined the differentiation between for-profit and nonprofit California hospitals. Bai further examined the influence of board size and occupational background of directors on social performance. Nonprofit hospitals' leadership consider enhancing social performance as significant to their mission since these organizations, by definition, receive tax subsidies for pursuing charitable missions for community betterment. Results of this study determined that board size and having government officials on the board were positively associated with social performance for nonprofit hospitals. The presence of physicians on the board was positively associated with social performance in for-profit hospitals. Thus, there are important implications concerning boardroom practices and possible effect on organizational sustainability (Bai, 2013).

The requirement for reporting patient data and quality outcomes of care under the Physician Quality Reporting Initiative (PQRI) of the PPACA, including the establishment of an electronic patient medical record, places additional expense on hospitals' leadership, especially those whose organizations are part of large networks. A new Center for Medicare and Medicaid Innovation is also established by government leaders under the PPACA to research, develop, test, and expand innovations. These innovations include payment and delivery arrangements for hospitals that result in bundled payments to physicians for improving patient care and cost savings. If either of these conditions of improving patient care or reducing costs is unmet, reduction in reimbursement occurs (Cohen et al., 2010). A dollar value was set by government leaders of each hospital's percentage of possibly preventable Medicare hospital readmissions. This value serves as the basis for adjusted payments to hospitals from government-funded programs (Cohen et al., 2010). Rajkumar et al. (2014) in agreement with Cohen et al. (2010) noted that beginning in 2012, this percentage of potentially preventable hospital readmissions adjusted by government leaders may further reduce reimbursement rates since the leadership of the federal government can withhold Medicare payments from hospitals if there is an excess of patients returning to the hospital within 30 days of discharge. There is no current data available identifying the scope of this possible reduction in reimbursement rates.

Title V of the PPACA states that executive leaders of hospitals must ensure a competent, diverse, workforce, providing innovation in workforce training, recruitment, and retention in order to develop strategies for aligning workforce resources with national

needs (U.S. Department Health & Human Services, 2010). Current demographic and economic trends, including increasing unemployment and government deficits, are cutting health care funding while employers, consumers, and government leaders are demanding reduced health care costs that are exceeding inflation (Berman et al., 2011). Similarly, Davis & Robinson (2010) stressed that as the economy continues to lag in recovery and leaders of healthcare reform strive to curb medical spending, hospital leaders are facing investment in costly initiatives for advanced technology, increased physician employment, reductions in payment, and increased efficiencies in patient care. As a result, independent hospitals' leadership across the United States is urgently seeking a greater leadership position in the industry market and capital access through merger or acquisition (Davis & Robinson, 2010). In 2009, 52 incidences of these independent hospitals' leadership seeking such an advanced leadership position and capital access (85% of all announced transactions) resulted in mergers or acquisitions (Davis & Robinson, 2010).

There are many definitions of sustainability. The World Commission on Environment and Development held in 1987 defined sustainability as meeting current needs without impacting future ones (World Commission on Environment and Development, 1987). Many organizations' leaders use the triple bottom line (TBL) approach incorporating financial, social, and ecological outcomes as measurement systems for corporate sustainability (Sloper & Hall, 2011). Sloper and Hall (2011) use the TBL approach on three fronts (i.e., people, planet, and profits) which allows organizations' leaders to apply this concept of sustainability suitably to their specific

needs and to evaluate the results and consequences of decisions made from a long-run perspective. Development of the selected approach to organizational sustainability occurs in various ways using ongoing sustainability measures, based on strategic management and measurement of organizational performance (Sloper & Hall, 2011). The TBL approach expands the baseline performance measurements used by organizations' leaders as sustainability measures to include holistic business management strategies, building a strong corporate culture striving toward corporate growth as well as solid social and environmental standards (Sloper & Hall, 2011). Organizations' leaders using this TBL approach to sustainability have demonstrated significant impact on others, generating stakeholder value and contributing to the overall economy and well-being of others in the regions in which they operate (Sloper & Hall, 2011).

Many issues endure that challenge nonprofit hospital organizational leaders' to sustain strong corporations meeting the needs of shareholders and the communities they serve. These challenging issues include (a) staffing shortages of physicians and nurses, (b) rising expenditures, (c) decreased reimbursements, and (d) decreased shareholder satisfaction (Aiken et al., 2012; Petterson et al., 2012). Liu, Forgione, and Younis (2012) noted in their study analyzing costs, volumes, and profits of nonprofit teaching hospitals, agreement with these prior studies, but added increases in uncompensated care, reduction of operating margins, and changes in public policy as significant challenges to organizational sustainability.

Strategic leadership is defined as having talent to anticipate issues and behaviors, be a visionary, and maintain flexibility. Strategic leaders must also think strategically and

work with others to create sustainability for their organizations (Hitt et al., 2011). Hitt, Ireland, Simon, and Trahms (2011) defined strategic management in a similar fashion. These authors posited that leaders must commit, make decisions, and take actions for success. Such strategic actions require achieving competitiveness and above-average returns for their organizations. Primary factors for organizations are effective competitive positioning and acquisition, bundling of leveraging of resources for achieving competitive advantage and creating value. Leaders are an integral part of community organizations and governments maintaining continuity linking the past to the present and the present to the future making them sustainable leaders in moving an organization to reach its goals through cooperative effort. Dibrell, Craig, and Neubaum (2014) noted, in agreement with Hitt et al. (2011) that contemporary business leaders face many challenges. Their leadership success is dependent on strategic, flexible planning and innovative initiatives maintaining competitive advantage and performance. However, Dibrell et al. (2014) caution that having a formal strategic planning process can create inflexibility, decreasing efforts toward adaptability in response to environmental changes reducing competitive advantage and innovation. Planning flexibility combined with the formal planning process allows the organization leaders to leverage significant resources and innovation for sustainability (Dibrell et al., 2014).

Complexity theory may also offer a strategic approach to organizational sustainability. The successful application of complexity theory to both health care systems and organizations provides explanations for self-organization of the health care system (Kannampallil, 2011). Self-organization behavior is unpredictable and difficult to

understand without observing it. Kannampallil further stressed that behaviors are nonlinear; and, even a small difference initially can lead to significant differences in outcomes for the organization. Recommendations made were to concentrate on possible explanations of known outcomes while assuming a nonintentional method for understanding behaviors within and across the organization for successful application of this theory to health services. Like Kannampallil (2011), Sturmberg, O'Halloran, and Martin (2012) expanded on the difficulties entrenched in the complex system of healthcare and noted that truly valuing patients' needs and outcomes arising from illness or disease is flexible and adaptable, continuously reconfiguring itself at every level in the system. A collaborative culture should exist between all members and functional units with leadership promoting the organization's shared vision and building a supportive environment. These authors posit further that the complex adaptive health system allows true patient-centered care reform to occur (Sturmberg et al., 2012). All agents as well as the systems' culture established by its leadership must support sharing of insights and ideas and learning across boundaries of the system. Learning from patients served should further be supported by leadership in order to develop a system governed by the truly shared system purpose (Sturmberg et al., 2012).

Halley (2012) recommended that nonprofit hospitals' leaders need to employ or affiliate with adequate numbers of primary care physicians and medical practices in order to capture market share and remain sustainable. Board members must control key expenses but also ensure the application of rigor to major revenue factors including: (a) provider capacity, (b) payer mix fees, (c) customer service, (d) physician productivity, (e)

coding and documentation, (f) accounts receivable management, and (g) service mix (Halley, 2012). The most successful hospital-owned practice organizations have partnerships of physician and executive leaders. This leadership maintains or enhances clinical and service quality, physician output, and operational and financial sustainability (Halley, 2012). Operating and financial pressures for health care organizations include challenges of decline in demand for hospital beds as outpatient services increase to decrease costs; labor costs of providers needed; malpractice liability and costly insurance premiums; limited access to capital for necessary upgrades to the physical plant, advances in technology needed, and medical equipment (Davis & Robinson, 2010). Davis and Robinson further advised that health care organizations should be performing self-evaluations, updating strategic plans, seeking opportunities for consolidation of systems and joint ventures, optimizing cost structures, and exploring all available capital financing in the market.

Many nonprofit hospitals' organizational leaders agree that an appropriate infrastructure for dealing with these challenges and change for provider or insurer must be in place for successful and sustainable organizations (Magill and Prybil, 2011). These authors noted that focus needs to be directed at reassessment of organizational approach to reform regulations to ensure compliance with federal guidelines, backing from finance and operations' executives in building community benefit for populations served, development of hospital wide initiatives for success in improving quality measures, having measurable outcomes, and education of policy makers (Magill & Prybil, 2011).

Contrastingly, Bonn and Fisher (2011) found that strategic decision-making by organizational management does not integrate sustainability as a factor of the strategic plans formulated at the corporate, functional, and business levels. The authors developed a framework for use by managers in treating sustainability as a strategic rather than an operational issue, and in identifying opportunities for further improvement. The framework addresses analysis of the organization's current business model for balance between economic, environmental, and social goals; product life cycle analysis; operations, finance, human resources, and marketing analyses; and organizational culture analysis. The framework proposes managers must address sustainability at the strategic level as the cornerstone for doing business, recognizing that all elements at the corporate, business, and functional levels are interconnected and significantly influence each other on an ongoing basis.

Healthcare reforms since 1910 have been based on controlling competition and the market, reinforcing a high cost care delivery model that is extremely specialized, capital intensified, and that does not incorporate health and social needs. This concept is in direct contrast to the business model developed by Bonn and Fischer (2011). Perkins (2010) studied health planning done primarily through results of hospital interviews performed through the years of 1910 through 1986 that advocated highly capitalized, highly specialized, and high cost institutions that raised healthcare costs. Irrespective of the needs of the population served, hospital appraisals were in terms of financial assets and capital. These appraisals were used to maximize efficiency and productivity. Perkins noted that health care reform continues to pose difficult challenges to existing institutions

and organizational models for remaining sustainable while still able to build and match healthcare services to population needs.

Planning and evaluation of performance for organizations facing the challenges of sustainability has become a growing concern as the world's population continues to increase, resources are depleting, social inequities persist and cultural breakdowns occur with radical, disjointed changes and stakeholder, public interest groups, and government leadership pressure to improve sustainability of products and processes (Porter & Derry, 2012). Due to this complexity, the authors developed a framework of sustainability thinking as a tool used for addressing sustainability issues and management of productive resources. As Bonn and Fisher (2011) before them developed their framework to treat sustainability as a strategic rather than an operational issue, so did Porter and Derry (2012). These authors recommended that managers be empowered to take risks to move from traditional hierarchical channeling and linear optimization to bottom-up initiatives, increased collaboration across boundaries, nonlinear communication, and development of spontaneous networks. The difference in thinking between these authors' ideas captured in their frameworks is that Porter and Derry recognize that traditional approaches to sustainability often coexist as change is occurring.

Changes in payment because of healthcare reform measures, especially those from Medicare, Medicaid, and commercial insurance companies are challenging traditional models of healthcare management (Grogan, 2011). Some changes are predictable challenges, but others remain unknown. Medicare payment is changing from volume reimbursement to performance reimbursement. A greater percentage of operating

revenues link to hospital and physician management of services. Other operating revenues link to appropriate emergency visits and admissions, and increased performance on process and patient outcome measures over the next 5 years (Woodson & Jenkins, 2010). Recommendations for sustainability included hospitals convening task forces to monitor risk and performance improvement. Further recommendations included identification of incentive payment metrics and quantification of financial risk. In addition, hospitals' leaders should pair a finance department staff person with a chief nursing or medical officer to monitor performance weekly (Woodson & Jenkins, 2010). It was further noted that the greater the integration of the organization, the better its performance and ability to sustain under the new payment reform measures (Woodson & Jenkins, 2010).

Examining vulnerabilities within the current healthcare system in the United States, use of a human centered approach in analyzing human behavior and systems should occur to identify problems and generate effective solutions (Searl, Borgi, & Chemali, 2010). This approach based on the use of engineering and design tools controls the loss of barriers that often occur, preventing failure and breakdown in complex systems. Thus, an understanding of human behaviors within the complex systems of healthcare will allow for evolution of sustainable healthcare systems (Searl et al., 2010).

Health Systems Innovation

Information technology use for meeting regulations of health care reform is causing significant impact on United States health care organizations, especially in the nonprofit sector, causing significant capital investment (Davis & Robinson, 2010). The

federal government is using health information technology (HIT) to drive the healthcare reform measures through mandated use of an electronic medical record for all patients. The federal government is also enacting other provisions of the American Recovery and Investment Act of 2009 creating a nationwide health information infrastructure. Within this infrastructure, recording, sharing, and utilization of health information can occur by all medical personnel having access to improve patients' health outcomes across the continuum of care (Davis & Robinson, 2010). Failure to improve technology causes difficulty for organizations in meeting mandates of the health care reform regulations as well as competing with other organizations in the health care industry market (Davis & Robinson, 2010). Funding to pursue this mandate and create organizations that will allow for accurate forecasting and data modeling is attainable from some federal government subsidy and use of other creative, nonconventional financing techniques or more complex partnership structures for third-party capital (Davis & Robinson, 2010; Zismer, 2013). It is the opinion of these authors that increased accuracy in forecasting and data modeling will lead to meeting patient needs, health outcomes, and effective management of healthcare organizations promoting sustainability and growth.

Several studies in the literature agree that information technology is a main driver of innovation in health care (Zismer, 2013). The use of information technology can enhance healthcare delivery systems in all areas to provide seamless care for all patients, linking all providers in the United States as well as throughout the international health care market (Zismer, 2013). Restuccia, Cohen, Horwitt, and Schwartz (2012) presented a different perspective on the use of hospital computing as an innovation to improve

process measures of quality of patient care through examination of data from surveys of quality managers, physicians, and nurses in 470 general hospitals. The authors found that hospitals having increased levels of health information technology (HIT) led strategies for increased numbers of quality practices. These hospitals also had increased performance mortality and patient satisfaction measures' rates. Assessments of patient care quality by management further increased. This increase resulted from management initiating EMRs, bar coding, and radio frequency identification device systems (RFIDs). These processes were used to track medications, supplies, patients, and equipment leading to increased patient safety and quality of care measures (Restuccia et al., 2012).

Organizational Leadership

Sustainability of nonprofit hospital organizations, because of dealing with the many challenges of the changing health care industry, including those imposed by the PPACA for hospital leadership, may be at risk. Wikstrom (2010) noted that maintaining stability and healthy financial margins are essential, particularly if organizational leaders plan to enter capital markets seeking additional financing to meet demands. Bush (2011) agreed that organizational leaders must balance profit, environmental, and social needs, coupled with maintaining an effective healthcare workforce. Strategic leadership is recognized as necessary to provide competitive advantage and sustainability for healthcare organizations (Ault, Childs, Wainwright, & Young, 2011; Lewis et al., 2010a; Woolhandler & Himmelstein, 2011).

Effective governance in the nonprofit world, especially in healthcare, is not as easy to discern or measure as within a for-profit organization, where if shareholders'

interests are being met, the organization is measured as being effective (Alexander et al., 2009). Alexander et al. examined data from three national surveys of hospital governance in their study of effective governance strategies. These authors examined changes in oversight and monitoring practices of public and private nonprofit hospital boards. Such oversight and monitoring responsibilities concentrate on board assessment, evaluation, and alignment of nonprofit performance with the strategy and mission of the organization (Alexander et al., 2009). Nonprofit hospital boards are increasing their role in active oversight and monitoring. Doing so, separation between governance and management decreased with management becoming more involved in governance of the organization. Davis and Robinson (2010) believe these changes are critical for aligning management behaviors with those of the community. In addition, these changes are critical for creating incentives and for aligning the interests of hospital management in an effort to maintain sustainability. Choices made by nonprofit organizations in variations of revenue streams are significant to maximize satisfaction and breed a successful combination of resources and outputs. Such choices assist nonprofits in achieving their mission and subsequent sustainability (Fischer, Wilsker, & Young, 2011). Variations in revenue streams include those that are available to the private sector as well. These include earned revenues, returns on investment, and government contracts. Others available are charitable contributions, grants, and in-kind gifts (i.e., volunteer labor).

Studies exist in the literature reviews that indicate a positive correlation between nonprofits' financing and services and benefits provided (Fischer et al., 2011; Zismer, 2013). A further relationship of revenue strategy of nonprofit organizations to risk

management and size of the nonprofit organization exists (Zismer, 2013). This relationship may influence the organization's diversification strategies. The authors stressed further that such a relationship may also result in reliance on specific revenue streams (Zismer, 2013).

In comparison, many researchers have indicated that the mission of the nonprofit organization is most important to organizational sustainability and is the driver for strategic decision-making value (Ridder & McCandless, 2010). The role of strategic human resource management (HRM) captures the impact of how the strengths of nonprofit organizations lay in their strategic goals derived from their mission and values. These authors stressed that dealing with pressures of funding requirements, increased performance monitoring, reduced staff, and increasing workloads, especially in the arena of care services, result in detrimental effects on work and commitment of employees.

Revenue diversification is a fundamental imperative for financial sustainability; and, the capital structure of nonprofits is vital to sustainability and development (Fischer et al., 2011). The mix of different revenue sources provides great strategy for increasing revenue stability. This revenue mix also offers decrease in financial risk for nonprofit organizations' leaders since they are primarily dependent on the financial strategy of paying debts as they are incurred or borrowing to finance capital expenditures (Fischer et al., 2011). Identification of traditional sources of revenue for nonprofit organizations includes fees for service, grants, donations, and investment income.

Management is changing models of healthcare organizations to meet the challenge, as payment for services to hospitals from Medicare and commercial payers

occurs as a result of healthcare reform measures that have already been established and those yet unforeseen. The PPACA is requiring funding of a $1 trillion extension of health coverage benefits to 30 million more Americans. However, regulatory changes dramatically increase regulatory private health insurance oversight, decrease Medicare payments, and decrease Medicare funding (Feldman et al., 2010). Employers are facing new administrative burdens and financing costs. A greater percentage of operating revenues link to how well hospitals and physicians coordinate services. Revenues further link to decreased inappropriate care and services, increased performance on process and patient outcome measures, and decreased inefficiencies in efforts to reduce cost growth over the next 5 to 10 years (Williams et al., 2013). Under the new healthcare reform law, hospitals will have financial incentives to improve quality, reduce numbers of hospital-acquired conditions such as pneumonia and infection, and move from a system of payment based on volumes of patients and services to payment based on positive performance metrics (Williams et al., 2013). These measures require a new approach by management in planning strategies for the long and short term to ensure success and accommodate the new law's requirements. Recommendations for hospitals' management strategies throughout the literature included convening a task force to monitor risk. This task force would also lead performance improvement initiatives identifying metrics for quality incentive payments. The focus would be preventive quality indicators such as reduced hospital readmission rates and further quantifying financial risk exposure (Magill & Prybil, 2011).

Eldenburg, Gunney, Hee, and Soderstrom (2011) examined earnings management related to pay-for-performance in their study of 432 nonprofit hospitals in California finding that managers in nonprofit organizations have larger incentives to avoid high levels of net income in an effort to decrease scrutiny of their actions by government and stakeholders. There is pressure to maintain tax-exempt status and managers could employ value-decreasing activities such as under spending on public relations or education. These authors found that hospital leadership have stronger incentives to manage performance earnings upward and have significantly greater reductions in non-revenue-generating and non-operating activities. Thus, the leadership advocates that nonprofit hospital management make operating decisions based on real earnings management without manipulation of accruals, separating compensation incentives from incentives to meet an earnings benchmark.

Corporate sustainability, recognized as a complex issue since organizations are complex adaptive systems within even larger complex systems, places extraordinary demands on leaders who must make the decisions that may or may not lead to a sustainable future for their organizations (Metcalf & Benn, 2012). These authors describe complex systems as interconnected environmental, economic, and social systems. Leaders of organizations within these systems require the cognitive ability to think through complex problems. Leaders must also engage groups in adaptive organizational change. However, these authors also stressed that leaders must have high emotional intelligence in dealing with personal emotions associated with the complexity of the

problems identified as they and their groups develop strategies to address them for organizational sustainability (Metcalf & Benn, 2012).

Von Bertalanffy (1948) postulated that general systems theory (GST) is applicable to all sciences concerned with systems. Every living thing is an open system that maintains itself. Maintenance occurs in a continuous inflow and outflow never being in equilibrium where there is an equal balance between reversible processes occurring at the same rate, but maintaining itself in a steady state where some of the processes are not reversible nor occurring at equal rates (von Bertalanffy, 1948). Von Bertalanffy presented the concepts of wholeness, directiveness, and differentiation as indispensable variables in dealing with groups. Thus, the inability to explain isolated behavioral phenomena within any organization confirms this general concept of wholeness where all subsystems must interact with each other on a higher level leading to integration in order to maintain a steady state of viability and sustainability.

Hospitals are large, complex entities in which there are a large number of parts constantly interacting with one another nonlinearly and dynamically on different scales and responding to inputs, outputs, and processes. The key to their operational success results when output exceeds interactions of its components (Lipsitz, 2012). The United States health system is also a complex system of social change and business challenges, needing teamwork among all of its subsystems in response to inputs and outputs for delivery of optimal care and viable functioning (Johnson, 2013). The function of any system is to process inputs (i.e., materials, energy, information) into products or outcomes used within the system or the environment, or both (Johnson, 2013). Systems

analysis, developed independently of systems theory, applies these same principles for health system data analysis to aid in planning, design of policies and programs for strengthening of strategies for increased performance, monitoring, and evaluation (Berman & Bitran, 2011).

This concept of complexity science, theory, and thinking is not new to healthcare systems. As Lipsitz (2012) noted, in a complex and multifaceted organizational structure of the healthcare systems environment, patients quickly become acclimated within its multiplicity of processes and services over multiple scales. Lipsitz further noted that the nonlinear interaction of the network of components in complex health care systems can develop from emergent situations, is dynamic and unpredictable, and can often produce unintended results but is successful if the output exceeds the total interactions of its components. Lipsitz stressed that systems' values as well as complexity theory are imperative to progressing the understanding of the multiple, interdependent components affecting medicine and healthcare in an effort to achieve organizational goals.

Researching these issues affecting complex, multidimensional, and multilevel hospital systems, I found that the conceptual framework of general systems theory is applicable to this research academic literature review. Investigating the multiple issues challenging sustainability of nonprofit hospitals, it is evident that the principles of systems theory are significant in understanding the maintenance of the steady state of inputs, outputs, and processes that are continually changing at each level and within each subgroup within the larger system of the hospital environment. Hospital leaders must

develop strategies for sustainability of their organizations using these principles and nonlinear interactions in solving the complex challenges of health care reform.

Transition

This doctoral study includes an exploration of what strategies and changes the executive leaders of the nonprofit hospitals in Maryland use to address the operational and fiscal challenges presented by the implementation of the PPACA. Investigation of processes, strategies, and system changes that can continue to meet these demands for change in the present and future health care industry delineate best how well nonprofit hospitals in Maryland can sustain operations while meeting the needs of patients, staff, and stakeholders. Conclusions and recommendations made in the existing literature are in the context of the theories for appropriate patient care delivery, access to care, and organizational sustainability. Section 2 addresses the research process, the qualitative method and descriptive design, and data collection from in-depth personal interviews of executive leaders of nonprofit hospitals in the state of Maryland-CEOs, executive team members, and members of the board of directors. Section 3 includes the findings of this data, the applicability of the findings to business practices for continued sustainability of nonprofit hospitals in Maryland and recommendations for useful action. Implications for organizational change and possible areas for future research concerning organizational sustainability as the healthcare industry continues to evolve are also presented.

Section 2: The Project

Identification and explanation of the study research process, qualitative research methodology and descriptive research design, and method of data collection and analysis occurs in this section. The section also includes an examination of research quality, validity, and reliability of the data gathered. Additionally, I presented instrumentation used in the data collection and data coding and monitoring techniques with attention to limitation of research bias.

Purpose Statement

The primary focus of this qualitative descriptive study was to explore what strategies and changes executive leaders of nonprofit hospitals in the state of Maryland can use to address the operational and fiscal challenges presented by the implementation of the PPACA. Qualitative descriptive studies are exploratory and intended to uncover novel insights about a phenomenon with rich description from the perspective of the selected participants using inductive reasoning rather than deductive as used in quantitative research (Nuttall et al., 2011). In this research, I strive for a deep understanding of participants' motivations and desires, contributing to the development of personal experience data (Nuttall et al., 2011). I used responses from interviews of selected members of executive leadership from these organizations to determine business strategies and practices for organizational sustainability. Study design is descriptive that allows for an interchange of views between the researcher and the participants, unfolding the meaning of their experiences through rich descriptive responses to the interview questions posed during the interviews (Bernard, 2013; Merriam, 2014). The

phenomenologist is concerned with sharing of insights with others and understanding phenomena from the perception of those involved in the phenomenon (Bernard, 2013). Thus, sharing of the subject's point of view, experiences, feelings, beliefs, and convictions occur.

Role of the Researcher

I ensured for all participants the five basic ethical principles per the National Institutes of Health (NIH) Belmont report of respect for persons, beneficence, and justice (NIH, 2011). These include respect for persons; provision of autonomy of individuals to choose to participate in the study; protection of vulnerable populations; beneficence ensuring no harm to participants before, during, or after the study; and justice in ensuring that the distribution among the participants occurs fairly concerning benefits and risks of the study (Wester, 2011).

The research process and interview protocol include responses to open-ended, semistructured interview questions I developed to elicit the personal business experiences of the selected participants (Stuckey, 2013). Recordation and analysis of the collection of the data responses for broad categories or recurrent themes occur (Merriam, 2014; Stuckey, 2013). To reduce bias, application of no personal opinion or position occurred in reference to the participants' views and judgments intrinsic to their life experiences (Stuckey, 2013). Because of personal extensive experience with the healthcare industry, it was important to clearly convey the purpose of the study to all participants, to ensure understanding and build trust of the confidentiality and integrity of the data collection and analysis. Open-ended, semistructured interviews reduced researcher bias (Bernard,

2013). Discussion included the use of a confirmability audit and use of member checks by participant reviews of the recorded data findings of the interpretations to confirm accuracy of the data (Bernard, 2013).

Participants

A purposive sample of 20 executive management staff of 10 of the nonprofit hospitals within the state of Maryland served as the participants for this study until the saturation of data occurred. Purposive sampling of participants having a knowledge base of the subject area because they work in the healthcare system served this study better rather than attempting to collect data from all respondents who may not work directly in the healthcare system but have had exposure to the phenomena studied. I continued to enroll participants as needed until I reached a saturation of data when no new information was being presented as seen in the previous interviews and no new critical themes or unexplained phenomena emerged from the data analysis and sampling was adequate to provide depth and maximum opportunity for findings' transferability (Bernard, 2013; O'Reilly & Parker, 2013; Simon, 2011). Three levels of management--CEOs, executive team members, and members of the board--were the participants. Participant names were obtained from the leadership membership list found on the Maryland Hospital Association's website and references from known individuals holding executive positions in the nonprofit hospitals within the Maryland Hospital Association network. Age and gender of participants were not factors involved in this study. Participant screening assured that selected executives had minimally 5 years of experience in the health care industry as CEOs, executive management, and members of the board in the nonprofit

hospital environment that had experience in the development of strategies for the phenomena studied. This level of executive leadership was better informed and more knowledgeable about the identified issues challenging their organizations than other managers and employees within their organizations. In addition, it is the role of executives to set standards and maintain accountability for their organizations as trusted agents of the public good and all stakeholders (Crossan et al., 2013). Any personal theories developed before this study did not affect the interpretation of the data or shape the data production process in ways that lead to error and researcher bias, as a nurse affected by the issues presented in this study and having a health care management background. Noninfluential previous knowledge or personal theories of the participants regarding the phenomenon under investigation needed consideration so as not to impose preconceived notions or attempts to generalize issues to all clients having a particular problem prior to the interviewing process to allow for an open understanding of all the responses of the participants (Bernard, 2013). The study participants signed a consent form, used as a tool for ensuring confidentiality, included as Appendix B. Control of researcher bias occurred for known participants largely because there may have been tendencies to collect the data and present results that were in line with these known participants' prejudgments, political views, or practical commitments (Bernard, 2013). Conflict of interest during the interview and data analysis and reporting processes focused on negating researcher bias (Bernard, 2013). Maintenance of an effective rapport with the participants was necessary, but I also needed to remain detached and objective in an effort to maintain limited researcher bias.

Research Method and Design

Since the study was concerned with the examination of a central issue facing all nonprofit hospitals, a descriptive research design and qualitative method were used. The qualitative method of research allowed for a better understanding of complex social processes (Bernard, 2013). Qualitative research scope has expanded since the 1980s to include use of theoretical lenses guiding the researchers to issues of importance for examination, the selection of participants to be studied, position of the researcher within the study, and the reporting of the analysis of the data collection (Bernard, 2013). Qualitative studies are exploratory and are intended to uncover novel insights about a phenomenon from the selected study participants' perspectives using inductive reasoning rather than deductive as used in quantitative research (Bernard, 2013; Kisely & Kendall, 2011). This type of research tries to achieve a deep understanding of participants' motivations and desires, contributing to the development of personal experience data (Nuttall et al., 2011). Qualitative research differs from quantitative in that it describes the complexity or range of occurrences or phenomena, occurs in natural rather than experimental settings, and produces data through open-ended discussions and observations (Bernard, 2013; Merriam, 2014). Consideration of qualitative research methods for use occurs when the study involves the investigation of complex phenomena that are difficult to measure quantitatively, obtaining a comprehensive knowledge of an issue including its possible causes, and then developing further complementary quantitative research theory when possible (Bernard, 2013; Curry et al., 2013).

Quantitative methods alone, although used for outcomes research in health care organizations to examine utilization, cost, and clinical effectiveness of medical care delivery through experimental design studies, are not well suited for measuring complex aspects of the operational issues affecting sustainability of health care organizations. Organizational change, clinical leadership in implementing changes in care resulting from evidence-based studies, patient and staff perceptions of care, and leadership business strategies in a consistently changing health care environment is better suited to qualitative research methods (Curry et al., 2013). Based on these criteria, the qualitative method of research was the method used for this study. This method served to gain a deeper understanding of issues occurring in health care and affecting the sustainability of nonprofit hospitals since 1990. The basis for the use of the research was to bridge the knowledge gap of nonprofit hospitals' executive leadership concerning business strategies and changes needed to address the operational and fiscal sustainability of their organizations in the changing health care industry. Systems theory, systems analysis, and complex adaptive systems theories contributed to the analysis of the data collected and its relationship to the complexity of the phenomenon studied.

Research Method

The selection of a qualitative research method for this research study emerged because it was best suited for exploring complex issues for the integrated systems of health care using inductive reasoning. Qualitative methods use data collection types such as observations, face-to-face or telephone interviews, focus group interviews, public and private documents, and audio-visual materials (Bernard, 2013). Interviews conducted

using this method make use of open-ended questions in order to obtain the lived personal business experiences of the participants. Interpretation of the data involves moving deeper into understanding the data, involving continuous reflection, and evaluation (Bernard, 2013). Moustakas (1994) discussed two levels of data collection when using the qualitative approach to research as first collecting data using open-ended questioning of participants and observation, and then returning to the data multiple times for reflective, structured analysis to portray its essences of the experience.

Quantitative research, based on the scientific method, identifies a problem and then develops a series of hypotheses specifying the relationship among independent and dependent variables. The results of the study either confirm or disconfirm these hypotheses. This method uses a deductive reasoning approach and uses statistical procedures to control the variables. Broad numeric trends of the data results are reported. Mixed methods approaches involve the use of both quantitative and qualitative research methods. The mixed methods approach either broadens the understanding of the topic or uses one approach to better understand, explain, or build on the results of the other (Mayoh & Onwuegbuzie, 2015). This type of research requires extensive data collection of text and numeric data that can be either concurrent or sequential (Mayoh & Onwuegbuzie, 2015). Research tools include hypotheses and open-ended questions. One type of data results follows the other in sequential study reporting. Both quantitative and qualitative data are in separate sections of the same report, but the analysis and interpretation combines the results, seeking similarities between them in a report of a concurrent study (Teddlie & Tashakkori, 2012).

Teddlie and Tashakkori (2012) defined this research as relying on qualitative and quantitative viewpoints. Data collection, analysis, and inference techniques are combined to address a study question. Johnson, Onwuegbuzie, and Turner (2007) further noted that this research paradigm provides the most informative, complete, balanced, and useful findings but should be used when the research question warrants its use for multiple validity confirmation. Choosing this mixed method of research did not meet the paradigm criteria for this study since there are not adequate quantitative data available concerning the effects of the current healthcare reform to support the research question.

Research Design

A descriptive approach was the research design used for this study. This design was used in an effort to comprehensively describe, understand, and explain the complexity of the phenomenon of what strategies and changes executive leaders of the nonprofit hospitals in Maryland use to address the operational and fiscal challenges presented by the implementation of the PPACA and maintain the sustainability of their organizations. The complexity of this phenomenon occurs in the changing environment of the health care industry, dwindling resources, and increased operational expenses (Bailey, 2014). Descriptive design evolved from the social constructivist worldview that assumes individuals seek understanding of their world, developing subjective meanings of situations they experience through discussions and interactions with others, and historical and cultural norms operating in their lives (Bernard, 2013). Descriptive research design as described by Merriam (2014) allows for rich descriptive data about the phenomenon under investigation and emerging themes, meanings, and the essence of

what an experience means for those who have lived it. Those persons are then able to comprehensively describe the experience. Thus, sharing of the subject's point of view, experiences, feelings, beliefs, and convictions occur. Qualitative descriptive research studies are exploratory, seeking to uncover novel insights into issues that individuals, as well as organizations, may be experiencing from selected study participants (Bernard, 2013). Knowledge gained through qualitative descriptive investigation is richer, offers enhanced understandings of the phenomenon studied, and is more informative (Bernard, 2013). Qualitative method of research places primary value on how individuals understand, experience, and operate within dynamic and socially structured milieus (Ozaki, 2011). The design of the study consisted of semistructured, in-depth personal interviews of purposive selected participants, enabling me to obtain participants with the necessary experience and expertise of the subject, using specific open-ended interview questions (Bernard, 2013). Conduct of interviews occurred as face-to-face or via telephone or Skype. The interview instrument included seven questions I developed and designed to use open-ended questions to elicit rich descriptive personal experience responses from the participants (Alisic, Boeije, Jongmans, & Kleber, 2012; Bernard, 2013; Merriam, 2014; Moustakas, 1994). Review of the consent for participation occurred before the presentation of the interview questions, explaining the purpose and scope of the study. I then further explained the study's importance to strategic planning and social change; ethical considerations involving the participants; and analysis, recording, and storage of data collected. A list of participants obtained from the leadership membership list found on the Maryland Hospital Association website served

as the tool for purposive selection of participants from 10 nonprofit hospitals in the state of Maryland. Selection was from three levels of executive management: (a) CEOs, (b) executive team members, and (c) members of the board of directors having 5 years or more experience working in the health care industry and who had developed strategies for dealing with the study phenomenon. I had direct contact with the participants but used specific semistructured interview questions, further limiting researcher bias. Keeping the exact wording of the interview questions as originally written, I assured less opportunity for injecting personal feelings and responses during the interview process. Planning included a 1-month data collection period, but a longer period was required until saturation occurred. All study participants received a numerical code in order to protect confidentiality. Coding of study participants was as SP1 through SP10 since data saturation was reached at that point. Coding and reviewing of responses occurred upon receipt of the written interview form. Analysis, using NVivo10 software, allowed for identifying trends and patterns within the data providing a more thorough understanding of the research problem. The analysis process added to the validity of the study through the identification of established themes from this analysis. I also gained analysis questions for further study using this method. The specific list of interview questions is included as Appendix A. A copy of the confidentiality and consent form is included as Appendix B.

Population and Sampling

The populations from the leading executive management from 10 of the nonprofit hospitals across the state of Maryland comprised the sample. A list of the leadership

membership obtained from the Maryland Hospital Association website supplied the names of possible participants, purposely selected to yield 20 participants or more, as needed until saturation of the data occurred. Selected participants had 5 years or more of experience working in an executive management position within the health care industry in Maryland and have had experience in development of strategies for managing the effects of the study phenomena. Age and gender of participants were not factors considered for this study. Study participation was voluntary and all participants were ensured that the basic ethical principles per the National Institutes of Health Belmont report of respect for persons, beneficence, and justice (NIH, 2011) and those noted by Wester (2011) were enforced throughout the study period.

Establishing these requirements assisted in obtaining experienced responses from those trained in nonprofit hospital operations and strategic systems thinking and planning to allow for exploration of business strategies for organizational sustainability in the present healthcare market. Those selected participants had the ability to apply these concepts in the delineation of effective business strategies. Qualitative study methods based on descriptive design have no requirement for number of participants in the sample population (Bernard, 2013); but I continued to interview as many participants as needed to reach data saturation. The originally selected 20 participants agreed to participate in the study. If this had not occurred, I would have selected additional participants, using the original method of selection, until there was a full complement of participants as needed for saturation.

Use of a semistructured survey instrument assisted in reducing researcher bias, allowing the participants to express their personal views and experiences and elaborate further, through additional probing, on their initial responses to the interview questions posed without deliberate guidance to a specific preformed conclusion (Stuckey, 2013).

Ethical Research

I ensured for all participants the basic ethical principles per the National Institutes of Health Belmont report of respect for persons, beneficence, and justice (NIH, 2011). Wester (2011) noted that there are five main ethical principles that the researcher should always consider. These include respect for persons; provision of autonomy of individuals to choose to participate in the study; protection of vulnerable populations; beneficence ensuring no harm to participants before, during, or after the study; and justice in ensuring that the distribution among the participants occurs fairly concerning benefits and risks of the study. These five main ethical principles delineated by Wester were also ensured for all participants. Study participation was voluntary, and the selected population not classified as vulnerable. Anyone agreeing to participate in the study was presented with a confidentiality and consent form (Appendix B) delineating the ethical requirements embodied in the research study process.

I guaranteed participants and their organizations confidentiality throughout the conducting of the study and reporting of the study, as well as respect for their positions within the community and as willing participants in the research process. Damianakis and Woodford (2012) stressed this importance of respecting and maintaining confidentiality at all research stages and at the completion of the study. There were no incentives offered

to participants. No known risk was posed to any participant. Once enrolled in the study, participants were able to withdraw at any time upon notifying the researcher in writing. All data acquired from the participant remained the property of the researcher if this situation occurred. The analysis would not contain this data. Attempts at selection of new participants for those who had withdrawn from the study occurred from the original list of hospital executives and educators from the Maryland Hospital Association. The confidentiality and consent form, Appendix B, further detailed the maintenance and storage of the data acquired during the study.

Upon approval of the study by the Walden IRB and assignment of approval number 05-12-15-0163080, interviewing of participants and data collection was begun. Maintenance of all data for analysis was in a locked storage area, known only to myself. I will maintain data in locked storage at the completion of the study for a period of 5 years, and then incinerate or shred to further protect the rights of all participants.

Data Collection Instruments

Participants from whom I gathered data for this qualitative study were chosen from names of MHA members found on the MHA website. Selected participants had 5 years or more experience working in a nonprofit hospital in Maryland as well as having experience with development of strategies for management of the study phenomenon. Interviews elicited in-depth personal experiences of the participants. I elicited data for this study using open-ended, semistructured questions for personal participant in-depth interviews, utilizing the qualitative method and descriptive design of this study, to explore possible business strategies for the sustainability of nonprofit hospitals in

Maryland faced with the challenges presented by the PPACA. The instrument (Appendix A) relates back to the central question of the study eliciting detailed views of the participants using qualitative method and descriptive design. I used a LiveScribe pen device for writing and digitally recording responses.

The central research question was to determine, from the perspectives of executive organizational leadership, how nonprofit hospital leadership in the State of Maryland have and can continue to maintain sustainability of their organizations in the changing environment of the health care industry, dwindling resources, and increased operational expenses. The data collection included semistructured interviews that are comprised of open-ended questions. Alisic et al. (2012) used semistructured interviews with parents of children who suffered traumatic events to explore the complexities and commonalities across such experiences. Since hospitals are complex adaptive systems, this same method of using semistructured interview questions with hospital executive leadership to explore their personal experiences with the business phenomena studied yielded pertinent data. Stuckey (2013) noted that use of semistructured interviews allowed for creativity and flexibility in assuring that each participant's story was fully uncovered. This flexibility allowed for probing initial responses of the participants to encourage elaboration of their initial answers (Stuckey, 2013). Rowley, Jones, Vassiliou, and Hanna (2012) determined that semistructured interviews are a particularly useful approach used in qualitative studies. These interviews encourage participants to express their attitudes and experiences. Knowledge and understanding of professional work practice and processes is also encouraged.

Analysis of all data was completed through utilization of NVivo10, a computer research software application. This software is capable of many functions, and can organize unstructured information from the respondents' interviews and classify all data quickly, uncovering subtle connections or themes. Further, interchange of data with other computer applications such as Microsoft Word and Excel, End Note, Zotero, and RefWorks is possible. NVivo nodes contain virtual filing boxes that allow seeing all collected information on a theme summarized together. Others locally and globally can easily share files of interview findings (NVivo10, 2011). This application is a primary source used for qualitative research study data analysis. Errors of reliability and validity may be random or systematic based on the ability to replicate observations or record correct impressions of the phenomenon studied. However, random error should not affect the data analysis. Systematic error may affect responses of participants across the study. This type of researcher or participant bias is difficult to control within the study (Bernard, 2013). Use of a confirmability audit, member checks, and pretest of the interview questions with colleagues from the same educational and position level as the participants decreases the chance for such errors. Validity, reliability, and credibility of the study through confirmability, data coding, saturation of the data obtained from participants, and presentation of possible negative or discrepant information from the data analysis that contradicts the theme of the study are increased (Bernard, 2013). Maintenance of raw data is for a 5-year period, and is only available to me until disposal. A locked storage file serves to secure all data until disposal by incineration, shredding, and electronic erasure at the completion of the 5-year period.

Data Collection Technique

Participants reviewed and signed the consent form prior to the initiation of the interviews. I communicated with the participants face-to-face or through use of Skype, which allowed for two-way direct verbal communication. This direct verbal communication of participant responses, once interpreted, allowed for member checking through which participants reviewed the interpretations for accuracy (Denzin, 1978). I recorded the participant responses using a LiveScribe pen, reviewed the transcripts for accuracy and then returned the transcriptions to the participants for their completion of the member checking process. Once returned from the participants, I then reviewed the participants' comments for any changes made by the participants and the accuracy of the transcriptions as recorded.

Data Organization Technique

I was responsible for all data collection and organization. Initially, all data responses were open coded by topics such as nurse and physician staff shortages, sustainability strategies used, and mergers/acquisitions. This coding allowed for the development of further refined categories of interconnections of related issues. Participants' cataloguing occurred as SP1 through SP10 for number of participants interviewed until saturation of data occurred within the selected organizations. Sequential numbers identified each participant. A locked file served to secure all data for a period of 5 years. Data remained only accessible to me. My incineration, shredding, and electronic erasure of all raw data will occur at the end of the 5-year period.

Data Analysis

Data collection included verbal participant responses to the interview questions as found in Appendix A. Analysis of all data from the responses of the participants was the sole responsibility of the researcher. Data analysis, using a modified van Kaam method, addressed all research interview questions and outcomes from the recorded and transcribed researcher interpretation of the participants' responses during the interview process (Moustakas, 1994). Data analysis further included the transcriptions of all data, documenting under the numerical coding applied to each respective participant. Assignment to each participant from each respective institution for cataloguing and coding of data consisted of a numerical code (i.e., SP1, SP2, and SP3). The topic of each interview question, for example, sustainability of operations, staff shortages, and quality of patient care delivery, delineated the coding of the data collected. Alphabetized codes allowed for ease of reference, and use of NVivo10 software application for analysis of the data. This software organized unstructured raw data from the respondents' interviews, classified all data quickly, and uncovered subtle connections or themes within the data. Development of individual textural and structural descriptions from the transcribed data, then synthesizing these findings to identify the essence of all participants' experiences occurred as part of the data analysis process (Moustakas, 1994). Those experiences from the transcribed data found to be irrelevant were deleted (Moustakas, 1994). These findings may link back to the original data that support them, allowing for justification of the data results and limitation of bias. This data can further be interchanged with other computer applications such as Microsoft Word and Excel, PASW Statistics Grad Pack

Base 17.0, End Note, Zotero, and RefWorks, if needed or desired, allowing for sharing of information locally and globally. NVivo10 nodes contain virtual filing boxes that allow for all collected information on an identified theme to be summarized together (NVivo10, 2011). This application serves as a primary source used for qualitative research study data analysis.

Reliability and Validity

Reliability

Unlike quantitative studies that use traditional standardized measures for scoring of objective data, qualitative studies must use other measures to determine dependability, confirmability, credibility, and transferability of the study conducted. Credibility depends on ability and extensive efforts of the researcher to control bias, establishing trustworthiness and confidence in the study (Denzin, 1978). Although bias exists in all research to some degree, clarification of the researcher's bias must ensure reliability. Direct contact with the participants could increase bias, but use of the developed specific interview questions during each personal interview assisted in limiting researcher bias (Stuckey, 2013). Researchers may conduct future studies to determine if the same results from data collection will occur if there is repetition of the study with the same or different participant groups, assessing for changes that occur within the setting of the study, extending validity and dependability to the study.

Validity

Use of a confirmability audit, member checks, and supplying of the final report to all member participants allowed for determination of the accuracy and validity of

findings and reported themes. Validity, reliability, and credibility of the study through confirmability, data coding, saturation of the data obtained from participants, and presentation of possible negative or discrepant information from the data analysis that contradicts the theme of the study are increased (Bernard, 2013). Rich, thick description of the setting and perspectives about the established themes in conveying findings of all interview information occurred to add to the realism and validity of the reporting of the findings of the study. In addition, presentation of any possible discrepancies in information obtained throughout the study that may contradict the themes resulting from the analysis of the data added further to the validity (Bernard, 2013). Constant review of all data once saturation of information from participants is achieved, procedures for coding and categorizing data during data analysis, inhibiting the researcher from drawing incorrect inferences and developing incorrect themes, minimized threats to external validity. Triangulation of data through personal interviews, recordings, observations during the interviews, and returning to review the data multiple times during the analysis supported a more defensible result. Use of multiple investigators to conduct the research and perform data collection, comparison of multiple theories and research methods further improve the study reliability and validity (Denzin, 1978). Although multiple theories and methods were compared, multiple investigators were not used for this study.

Transition and Summary

The research process, qualitative descriptive method of design including the choice and interview questionnaire development, details the focus of the problem faced by executive leaders of nonprofit hospitals. The study is centric to nonprofit hospitals in

the state of Maryland but also addresses global activities and strategies for organizational sustainability. One barrier to the research method and design may be the lack of experience of the participants with effects of the PPACA of 2010 because it became effective as of April 2010. Data gathered, and subsequent ongoing analysis should adequately validate the research problem. Section 3 features the results of this analysis and their application to possibly needed changes in business practices and processes used by executive leaders within nonprofit hospitals to improve their organizations' positions in the health care market while maintaining or advancing organizational sustainability in a challenging environment besieged by health care reform challenges.

Section 3: Application to Professional Practice and Implications for Change

This qualitative descriptive study detailed the focus of the problem faced by executive leaders of nonprofit hospitals in the state of Maryland as well as addressed global activities and strategies for organizational sustainability when challenged with the effects of the PPACA of 2010. The results of the analysis of the data gathered from this study may be applicable to possibly needed changes in business practices and processes used by executive leaders within nonprofit hospitals to improve their organizations' positions in the health care market while maintaining or advancing organizational sustainability in a challenging environment besieged by health care reform challenges.

Introduction

The purpose of this qualitative descriptive study was to explore strategies executive leaders of nonprofit hospitals in Maryland use to address the operational and fiscal challenges presented by the implementation of the PPACA. The data evoked from the interviewed participants revealed strategies for decreasing overall business expenses. Leaders incorporated efficiencies in previously established processes using Lean Six Sigma principles (Albliwi, Antony, Lim, & Van de Wiele, 2014). Involving all staff members affected by the issues identified directly in the problem-resolution further led to increased staff satisfaction levels. Hospital leaders used additional strategies including aligning their organizations, if smaller community-based hospitals, with larger nonprofit hospital systems rather than be acquiesced or closed, and forming ACOs. Establishment of ACOs allowed hospital leaders to more efficiently manage their patients' care across the healthcare continuum and array of specialty medical providers at reduced cost

(Barnes, Unruh, Chukmaitov, & Van Ginnekenm, 2014). Hiring of hospitalists and intensivists to manage the care of patients in specialty care units within the hospital increased efficiency and coverage for multiple specialties. Hospital leaders hiring these hospitalists and intensivists agreed with the study findings of Duplantier et al. (2015) in that the benefits of the care they provided for positive clinical and economic impact outweighed the cost of their employment. Staffing shortage issues were remedied by the hiring of NP and PA provider extenders and emigrated nurses and physicians to meet the increased demand for care (Crawford, 2014; Hariharan, 2015). Foreign-born or foreign-trained emigrated physicians equal 30% of the physician population and are essential for maintaining delivery of care, especially in rural areas (Crawford, 2014). Original projections of the primary care physician shortage did not account for the rapid growth in the population, the increased aging population due to increasing life expectancy of the existing population, and the additional uninsured patient population now obtaining insurance coverage through state and federal plans (Hariharan, 2015). Hospital leaders collaborated with schools of nursing in joint education ventures in order to attract nursing educators from within the hospital nursing population to be able to educate and graduate new nurses for entry into the workforce. Nursing leaders established new models of care delivery to increase efficiencies of care delivery and reduce staff dissatisfaction with the work environment (Bacon & Stewart, 2014). Hospital leaders collaborated with community physician groups and community groups for the delivery of preventative care in order to reduce hospital readmissions and the associated penalties as per the requirements of the PPACA.

Presentation of the Findings

The research question for this study was as follows: What strategies and changes can the executive leaders of the nonprofit hospitals in the state of Maryland use to address the operational and fiscal challenges presented by the implementation of the PPACA? Personal interviews were completed with 10 hospital CEOs, executive team members, and board of directors from 10 nonprofit hospitals in Maryland using the interview instrument (Appendix A) until data saturation was reached. These participants are responsible for the operation and sustainability of the organization and adequate provision and delivery of health care for their clients and staff as stakeholders.

All of the study participants were members of the executive hospital leadership for their respective organizations with 10 to 30 years of experience in healthcare administration. Four of these participants had been employed 10 to 15 years within their specific organizations and six participants had more than 15 years employment with their respective organizations. All were extremely knowledgeable of the PPACA legislation and had been preparing for meeting the demands of the regulations for several years prior to the legislation being passed by Congress in 2010. Buckman (2014) examined the continual economic changes in the United States and how they affect healthcare delivery systems. Since political designs interface with medical structures, insurance companies, and businesses, they have affected and transformed healthcare for over 50 years and continue to do so (Blumenthal et al., 2015). Issues such as increasing unemployment, decreasing medical insurance coverage, increases in population growth, and the increase in the aging population over 65 years of age have affected the rising costs of healthcare.

These issues also caused changes in healthcare delivery by hospitals needing to meet the changing demands (Buckman, 2014). All of the study participants agreed that economic changes and federal government involvement have impacted their operational systems and financial sustainability. Warnings of possible loss of social security benefits for which the federal government has been functioning as a third-party payer and change from the Prospective Payment System to the PPACA value-based system of care delivery had caused hospital leaders to start searching for effective strategies and new models of care delivery even though the regulations had not yet been formally established.

Increased volumes of uninsured patients eligible for medical coverage, decreases in payments to physicians, and recurring staff shortages led hospital leaders to establish interdisciplinary committees to address these issues using a systems approach across all levels of the organization (MacIndoe & Sullivan, 2014). Several themes evolved from the data analysis across all participants' responses including (a) investment in IT resources to support an EMR system, (b) strategies to deal with healthcare workforce staffing shortages, and (c) strategies for sustainability with a focus on movement of many patient services to a managed care outpatient arena while maintaining patient safety and quality of care delivery. In addition, several of the participants expressed their concern regarding the impact of multiple social factors contributing to the issues affecting organizational sustainability, staff and patient satisfaction with care delivery, and staff satisfaction with their workplace environment. As Table 1 shows, these emergent themes confirmed that nonprofit hospital leaders require the development of health care strategies to effectively deal with the ongoing changes presented by the regulations of the PPACA.

Table 1

Frequency of Primary Themes From Data Collected From Semistructured Interviews

Theme	*n*	% of frequency of occurrence
Investment in IT resources supporting EMR system	33	46.80%
Strategies dealing with healthcare workforce staffing shortages	26	36.83%
Strategies for sustainability: Managed care outpatient services and patient safety/quality of care delivery	21	30.00%

Note. n = frequency.

Emergent Theme 1: Information Technology Investment to Support an EMR System

When inquiring how the United States economy and health care reforms initiated with the PPACA in 2010 affected sustainability of their organizations, all participants related the huge financial burdens placed on their leadership to develop or purchase the EMR. This cost, as well as pay for staff overtime hours worked in preparation of transferring current patient files to the new EMR, resulted in increased expenses. Pay for the development and printing of hard copy paper forms to be used if and when the electronic system failed further increased these overall expenses. Costs ranged, depending on the size of the organization or health system, from $4 million to $800

million. Six of the 10 participants' leadership purchased a prior-developed canned EMR with which they encountered much difficulty in adapting to their organizations' models of care delivery. This resulted in use of two systems (i.e., EMR, hard copy paper) for all documentation of patient care delivered throughout the organizations. Originally, hospital leadership of these organizations planned for a projected cost-savings through a reduction in staffing for their medical records departments. Maintaining two documentation systems for an indefinite period of time until each of the organizations could further develop the EMR to document across all departments and units within the organization resulted in increased expenditures and chaos across the medical system. Prior to the directive to change to an EMR, all of the organizations had multiple electronic systems that were independent of each other, limiting pertinent patient medical information sharing between electronic systems in various departments within the same organization as well as those across organizations. The remaining four participant organizations' leadership developed customized EMRs in collaboration with all staff, departments, divisions, subdivisions, and community physician provider groups. Two of these participant organizations were large academic institutions whose leadership developed their customized EMRs in collaboration with all stakeholders and across all entities under their academic business service umbrella including additional nonprofit hospitals, outpatient medical and surgical clinics, and free-standing surgical centers. The cost for these organizations' leadership, as expected, was the most expensive of all the participating organizations. Additional IT personnel had to be hired, additional staff had to be hired for those staff who transferred into the additional IT positions posted, more

planning and training sessions for all staff had to be developed, and additional computer hardware components had to be purchased to handle such large, complex, and robust systems. Patient satisfaction scores for service in all of the hospitals' populations served also dropped because patients felt care was more impersonal as the physician continuously entered data into the EMR rather than interacting fully with them during their visits. As of this writing, all the participating hospitals' leaders are continuing to pursue expanded IT services to continue to meet the needs of the stakeholders and regulations set forth by the PPACA. Although incentives labeled as meaningful use of the EMR based on 36 different quality patient services measures that support improved patient outcomes are provided under the PPACA, the organizations' leaders are reaping little to no benefit as of yet. These incentives amount to approximately $19 billion across the United States health systems (Chalasani et al., 2014). Each health care organization's leadership must participate in the maintenance of the EHR, but the amount of federal incentive monies received by each is dependent on meeting a rating of 90% or better score on each of the 36 quality measures (Chalasani et al., 2014).

Ferneini (2015) stressed the need for the EMR as a tool for patient safety across the complex care continuum of health care between divisions and multiple care subcontractors, welcoming this update required by the PPACA. Ferneini noted that secure communication through sharing of EMR information is essential to positive clinical outcomes and provides valuable information to hospitals' leadership for developing strategies to overcome IT challenges as faced by many organizations' leaders such as those that participated in this study. Contrary to Ferneini's study results, Menon

et al. (2014) found that the voluminous amount of data in EMR systems actually fatigued physicians and increased the risk for harm to patients. These authors found a correlation between this increased risk for harm and IT solutions created solely by software vendors without physician input. Bodenheimer and Smith (2013) noted in previous research this same need as presented by Menon et al. (2014) to develop and design improved CAS software tools in collaboration between the software vendors and clinical software end-users for improved business application across such complex health care systems. Krist et al. (2014) agreed that a sociotechnical framework in which software developed must incorporate not only technical needs for data collection but also social needs so that providers may not miss important patient data that could cause harm to patients. In addition, having this type of framework where there is an improved understanding of the various communication patterns between levels and interdisciplinary units, workflows involved, and the tools required by end-users will assist software developers to better address issues within complex systems of the health care industry. The larger academic organizations' hospital leaders made use of these factors in the development of their EMRs. Review of the literature regarding such lack of interoperability of EMRs has led to the recommendation for the adoption of a national patient record bank to better manage population health in collaboration with all stakeholders across the health care industry toward realistic goals of meeting the triple aim of the PPACA for providing better quality and safer patient care at decreased cost (Burwell, 2015; Yasnoff, Sweeney, & Shortliffe, 2013).

Emergent Theme 2: Strategies to Deal With Healthcare Workforce Staffing Shortages

As has been noted in the prior literature reviewed, nursing staff shortages have resulted in unsafe nurse-to-patient ratios, decreased patient safety, decreased quality of patient care provided, diminished patient care outcomes, and decreased staff and patient satisfaction (Aiken et al., 2012; McHugh, 2011; McHugh et al., 2011; Richardson, 2011). Inadequate nurse labor resources continues to be an issue and has been consistently identified as the most significant factor affecting what Jones, Hamilton, and Murry (2015) termed unfinished care among nursing staff in acute care hospitals. Unfinished care was identified by the nurses interviewed for this study as five major items: (a) emotional support for patients and significant others, (b) education of patients, (c) care coordination and adequate planning, (d) discharge planning, and (e) timeliness of care provided. These items identified by 55% to 98% of staff nurses in acute care hospitals studied were found to result from inadequate nursing labor resources that had to deal with increased patient volumes and increased patient acuity of illness. These were also consistently associated with negative nurse, patient, and organizational outcomes (Jones et al., 2015). Another study by Xue and Brewer (2014) re-examined the nursing shortage in the United States through a supplemental analysis of the National Sample Survey of Registered Nurses from 1988 through 2008. Although the PPACA calls for a more diverse workforce for an increasingly diverse population, the results of this secondary survey found that the gap in racial and ethnic working nurse minorities had actually widened from the time of the original study. Only 18% of the nurse workforce was

attributed to all minorities, with Hispanics and Blacks being the least and located in largest numbers in the South and West United States. This gap increased by 10.3% from 1988 through 2013 inclusive. These authors further noted that attempts at immigration of additional nurses have not substantially increased the general nurse workforce or its diversity. Juraschek et al. (2012) projected in their previous study that by 2030, the largest regions in the United States affected by the nursing shortage would also comprise the South and West regions. Thus, this projection remains unchanged in the most current literature.

Regardless, according to the International Center on Nurse Migration, nurses comprise one-fifth of the world's nursing supply and foreign nurses have increasingly become a significant portion of the nurse workforce in the United States healthcare system (Arnold, 2013). The increased demand for nurses secondary to the enactment of the PPACA will lead to the continued recruitment and migration of foreign nurses to meet the demand. Although there is such a nursing shortage, 50,000 qualified nursing applicants are denied entrance into United States schools of nursing yearly due to lack of faculty and funding. It is also less expensive for hospitals' leadership to hire foreign-trained nurses instead of Per Diem or travel RNs to whom other incentives such as sign-on bonuses and scholarship programs are routinely offered (Arnold, 2013). It was projected for Maryland that the nursing shortage will equal 12,894 nurses by 2030 based on current demographics (Anderson, 2014).

All but one of the participating hospitals' leadership confirmed that they are still

experiencing effects of the nursing shortage with increasing turnover rates and numbers of experienced nurses dwindling due to retirement, nurses' dissatisfaction with the work environment taking jobs outside of the hospital arena, and nurses shifting from inpatient units to outpatient clinics and free-standing surgical centers. This hospital is a community-based facility drawing the nursing staff living within the same community and not desiring to travel to larger metropolitan hospitals for employment. Being proactive in addressing the nursing shortage, these hospital leaders had developed collaborative contracts for nursing education, internships, and scholarships with the local community college since 1995. Thus, there is a continuous pipeline of new graduate nurses available to them. This was the first year since 1995 that the hospital leadership could not hire all the new graduates, forcing them to seek employment elsewhere. However, to maintain the financial sustainability of their organization and bring much needed programs into the community, these leaders merged their organization with a larger academic institution and are experiencing continued positive growth with adequate nursing and physician coverage. All of the other participating hospitals' leadership noted that nursing shortages are increasing and that they have to limit the number of new nurse graduates that they can hire. This limiting of new graduate nurses is due to a lack of experienced nurses available to precept and continue educating them with more intense, worthwhile patient learning experiences. A trend was noted in that some new graduate nurses that were hired used their positions only as a stepping-stone for becoming nurse practitioners or other advanced nurses and filling those advanced nurse positions after only 1 year of employment. Nurse-to-patient ratios were one RN to five or six patients for

day/evening shift but could increase to one RN to10 patients on evening/night shift. All of the participating hospitals' leadership with the exception of those of the community-based hospital had also hired certified medical assistants (CMAs) to fill many RN positions in clinical outpatient areas where treatment modalities are less intense and patients are presenting with usually less severe acuity of illness issues. Strategies for addressing the nursing staff shortages included development of new models of care using more CMAs to perform basic care tasks allowing RNs to handle more intense patient care activities for which they were specifically trained and increasing salaries with nurses having greater longevity receiving greater increases based on total number of years. In addition, recruitment efforts were targeted to experienced RNs stressing the benefits of returning to the workforce, institution of multiple nurse internship programs bridging to graduate RNs per year, and offering of weekend option programs in which RNs are required to work 24 hours but are actually paid for 40 hours worked. Outpatient clinical areas were staffed with primarily CMAs and only one or two RNs for oversight of clinical nursing and performing of all nursing duties that cannot be delegated by the regulations of the Nurse Practice Act to allied medical personnel.

However, one participant (P4) expressed concern that many of the CMAs are not socialized in proper respect for others and address patients in a disrespectful manner, reducing patient satisfaction. This participant felt that the CMA philosophy of life is that "the state must take care of them and they don't feel an obligation to contribute to society." Thus, they have many social issues causing considerable time, effort, and

monies spent on disciplinary action for absenteeism, inappropriate use of FMLA, and poor customer service and quality of care occurrences.

Anderson (2014) stressed that workforce projections remain at an even greater shortage than as previously projected by Juraschek et al. (2012) and the USHHS (2013), totaling 300,000 to 1.2 million nurses and 91,000 to 130,000 physicians and will continue as a significant financial investment placed on hospitals' leaders. Previous initial projections of the physician shortage did not consider the consistent growth in population, the increasing longevity of the present population needing continued health care, the increased numbers of newly insured, and the PCPs leaving the workforce (Hariharan, 2015). Though medical schools' faculty are strategizing to increase enrollment by 30% by 2017, there is still an inadequate number of residency slots available, limiting the number of potential enrollees accepted. As with nurses, physicians are responding to the increased stressors of being unable to ensure quality care and struggling to avoid violating their moral and ethical beliefs in attempting to meet workload demands of the regulations set by the PPACA (Anderson, 2014). Many are no longer finding general medicine practice personally or financially gratifying and are thus becoming consultants, administrators, or concierge physicians. Some are also joining hospital groups rather than remaining in private practice with over one-half of practicing physicians in the United States being employed by hospitals or large group practices (Charles et al., 2013; Hariharan, 2015; Hunter & Baum, 2013).

Several strategies to combat the physician shortage were noted by all study participants. These included hiring of hospitalists and intensivists as direct employees of

the organization to provide physician coverage in the ED and other critical care units, use of contracted physician groups, emigration of foreign-trained physicians, and hiring of midlevels (i.e., NPs, PAs) as physician extenders. Crawford (2014) noted that there are approximately 800,000 physicians in the United States, of which 30% are foreign-born or foreign-trained and who are significant in providing care delivery in internal medicine, family medicine, and pediatric specialties. Although recruiting of foreign medical graduates continues, the training process in the United States lasts at least 3 years, with many having to complete residencies in very rural areas. Still others, once trained, choose to return to their own countries because the licensing process to work in the United States is so extensive and costly. Congressional Bill 744 passed by the Senate in 2013 would add flexibility to the immigration process and make more residency slots available for these graduates, decreasing the present barriers to this component of attempting to resolve the physician shortage (Crawford, 2014). Use of advanced practice RNs and PAs as physician extenders appears to be assisting in closing the gap, especially in covering the roles of residents in hospitals and providing preventative care regulated by the PPACA to patients living in rural areas. However, as Anderson (2014) noted, there are still less PCPs than specialists and NPs and PAs needed to help close the projected gap by 2013 totaled 6,340 for Maryland alone. Hariharan (2014) agreed that using NPs and PAs in these roles allows physicians working in hospitals to provide care to more acutely ill patients and lower costs, but may increase liability of care provided. Bodenheimer and Smith (2013) recommended empowering RNs and pharmacists to provide more care as physician extenders as well as the creation by physicians of standing orders through

which non-licensed CMAs could function as care managers and health coaches. They would be assigned to assist with preventive and chronic care needs of patients. None of the participating hospitals' leaders were presently using CMAs in this capacity.

Emergent Theme 3: Strategies for Organizational Sustainability: Managed Care Outpatient Services and Patient Safety/Quality of Care Delivery

Chen (2014) examined the effectiveness of the PPACA regulations on cost, population accessibility to health care services, and sustainability of health care organizations in the United States. The goals of the PPACA noted in the study included cost containment, provision of a safety net for low-income populations, increased health care choices for patients and providers, and ease in administration of the regulations. Findings indicated that thus far the goal for provision of a safety net for the low-income and uninsured population has had some success but the other goals have not shown much improvement. These findings are consistent with the study by Hacker et al. (2014) who examined strategies developed by The Cambridge Health Alliance of Massachusetts to meet the priorities of the PPACA. Strategies included redesign of models of care delivery, financial realignment, workforce transformation, and alignment of physician compensation with incentives rewarding quality and population management. Results of the study noted only minor improvement in access to care, patient experience, quality, and utilization. But, there was significant success noted in maintaining being a safety net provider. This success confirmed the strategy to reorganize into an Accountable Care Organization (ACO) for population management (Chrikmaitov et al., 2014). These authors opined that these strategies will still not have a positive impact in eliminating

present operating deficits or the risk for decrease in future financial sustainability secondary to type of population served payer mix, cost structure, and attempts to meet the requirements of the PPACA. Establishment of an ACO can still be difficult for many organizations since the PPACA has reduced Medicare and Medicaid provider and health care organizations' payments, which has been a major source of funding prior to the PPACA enactment. Funding may not be available for increased resources needed to maintain quality while redesigning models of care and dealing with multiple adverse social issues of the population served (Garthwaite, 2012; Hacker et al., 2014).

Fortunately, for Maryland hospitals, the state's Delivery System Transformation Incentive (DSTI) waiver is providing up to $22.4 million in annual funding for a 5-year period to fund health care delivery restructuring (Hacker et al., 2014; Rajkumar et al., 2014). This new model was announced in January of 2014 establishing Maryland as the only state having a rate-setting system (i.e., HSCRC) for all-payers including inpatient and outpatient medical services. Per capita growth rate is limited to 3.58% and hospital costs growth rate limited annually to 0.5% less than the national growth rate per year for years 2015 through 2018. Performance is measured on the reduction of patient readmission rates per 30 days' episode and the improvement in patient quality and safety measures, and as such, is tied to revenue. As hospital volumes decline due to decreased readmissions, effects of preventative medicine practices, and services are moved to outpatient arenas, hospitals' leaders may retain portions of the lost revenue in order to maintain sustainability (Rajkumar et al., 2014).

All participants in this study felt that the new waiver seemed to be working as intended at present, but that there is not enough current data to truly evaluate effectiveness. Two participants stated that they knew other hospitals were struggling under the new reform measures. All participants noted that the economic downturn leading to increased unemployment, increased numbers of patients without insurance, overcrowding of EDs, and increased immigration of uninsured foreign populations impacted operational systems within their organizations over the prior 5 to 10 years. Immediate reduction of operational expenses became the priority of strategies developed for sustainability. Other strategies included adoption and use of Lean Sigma methodology for process improvement and sustainability of newly developed processes for reduced cost and increased efficiency such as decreasing the length of time for patient throughput at evaluations of care, decreasing length of time for patient diagnostic testing, and decreasing operating room turnover times (Albliwi et al., 2014). Demographics of populations served were examined for accessibility to care in an effort to reduce overcrowding of the EDs and overtime pay for staffing having to work longer hours in order to complete care of patients already in process of care delivery. The two larger academic institutions also participated in the Value-Based Purchasing Program (VBPP) part of the PPACA through which costs for inpatient hospital services for Medicare patients are targeted in an effort to improve healthcare quality per dollar spent (Burwell, 2015). Medicare payments to participating hospitals are uniformly cut and then reissued as incentive payments for improvements in quality and safety of services through reduction in adverse patient events, adoption of evidence-based standards and protocols

that result in improved outcomes for patients, and improvement in patients' experiences of care. New models of care were developed with many services being moved to outpatient practice areas where CMAs, NPs, and PAs could be providing the majority of patient-care services while increasing volumes of patients evaluated. Uninsured patients were provided assistance in selecting federal and state plans and completing online applications for purchase to reduce bad debt and charity expenses. The two larger academic hospitals' leaders established ACOs to maintain capture of their patient populations and increase market share.

All hospitals studied were complex adaptive medical systems. The three larger hospital systems studied had extremely complex, intertwined systems consisting of acute hospitals, outpatient clinics, freestanding surgical centers, and community physician groups. As Lipsitz (2012) noted, in such complex health care systems the nonlinear interaction across all network components is dynamic and unpredictable, and can often produce unintended results, but is successful if the output is greater than the sum of its component parts. Further success is realized if there is achievement of organizational goals. Meyer, Diorgenes, and Lucilaine (2014) agreed that hospitals are complex systems that must adapt management methods to the specificities of a pluralistic hospital and health care market context. Leadership-developed management strategies occur interdependently through cooperation and interrelations between all elements of the organizational environment that is nonlinear and unpredictable. Those leadership strategies related to the development of the EMR, although extremely costly to these organizations, resulted in positive outcomes for the patients, hospital staff, and other care

providers because patient medical information is now easily accessible to those with a need to know that are participating in the patients' care.

The changing economic climate over the past 5 to10 years and the health care reforms established by the PPACA impacted operations across all medical systems studied. All hospital leaders confirmed that increases in unemployment, increased lack of insurance coverage for patients secondary to the loss of employment, immigration of undocumented peoples requiring medical care, and decreased government funding have placed increased burden on the United States medical industry and market. All of the participants expressed that the change toward provision of positive outcomes focused on population health and prevention of illness, as deemed by the regulations set forth in the PPACA, placed most of the ownership on hospital leaders rather than the federal government and insurance payers. Emergency departments' patient census at each facility rose consistently each year to the extent that approximately 80% of all hospital inpatient admissions were funneled through the ED causing overcrowding, reduced access to care for many still needing emergency treatments, treatment delays and long waiting times prior to evaluation once patients arrived in the ED. Patients were often readmitted through the ED within a short period of time after the initial visit because physicians rendering care did not have time to learn the patient well enough to provide the best course of care available. Thus, the readmission rate for bad admits (i.e., patients who did not meet admission criteria) also continued to increase, stressing resources and hospital capacity. All hospital leaders stated that their organization had much difficulty in backfilling these bad admits with appropriate admissions and recovering lost revenue.

Thus, more services and patients needed to be transferred to outpatient clinical services for treatment as a viable strategy for operational sustainability. This shift in operations seemed a misalignment of incentives for provision of care by four of the 10 participant leaders. Under the regulations of the PPACA, hospital leaders are financially penalized for readmissions within 30 days of discharge from inpatient units, inappropriate transfers to other institutions, and observation patients (held in the ED up to 23 hours without being admitted).

Strategies developed by hospital executive leadership across all the participating organizations in dealing with the adjustment of processes to reduce the impact to their organizations were very similar, although not all noted were used in the same ways in each. Although individuals have the ability to choose an insured health plan as part of the PPACA reform measures guaranteeing coverage for all Americans, many have not done so.

Applications to Professional Practice

The analysis of the data presented from this study should serve to tighten the knowledge gap of executive hospital leadership on use of strategic thinking, planning, and decision making when encountering the short-term effects on nonprofit hospitals' sustainability in dealing with the challenges imposed on the present health care industry and the enforcement of the PPACA. This reduction in knowledge gap could result through use of the discovered effective strategies used by organizational leaders participating in the study to meet the identified challenges faced by nonprofit hospitals' organizational leadership. Although there is general awareness of the identified issues

affecting sustainability of these organizations, there is still a lack of awareness of the full extent of the challenges. This lack of awareness of the full extent of these challenges adds to the need for leadership, professional staff, educators, and legislators to find strategies to meet the demands of providing affordable access to care for all individuals. Tyler (2013) noted that efforts of the PPACA developers have focused on insurability and access to care for all Americans, but no efforts have truly addressed the social aspects of the right to human health, so social issues remain as barriers to care. Tyler (2013) and Chen (2014) agreed with Hall (2011) that universal coverage for all Americans has to also provide better safety-net programs for those Americans who still cannot afford complying with the regulations of the present PPACA reforms due to their social status and demographic conditions (Hall, 2011). Chen (2014) and Hoehn et al. (2015) further noted that the PPACA has demonstrated some success in providing an adequate safety-net for the uninsured with a decrease in the uninsured rate from 14.4% in 2013 to 13.1% in 2014, but has concurrently shown a loss of other Americans having had existing insured coverage with an increase in the uninsured rate to presently 13.8%.

In addition, strategies are needed for recruiting and retaining educated, capable personnel to service patients and establish processes for safe, quality medical care. Lambrou et al. (2014), Mulready-Shick & Flanagan (2014), and Klein (2015) reiterated the findings of Pittman (2013) and Juraschek et al. (2012) that decision-makers within hospital leadership need to address provision of a professional work environment having adequate staffing ratios of educated providers, increased teamwork, continuity of patient care quality and safety, and increased positive patient outcomes. Thus, the results of the

analysis of the study data should further enhance the understanding of the need for increasing educational opportunities for nurses and physician providers to assure a decrease in professional staffing shortages and maintenance of effective safety and quality controls. All of the study participants had initiated changes in strategies within their organizations to develop a more welcoming environment for staff and patients. These included (a) educating all staff throughout the system in proper customer service skills, (b) developing excellence in customer service awards programs, (c) reassessing salary scales and adjusting to meet market demands, (d) offering extended intense orientations and internships to increase a sense of belonging, and (e) initiating Team Steps programs to elicit input and feedback from representative staff across the entire organization for leadership decision-making. Other strategies shared by P2, P4, and P6 included diversity training for all staff, establishment of physician provider incentives, hiring of patient safety nurses, increases in quality improvement efforts, and establishment of preventative staff and community programs for healthy living initiatives. Participants 2, 6, and 8 had established tighter integration and collaboration with present partners as well as completing acquisitions of other health care entities and integrating them into their already complex health systems to gain a greater footprint and further establishment of their brand in the market. All participants had also moved all primary medical services and many surgical services to the outpatient arena in an effort to increase access to care and decrease expenses. All of these strategies support the findings of the studies by Balabanova (2013) and Meyer et al. (2014) that hospitals, as complex and interdependent hybrid organizations, need leadership that can build consensus at a

socioeconomic level and adapt leadership methods and models of care delivery for increased flexibility, commitment, and market context adaptability.

Implications for Social Change

The findings of this study should encourage all of these stakeholders to examine closely the need for adequate resources; developing better educational opportunities for professional clinical staff; developing business strategies and processes for delivery of safe, quality patient care and staff and patient satisfaction; and developing appropriate policies and processes to support local and national health care reform regulations (Anderson, 2014; USHHS, 2013). Since the PPACA is a federal and state government initiative affecting health care reform, any improvements in the effectiveness of quality and safety of health care delivery definitely contributes to social change and impacts all stakeholders (i.e., patients, providers, leaders, staff, communities served, and government). Successful efforts by hospital leadership in improving workplace environment, staff shortages, staff education, and staff engagement in organizational decision-making may increase employee commitment and staff satisfaction due to staff feeling valued and having the perception of a better quality of life (Cantrell, Kyriasis, & Noble, 2015; McGlynn, Griffin, Donahue, & Fitzpatrick, 2012; Pittman, 2013; Rosseter, 2014). The potential for development of innovative models for delivery of care that will improve quality and patient safety yielding positive outcomes may increase patient satisfaction and commitment from the community served (Jones et al., 2015).

Healthcare leaders may further use the findings to design systems and processes within their complex networks that will improve all of the previously discussed elements.

In addition, the findings could assist health care leaders to identify how public policy and practice collaboratives can further patient-valued outcomes as well as financial and operational sustainability for their organizations (Kumar & Blair, 2014; Schlesinger et al., 2015; Tyler, 2013). Hospital leaders could use the findings to better inform policy-makers of needs for policy changes and resources to better meet the regulations imposed and develop effective partnerships between federal and state governments. Such partnerships could also serve hospital leaders well working collaboratively with public and private sectors of the health care industry (Rajkumar et al., 2014).

Recommendations for Action

Although the enactment of the PPACA has exhibited some initial positive results in increased access to care for all Americans, economic effect of the federal regulations imposed may continue to place the sustainability of United States hospitals at significant risk (Cohen et al., 2010; D'Aquila et al., 2013; Davis & Robinson, 2010). Carroll (2015) noted that risk is inherent in health care management and has as its center continued uncertainty. Thus, risk must be managed effectively by hospital leaders for sustainability of health care organizations under the regulations imposed by the PPACA. The focus of hospital leaders should include the provision for quality patient-centered care delivery at decreased cost utilizing innovative models of care. Strategic planning by hospital leadership should take into consideration the investment in recruitment and retention of qualified staff, increased staff educational and advancement opportunities, assessment of patient and community needs, optimization of processes and services, supply of adequate resources, financial realignment, market share, and profitability (Johansen & Zhu, 2014;

Pennel et al., 2015). Planning these types of strategies for hospital leaders of nonprofit hospitals may have more inherent risk due to the limitations placed on revenue generation (Daquila et al., 2013). Additionally, nonprofit hospital leaders face challenges of having to compete for government funding through contracts or grants that often place constraints limiting autonomy and flexibility of their organizations. Maximizing service is a critical factor for these hospital leaders in competing effectively in the health care market (Johansen & Zhu, 2014). Hospital leadership should further use the information provided by the Consumer Assessment of Healthcare Providers (CAHPS) provided as public record under the regulations of the PPACA. The information obtained from CAHPS is patient-reported outcomes and experiences within the health care systems where patients seek care (Schlesinger, Grub & Shaller, 2015). Hospital leaders should use this information to target areas for improvement and changes in processes and policy in meeting patient-centered care initiatives. As Tyler (2013) opined, state and federal government leaders should also address the social aspects of the right to human health for all Americans in an effort to develop effective strategies for building partnerships among providers, public health professionals, and lawyers to advocate for system and policy changes needed as health care reform attempts continue. Thus, the results of this study should influence all shareholders to seek continued effective strategies for supporting health care reform objectives while maintaining sustainability of hospitals in the complex environment that is constantly changing and is unpredictable and nonlinear (Meyer et al., 2014). I will disseminate a summary of the study results to all participating hospitals' leadership as well as within my own health care organization, to nursing education

departments within local colleges and universities, and through presentations at national nursing associations' meetings and annual conventions.

Recommendations for Further Research

This study included only nonprofit hospitals' leadership strategies for sustainability of 10 Maryland hospitals since the establishment of the PPACA. Since there are an additional 1,349 hospitals in Maryland and thousands more across the United States, the study results warrant additional research of sustainability strategies hospital leaders could use for maintaining the viability of their organizations. This study explored multiple challenges faced by hospital leadership including staffing shortages and their effect on patient quality and safety, health systems innovation, and hospitals as complex health systems. However, other factors affecting sustainability such as demographics and social status of specific clientele served, hospital ratings, funding availability, and community resources were not fully explored. Therefore, further research should consider exploring these factors and their impact on the sustainability of hospitals not only in Maryland but in other locations across the nation.

There has been very little research addressing the effects of health care reform on organizational sustainability since the initiation of the PPACA. Since this study's focus was on nonprofit hospital sustainability, additional research should extend to for-profit and privately owned health care organizations. Researching the differences in strategies for sustainability used by hospital leaders within these different organizations should assist leaders in each type of organization to apply best strategies for sustainability. The participants for this study were selected from executive leadership that had been

employed for 5 years or more in their organizations. These participants had the primary responsibility of the development of strategies for maintaining sustainable operations. Future research should be extended to other employees beyond executive leadership within the health care organizations studied in an effort to elicit different personal experiences and best practice strategies for organizational sustainability since they are an integral component of the care delivery system.

Reflections

Prior to beginning the doctoral program, I believed I had mastered scholarly writing since writing had never posed an issue for me in my bachelor and master degree programs. As such, I found the realization that I had not mastered scholarly writing quite disturbing and difficult to accept. However, once I accepted this fact, working through the multiple revisions in the writing of this study taught me the fine points of true scholarly writing that I will now carry forward in my personal and professional life.

Being a professional working in the health care industry for over 30 years in a middle management position, I also believed I had a very extensive understanding of executive management decision-making and the processes involved in developing best practice strategies. I found throughout the researching of this phenomenon that I actually had a narrowed perspective of the subject. The doctoral process helped me to broaden my thinking and meet executive leaders whom I would not have routinely met and who shared willingly their perspectives and values, teaching me the finer points of true leadership. Thus, I have grown academically and professionally.

I was initially confident that I would have no difficulty in obtaining participants

for my study and the personal interviews would take no longer than 30 days to complete, but that assumption was also unfounded. I began seeking participants as soon as I received Walden IRB approval for my study, planning to schedule at least five interviews per week. That goal soon proved unrealistic and interviews were scheduled sporadically over a 3-month period. Participant time availability, difficulty with arranging my work schedule to meet the participants' availability, and refusal of multiple possible participants posed significant barriers. Working through this part of the research process taught me that even the believed best-developed plans can fail to provide expected results and significantly impact any issue. Completing the doctoral process has allowed me to share my new research skills with other management colleagues, student nurses, and clinical faculty as well as gain the respect of executive management and other professionals with whom I work within the healthcare industry and the community.

Summary and Study Conclusions

Meyer et al. (2014) asserted that hospitals are complex, hybrid systems whose leadership must adapt effective strategies for dealing with the challenges of the enactment of the PPACA and its impact on organizational sustainability. However, hospital leaders of some nonprofit hospitals are struggling to meet the demands of the regulations posed by the PPACA. Hospital leaders must understand that in their complex healthcare environments there is interdependence between all levels and units within the organization, staff, patients, communities served, the health care market, and the state and federal policy-makers determining the future sustainability of their organizations. Strategies must be developed that support sustainability while providing models of care

delivery that support cost reduction, improved access to care, prevention of illness, quality, and safety for all.

Findings from this study indicate that nonprofit hospital leaders are making attempts at developing effective strategies to deal with the present health care reforms but are facing many difficult challenges that increase their risk for sustainability. Although these leaders have had to adapt to changes in health care reform since the 1990s with various plans developed by the federal government, they have not been well-prepared for a change of this magnitude and lack the expertise, knowledge, and resources needed to meet the challenges presented. In 2015, 39% of consumers favored the PPACA while 54% opposed it. Insurance payers are already requesting increases in premium charges for 2016 while decreasing their available networks of hospitals and providers (Rajkumar et al., 2014). In addition, taxes imposed by the federal government on consumers and businesses are expected to equate to $500 billion by 2023, increasing further the challenges for nonprofit hospital leaders to maintain their organizations' sustainability (Rajkumar et al., 2014).

Based on these factors and the results of this study, nonprofit hospital leaders must understand that development of effective strategies for meeting the challenges of the PPACA legislation is critical for the sustainability of their organizations now and into the future as further change in health care reform evolves.

References

Aiken, L. H., Sloane, D. M., Bruyneel, L., Moreno-Casbas, M. T., Brzostek, T., Heinen, M.…Kutney-Lee, A. (2012). Patient safety, satisfaction, and quality of hospital care: Cross sectional surveys of nurses and patients in 12 countries in Europe and the United States. *British Medical Journal, 344:*e1717. doi:10.1136/bmj.e1717

Albliwi, S., Antony, J., Lim, S. A. H., & Van de Wiele,T. (2014). Critical failure factors of Lean Six Sigma: A systematic literature review. *International Journal of Quality & Reliability Management, 31*(9), 1012-1030. doi:10.1108/IJQRM-09-2013-0147

Alexander, J. A., Lee, S. D., Wang, V., & Margolin, F. S. (2009). Changes in the monitoring and oversight practices of not-for-profit hospital governing boards 1989-2005: Evidence from three national surveys. *Medical Care Research and Review, 66*(2), 181-196. doi:10.1177/1077558708326527

Alisic, E., Boeije, H. R., Jongmans, M. J., & Kleber, R. J. (2012). Supporting children after single-incident trauma: Parents' views. *Clinical Pediatrics, 51*(3), 274-282. doi:10.1177/0009922811423309.

Aluwihare-Samaranayoke, D. (2012). Ethics in qualitative research: A view of the participants' and researchers' world from a critical standpoint. *International Journal of Qualitative Methods, 11*(2), 64-81. Retrieved from http://www.ualberta.ca

American Academy of Colleges of Nursing (AACN). (2014). Nursing shortage. Retrieved from http://www.aacn.nchc.edu

American Academy of Physician Assistants. (2011). *What is a PA?* Retrieved from http://www.aapa.org/

American College of Nurse Practitioners. (2011). *What is a nurse practitioner?* Retrieved from http://www.acnpweb.org/

American Hospital Association. (2010). *Financial fact sheet*. Retrieved from http://www.aha.org/

American Hospital Association. (2012). *Trendwatch chartbook 2012: Organizational trends*. Retrieved from http://www.aha.org/research/reports/tw/chartbook/2012/chart2-9.pdf

American Nurses Association. (2015). 2011 ANA health and safety survey. *Nursing World,* 1-2. Retrieved from http://www.nursingworld.org

Anderson, A. (2014). The impact of the ACA on health care workforce. *The Center for Health Policy Studies, 2887,* 1-20. Retrieved from http://report.heritage.org

Arnold, H. (2013). The affordable care act and international recruitment and migration of nursing professionals. *Indiana Journal of Global Legal Studies, 20*(2), 1373-1391. Retrieved from http://www.repositorylaw.indiana.edu

Ault, K., Childs, B., Wainwright, C. F., & Young, M. (2011). Relevant factors to consider prior to an investor-owned acquisition of a nonprofit healthcare entity. *Journal of Healthcare Management, 56*(2), 269-280. Retrieved from www.ache.org/

Bacon, D. R., & Stewart, K. A. (2014). Results of the 2014 AORN salary and compensation survey. *Association of periOperative Registered Nurses Journal, 100*(6), 570-585. doi:10.1016/j.aorn.2014.09.010

Bae, S. H. (2013). Presence of nurse mandatory overtime regulations and nurse and patient outcomes. *Nursing Economics, 2*(2)*,* 59-68. Retrieved from http://www.medscape.com

Bae, S. H., Brewer, C.S., & Kovner, C. T. (2012). State mandatory overtime regulations, and newly licensed nurses' mandatory and voluntary overtime and total hours worked. *Nursing Outlook, 60*(2)*,* 60-71. doi:10.1016/j.outlook.2011.06.006

Bae, S. H., & Fabry, D. (2014). Assessing the relationship between nurse work hours/overtime and nurse and patient outcomes: Systematic literature review. *Nursing Outlook, 62*(2)*,* 138-156. doi:10.1016/j.outlook.2013.10.009

Bai, G. (2013). How do board size and occupational background of directors influence social performance in for-profit and non-profit organizations? Evidence from California hospitals. *Journal of Business Ethics, 118,* 171-187. doi:10.1007/s10551-012-1578-x

Bailey, L. F., (2014). The origin and success of qualitative research. *International Journal of Market Research, 56*(2)*,* 163-185. doi:10.2501/IJMR-2014-013

Balabanova, D., Mills, A., Conteh, L., Akkazieva, B., Banteyerga, H., Dash, U., Gilson, L....McKee, M. (2013). Building good health at low cost 25 years on: Lessons for the future of health systems strengthening. *Lancet, 381*(9883), 2118-2133. doi:10.1016/S0140-6736(12)62000-5

Barnes, A. J., Unruh, L., Chukmaitov, A., & Van Ginneken, E. (2014). Accountable care organizations in the USA: Types, developments and challenges. *Health Policy Journal, 118*(1), 1-7. Retrieved from http://www.healthpolicyjrnl.com

Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *Qualitative Report, 13*(4)*,* 544-559. Retrieved from http://www.nova.edu

Beal, J. (2012). Academic-service partnerships in nursing: An investigative review. *Nursing Research and Practice*, *3,* 1-9. doi:10.1155/2012/501564

Benson, A. (2012). Labor market trends among registered nurses: 2008-2011. *Policy, Politics, & Nursing Practice, 13*(4), 205-213. doi:10.1177/1527154413481810

Berman, P., & Bitran, R. (2011). The International Bank for Health, Nutrition, and Population (HNP) discussion paper: Health systems analysis for better health system strengthening. The International Bank for Reconstruction & Development/The World Bank, 1-68. Retrieved from http://sitesources.worldbank.org

Berman, H., Lerner, A., Madden, P., Van Horn, L., & McPherson, B. (2011). Nonprofit health care market concentration and the public interest. *Inquiry Journal, 48*(2)*,* 102-108. doi:10.5034/inquiryjournal_48.02.07

Bernard, H.R. (2013). *Social research methods: Qualitative and quantitative approaches* (2nd Ed.), Thousand Oaks, CA: Sage Publications, Inc.

Blackford, M., Bloomrosen, M., Denten, M. A., Hashmat, B., Koppel, R., Overhage, J. M....Zhang, J. (2013). Enhancing patient safety and quality of care by improving

the usability of electronic health record systems: Recommendations from AMIA. *Journal of the American Medical Informatics Association, 20*(e1), e2-e8. doi:10.1136/amiajnl-2012-001458

Blegen, M., Goode, C., Spetz, J., Vaughn, T., & Park, S. H. (2011). Nurse staffing effects on patient outcomes: Safety-net and non-safety-net hospitals. *Medical Care, 49*(4)*,* 406-414. doi:10.1097/MLR.0b013e318202e129

Blumenthal, D., Davis, K., & Guterman, S. (2015). Medicare at 50: Origins and evolution. *New England Journal of Medicine, 372*(5), 479-486. doi:10.1056/NEJMhpr1411701

Bodenheimer, T. S., & Smith, M. N. (2013). Primary care: Proposed solutions to the physician shortage without training more physicians. *Health Affairs*, *32*(11), 1881-1886. doi:10.1377/hlthaff.2013.0234

Bonn, I., & Fisher, J. (2011). Sustainability: The missing ingredient in strategy. *Journal of Business Strategy, 32*(1), 5-14. doi:10.1108/02756661111100274

Brewer, C. S., Kovner, C. T., Obeidat, R. F., & Budin, W. (2013). Positive work environments of early-career registered nurses and the correlation with physician verbal abuse. *Nursing Outlook*, *61*, 408-416. doi:10.1016/j.outlook.2013.01.004

Brewer, C. S., Kovner, C. T., Yingrengreung, S., & Djukic, M. (2012). Original research: New nurses: Has the recession increased their commitment to their jobs? *American Journal of Nursing, 112*(3)*,* 34-44. doi:10.1097/01.NAJ.0000412637.63022.d4

Brook, R. H., & Young, R. T. (2010). The primary care physician and health care reform. *Journal of the American Medical Association, 303*(15), 1535-1536. doi:10.1001/jama.2010.472

Buerhaus, P. I. & Auerbach, D. I. (2011). The recession effect on hospital registered nurse employment growth. *Nursing Economics, 29*(4)*,* 163-167. Retrieved from http://www.healthworkforcestudies.com

Burwell, S. M., (2015). Setting value-based payment goals-HHS efforts to improve U. S. health care. *New England Journal of Medicine, 372*, 897-899. doi:10.1056/NEJMp1500445

Bush, H. (2011). The path to going green. *H&HN: Hospitals & Health Networks*, *82*(8), 26-32. Retrieved from http://www.hhnmag.com

Cantrell, J. E., Kyriasis, E., & Noble, G. (2015). Developing CSR giving care dynamic capability for salient stakeholder management. *Journal of Business Ethics, 130*(2), 403-421. doi:10.1007/510551-014-2229-1

Carroll, R. L., (2015). Where we’ve been, where we are, and where we are going. *Journal of healthcare Risk management, 35*(2)*,* 9-20. doi:10.1002/jhrm.21197

Chalasani, S., Jain, P., Dhumal, P., Moghimi, H., & Wickramasignko, N. (2014). Content architecture in healthcare. *Health and Technology, 4*(1)*,* 11-19. Retrieved from http://link.springer.com

Chang, C., Stukel, T. A., Flood, A. B., & Goodman, D. C. (2011). Primary care physician workforce and Medicare beneficiaries’ health outcomes. *Journal of the American Medical Association, 305*(20), 2096-2104. doi:10.1001/jama.2011.665

Chen, P. G., Auerbach, D. I., Muench, U., Curry, L. A., & Bradley, E. H. (2013). Policy solutions to address the foreign-educated and foreign-born health care workforce in the United States. *Health Affairs, 32*(11)*,* 1906-1913. doi:10.1377/hlthaff.2013.0576

Chen, P. G., Curry, L. A., Nunez-Smith, M., Bradley, E. H., & Desai, M. M. (2011). Career satisfaction in primary care: A comparison of international and US medical graduates. *Journal of General Internal Medicine, 27*(2)*,* 147-152. doi:10.1007/s11606-011-1832-4

Chen, Y. (2014). On the state of American healthcare: A discussion of the health care system and the Affordable Care Act. *Journal of Applied Business Economics, 16*(6)*,* 63-68. Retrieved from http://www.na-businesspress.com

Chenail, R. J. (2011). Ten steps for conceptualizing and conducting qualitative research studies in a pragmatically curious manner. *The Qualitative Report, 16*(6), 1715-1732. Retrieved from http://www.nova.edu

Chrikmaitov, A., Harless, D. W., Bazzoli, G., Carretta, H. S., & Siangphoe, U. (2014). Delivery system characteristics and their association with quality and costs of care: Implications for accountable care organizations. *Health Care Management Review, 40*(2), 1-12. doi:10.1097/HMR.0000000000000014

Cimiotti, J. P., Sloane, D. M., Aiken, L. H., & Wu, E. S. (2012). Nurse staffing, burnout, and health care-associated infection. *American Journal of Infection Control, 40,* 486-490. doi:10.1016/j.ajic.2012.02.029

Clark, R. C., & Allison-Jones, L. (2011). Investing in human capital: An academic-service partnership to address the nursing shortage. *Nursing Education Perspectives, 32*, 18-21. doi:10.5480/1536-5026-32.1.18

Cohen, J. P., Gerrish, W., & Galvin, J. R. (2010). Health Care Reform and Connecticut's non-profit hospitals. *Journal of Health Care Finance, 37*(2)*,* 1-7. Retrieved from http://www.unboundmedicine.com

Collins-McNeil, J., Sharpe, D., & Benleau, D. (2012). Aging workforce: Retaining valuable nurses. *Nursing Management, 43*(3)*,* 50-54. doi:10.1097/01.NUMA.000041228.68794.fa

Cortes, P. & Pan, J. (2014). Foreign nurse importation and the supply of native nurses. *Journal of Health Economics, 37,* 164-180. doi:10.1016/j.jhealeco.2014.06.008

Corwin, L., Corbin, J. H., & Mittelmark, M. B. (2012). Producing synergy in collaborations: A successful hospital innovation. *The Innovation Journal, 17*(1), 1-16. Retrieved from http://www.innovation.cc/scholarly-style-articles.htm

Crabtree, B. F., Nutting, P. A., Miller, W. L., McDaniel, R. R., Stange, K. C., Jaen, C. R., & Stewart, E. (2011). Primary care transformation is hard work: Insights from a 15 year developmental program of research. *Medical Care, 49*(12)*,* 528-535. doi:10.1097/MCR.0b013e3181cad65c

Crawford, M. (2014). Doctors from abroad: A cure for the physician shortage in America. *Health Progress,* 95, 45-48. Retrieved from http://www.chausa.org

Cronin, C. (2014). Using case study research as a vigorous form of inquiry. *Nursing Research, 21*(5)*,* 19-27. doi:10.7748/nr.21.5.19e1240

Crossan, M., Mazutis, D., & Seijts, G. (2013). In search of virtue: The role of values and character strengths in ethical decision-making. *Journal of Business Ethics, 113*(4)*,* 567-581. Retrieved from http://link.springer.com

Curry, L. A., Krumholz, H. M., O'Caithin, A., Plano Clark, V. L., Cherlin, E., & Bradley, E. H. (2013). Mixed methods in biomedical and health services research. *American Heart Association, 119,* 119-123. doi:10.1161/CIRCOUTCOMES.112.967885

Cutler, D. ZM. & Morton, F. S. (2013). Hospitals, market share, and consolidation. *Journal of the American Medical Association, 310*(18)*,* 1964-1970. doi:10.1001/jama.2013.281675

Damianakis, T., & Woodford, M.R. (2012). Qualitative research with small connected communities: Generating new knowledge while upholding research ethics. *Qualitative Health Research, 22*(5)*,* 708-718. doi:10.1177/1049732311431444

D'Aquila, R., Aseltyne, W. J., Jweinat, J., Ciaccio, T., & Comerford, M. J. (2013). Yale-New Haven Hospital's planning and execution of a complex hospital acquisition, *American Journal of Nursing, 126*(8)*,* 744-752. doi:10.1016/j.amjmed.2013.04.006

Davis, S. B., & Robinson, P. J. (2010). Health care providers under pressure: Making the most of challenging times. *Journal of Health Care Finance, 37*(2)*,* 49-55. Retrieved from http://vbn.aau.dk

Denzin, N. K. (1978). *The Research Act* (2nd ed.). New York, NY: McGraw-Hill.

Dibrell, C., Craig, J. B., & Neubrum, D. O. (2014). Linking the formal strategies

planning process, planning flexibility, and innovativeness to firm performance. *Journal of Business Research, 67*(9)*,* 2000-2007. doi:10.1016/j.jbusres.2013.10.011

Dill, M. J., Pankow, S., Erikson, C., & Shipman, S. (2013). Survey shows consumers open to a greater role for Physician Assistants and Nurse Practitioners. *Health Affairs, 32*(6)*,* 1135-1142. doi:10.1377/hlthaff.2012.1150

Dorland, W. A. N. (2012). *Dorland's illustrated medical dictionary* (31st ed.). Philadelphia, PA: Saunders.

Dorsey, R. E., Nicholson, S., & Frist, W. H. (2011). Improving the supply and distribution of primary care physicians. *Academic Medicine, 86*(5), 541-543. Retrieved from http://www.journals/lww.com

Duplantier, N. L., Briski, D. C., Luci, L., Meyer, M. S., Ochsner, J. L., Lockwood, J....Chimento, G. F. (2015). The effects of a hospitalists co-management model for joint replacement patients in a teaching facility. *The Journal of Arthroplasty*, Article in Press. doi:10.1016/j.arth.2015.10.010

Eldenburg, L. G., Gunny, K. A., Hee, K. W., & Soderstrom, N. (2011). Earnings management using real activities: Evidence from nonprofit hospitals. *The Accounting Review, 86*(5)*,* 1605-1630. doi:10.2308/accr-10095

Ellis, T. & Levy, Y. (2009). Towards a guide for novice researchers on research methodology: Review and proposed methods. *Issues in Informing Science and Information Technology, 6,* 223-337. Retrieved from http://www.informingscience.us/icarus/journals/iisit/publications

Feldman, E., Hemingway Hall, P., Kaiser, L., Martin, S., Monheit, A. C. (2010). The promise and pitfalls of the federal health care reform law for nonprofit health care organizations and the people they serve. *Inquiry Journal, 47*(8)*,* 278-284. doi:10.5034/inquiryjrnl_47.04.278

Ferneini, K. D. (2015). Focusing on patient safety: The challenge of securely sharing electronic medical records in complex care continuums. *Europe Pub Med Central*, *79*, 481-485. Retrieved from http://www.ncbi.nlm.nih.gov

Fischer, R. L., Wilsker, A., & Young, D. R. (2011). Exploring the revenue mix of nonprofit organizations: Does it relate to publicness? *Nonprofit and Voluntary Sector Quarterly, 40*(4), 662-681. doi:10.1177/0899764010363921

Fortney, L., Luchterband, C., Zakletskaia, L., Zgierska, A., & Rakel, D. (2013). Abbreviated mindfulness intervention for job satisfaction, quality of life, and compassion in primary care clinicians: A pilot study. *Annals of Family Medicine, 11* (5), 1-9. Retrieved from: www.annfammed.org

Fox, R. L., & Abrahamson, K. (2009). A critical examination of the U.S. nursing shortage: Contributing factors, public policy implications. *Nursing Forum, 44*(4), 235-264. doi:10.1111/j.1744-6198.2009.00149.x

Froelich, K. A. (2012). Hospice of the Red River Valley: A nonprofit's response. *Nonprofit Management & Leadership, 23*(2)*,* 237-257. doi:10.1002/nml.21044

Gardner, P. (2006). Historical Analysis. *The Sage Dictionary of Social Research Methods.* Thousand Oaks: CA, Sage Publications, Inc.

Garthwaite, C. L. (2012).The doctor might see you now: The supply side effects of public health insurance expansions. *American Economic Journal: Economic Policy 2012, 4*(3), 190-215. doi:10.1257/pol.4.3.190

Grace, E. S., Korinek, E. J., Weitzel, L. B., & Wentz, D. K. (2011). Physicians reentering clinical practice: Characteristics and clinical abilities. *Journal of Continuing Education In the Health Professions, 31*(1)*,* 49-55. doi:10.1002/chp.20106

Gray, B. H., Stockley, K., & Zuckerman, S. (2012). American primary care physicians' decisions to leave their practice: Evidence from the 2009 Commonwealth Fund Survey of primary care doctors. *Journal of Primary Care & Community Health, 3*(3), 187-194. doi:10.1177/2150131911425392

Grogan, C. M. (2011). You call it public, I call it private, let's call the whole thing off? *Journal of Health Politics, Policy, and Law, 36*(3)*,* 402-411. doi:10.1215/03616878-1271018

Groszkruger, D. (2011). Perspectives on healthcare reform: A year later, what more do we know? *Journal of Healthcare Risk Management, 31*(1), 24-30. doi:10.1002/jhrm.20076

Guerin, C. & Maki, J. A. (2014). Hospital realignment: Mergers offer significant patient and community benefits. *Center for Healthcare Economics & Policy,* 1-36. Retrieved from http://fahpolicy.org

Hacker, K., Santos, P., Thompson, D., Stout, S. S., Benese, A., & Mechanic, R. E. (2014). Report on health reform implementation. Early experience of a safety net provider reorganizing into an Accountable Care Organization. *Journal of Health*

Policy, Politics, & Law, *28*(1), 901-919. doi:10.1215/03616878-2744284

Hairr, D. C., Salisbury, H., Johannsson, M., & Redfern-Vance, N. (2014). Nurse staffing and the relationship to job satisfaction and retention. *Nursing Economics, 32*(3), 142-147. Retrieved from http://www.medscape.com

Hall, M. A. (2011). Getting to universal coverage with better safety-net programs for the uninsured. *Journal of Health Politics, Policy, and Law, 36*(3), 521-526. doi:10.1215/03616878-1271198

Halley, M. D. (2012). Think big, act small. *Healthcare Financial Management Association,* 1-4. Retrieved from http://hfma.org

Halter, M., Drannan, V., Chattopadhyay, K., Carniero, W., Yiallouros, J., de Lusignan, S....Grant, R. (2013). The contribution of Physician Assistants in primary care: A systematic review. *BMC Health Services Research, 13*:223, 1-13. doi:10.1186/1472-6963-13-223

Hardy, J. (2012). Effects of proactive leadership on sustainability in the nonprofit (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3525725)

Hariharan, S. (2015). Using Advanced Practice RNs and PAs to ease physician shortage. *Physician Leadership Journal, 2,* 46-51. Retrieved from https://researchgate.net

Harle, C. A., Harman, J. S., & Yang, S. (2013). Physician and patient characteristics associated with clinical inertia in blood pressure control. *The Journal of Clinical Hypertension, 15*(11), 820-824. doi:10.1111/jch12179

Harrison, A. S., Yu, Y., Dicker, A. P., & Doyle, L. A. (2013). Using qualitative measures to improve quality in radiation oncology. *American Journal of Medical Quality, 28*(4)*,* 345-351. doi:10.1177/1062860612461826

Hays, D. G. & Wood, C. (2011). Infusing qualitative traditions in counseling research designs. *Journal of Counseling & Development, 89*(3)*,* 288-295. doi:10.1002/j.1556-6678.2011.tb00091.x

Hitt, M., Ireland, R. D., Simon, D. G., & Trahms, C. A. (2011). Creating value for individuals, organizations, and society. *Academy of Management Perspectives, 25*(2)*,* 57-75. Retrieved from http://www.researchgate.net

Hoehn, R. S., Wima, K., Vestal, M. A., Weilage, D. J., Hanseman, D. J., Abbott, D. E.... Shah, S. A. (2015). Effect of hospital safety-net burden on cost and outcomes after surgery. *Journal of the American Medical Association,14,* 1-9. doi:10.1001/jamasurg.2015.3209

Hsia, R. Y., Kellerman, A. L., & Shen, Y.C. (2011). Factors associated with closures of emergency departments in the United States. *Journal of the American Medical Association, 305*(5), 1978-1985. doi:10.1001/jama.2011.620

HSCRC. (2011a). “Hospital Rates, Charge Targets, and Compliance,” para.4. Retrieved from http://www.hscrc.state.md.us

HSCRC. (2011b). “HSCRC’s Initiatives and Hospital Performance,” para.5. Retrieved from http://www.hscrc.state.md.us

Hunter,C., & Baum, M. (2013). Physician-hospital alignment: "Employment lite". *Journal of Medical Practice Management, 28*(4), 260-263. Retrieved from http://www.greenbranch.com

Hussain, A., Rivers, P. A., Glover, S. H., & Fottler, M. D. (2012). Strategies for dealing with future shortages in the nursing workforce: A review. *Health Services Management Research, 25*(1), 41-47. doi:10.1258/hsmr.2011.011015

Iglehart, J. K. (2012). Financing graduate medical education-mounting pressure for reform. *The New England Journal of Medicine, 366,* 1562-1563. doi:10.1056/NEJMp1114236

Internal Revenue Service. (2014). Tax information for charitable organizations: Exemption requirements 501(c) Organizations. Retrieved from www.irs.gov/

Jacobson, P. D., & Jazowski, S. (2011). Physicians, the Affordable Care Act and primary care: Disruptive change or business as usual? *Journal of General Internal Medicine, 26*(8), 934-937. doi:10.1007/s11606-011-1695-8

Jewett, E.A., Brotherton, S. E., & Ruch-Ross, H. (2011). A national survey of inactive physicians in the U. S. of America: Enticements to reentry. *Human Resources for Health, 9*(7), 1-10. doi:10.1186/1478-4491-9-7

Johansen, M., & Zhu, L. (2014). Market competition, political constraint, and managerial practice in public, nonprofit, and private American hospitals. *Journal of Public Administration Research & Theory, 24*(1), 159-184. doi:10.1093/jopart/mut029

Johnson, N. (2013). Primary care physicians' perception of caring for the uninsured (Doctoral dissertation). Available from ProQuest Dissertation and Theses

database (UMI No. 3550359)

Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Methods Research, 1*(2), 112-133. doi:10.1177/1558689806298224

Jones, T. L., Hamilton, P., & Murry, N. (2015). Unfinished nursing care, missed care, & implicitly rational care: State of the science review. *52*(6), 1121-1137. doi:10.1016/j.ijnurstu.2015.02.012

Jost, T. (2013). The Affordable Care Act and the Supreme Court: American health care reform inches forward despite dysfunctional political institutions and politics. *Health Economics, Policy and Law, 8*(1), 113-118. doi:10.1017/S1744133112000370

Juraschek, S. P., Zang, X., Ranyanathan, V., & Lin, V. W. (2012). United States registered nurse workforce report card and shortage forecast. *American Journal of Medical Quality, 27*(3), 241-249. doi:10.1177/1062860611416634

Kalisih, B. J., Tschannen, D., Lee, H., & Friese, C. R. (2011). Hospital variation in missed nursing care. *American Journal of Medical Quality, 26*(4), 291-299. doi:10.1177/1062860610395929

Kannampallil, T. A., Schauer, G. F., Cohen, T., & Patel, V. L. (2011). Considering complexity in healthcare systems. *Journal of Biomedical Information, 44*(6), 943-947. doi:10.1016/j.jbi.2011.06.006

Kisely, S. & Kendall, E. (2011). Critically appraising qualitative research: A guide for clinicians more familiar with quantitative techniques. *Australian Psychiatry,*

19(4)*,* 364-367. doi:10.3109/10398562.2011.562508

Klein, M. W. (2015). Settling a U. S. Senatorial debate: Understanding declines in state higher education funding. *Journal of Education Finance*, *41*(1), 1-29. Retrieved from http://nurse.jhu.edu

Kneeland, P. P., Kneeland, C., & Wachter, R. M. (2010). Bleeding talent: A lesson from industry on embracing physician workforce challenges. *Journal of Hospital Medicine*, *5*(5), 306-310. doi:10.1002/jhm.594

Kovner, C. T., Corcoran, S. P., & Brewer, C. S. (2011). The relative geographic immobility of new RNs calls for new strategies to augment that workforce. *Health Affairs, 30*(12)*,* 2293-2300. doi:10.1377/hlthaff.2011.0108

Krinsky, R., Murillo, I., & Johnson, J. (2014). A practical application of Katherine Kolcaba's comfort theory to cardiac patients. *Journal for Nurse Practitioners*, *27*(2), 147-150. doi:10.1016/j.apnr.2014.02.004

Krist, A. H., Beasley, J. W., Crosson, J. C., Kibbe, D. C., Klishman, M. S., Lehmann, C. U....Waldren, S. E. (2014). Electronic health record functionality needed to better support primary care. *Journal of American Medical Informatics Association*, *21,* 764-771. doi:10.1136/amiajnl-2013-002229

Kumar, S. & Blair, J. T. (2013). U. S. healthcarefix: Leveraging the lessons from the food supply chain. *Technology and Healthcare, 212*(2), 125-141. doi:10.3233/THC-130715

Lambrou, P., Merkouris, A., Middleton, N., & Papastavrou, E. (2014). Nurses' perceptions of their professional practice environment in relation to job

satisfaction: A review of quantitative studies. *Health Science Journal*, *8*(3), 298-317. Retrieved from https://www.researchgate.net

Landry, M., Hack, L. M., Coulson, E., Freburger, J., Johnson, M. P., Katz....Goldstein, M. (2015). Workforce projections 2010-2020: Annual supply and demand forecasting models for physical therapists across the United States. *Journal of the American Physical Therapy Association, 95,* 1335-1344. doi:10.2522/ptj.20150010

Lewis, L. (2010a). Oregon takes the lead in addressing the nursing shortage: A collaborative effort to recruit and educate nurses. *American Journal of Nursing, 110*(3), 51-54. doi:10.1097/01.NAJ.0000368955.26377.e1

Lewis, L. (2010b). Mississippi addresses the nursing shortage. *American Journal of Nursing, 110*(7), 58-61. doi:10.1097/01.NAJ.0000383937.68462.52

Lipsitz, L. A. (2012). Understanding health care as a complex system: The foundation for unintended consequences. *Journal of the American Medical Association, 308*(3)*,* 243-244. doi:10.1001/jama.2012.7551

Liu, L. L., Forgiono, D., & Youmis, M. (2012). A comparative analysis of the CVP structure of nonprofit teaching and for-profit non-teaching hospitals. *Journal of Health Care Finance, 39*(1)*,* 12-38. Retrieved from http://www.researchgate.net

Luke, D. A., & Stamatakis, K. A. (2012). Systems science methods in public health: Dynamics, networks, and agents. *Annual Review of Public Health*, *33*, 357-376. doi:10.1146/annureo-publichealth-031210-101222

MacDonald, J., Edwards, N., Davies, B., Marck, P., & Guerney, J. R. (2012). Priority setting and policy advocacy by nursing associations: A scoping review and implications using a socio-ecological whole system lens. *Health Policy, 107*(1), 31-43. doi:10.1016/j.heALTHPOL.2012.03.017

MacIndoe, H. & Sullivan, F. (2014). Nonprofit response to financial uncertainty: How does financial vulnerability shape nonprofit collaboration? *Journal of Management and Sustainability, 4*(3), 1-15. doi:10.5539/jms.v4n3p1

Magill, G., & Prybil, L. D. (2011). Board oversight of community benefit: An ethical imperative. *Kennedy Institute of Ethics Journal, 21*(1)*,* 25-50. Retrieved from http://muse.jhu.edu

Martin, G. P., Weaver, S., Currie, G., Finn, R., & McDonald, R. (2012). Innovation sustainability in challenging health-care contexts: Embedding clinically led changes in routine practice. *Health Services Management Research, 25*(4)*,* 190-199. doi:10.1177/0951484812474246

Mayoh, J., & Onwuegbuzie, A. J. (2015). Toward a conceptualization of mixed methods phenomenological research. *Journal of Mixed Methods Research, 9*(1)*,* 91-107. doi:10.1177/1558689813505358

McGlynn, K., Griffin, M.Q., Donahue, M., & Fitzpatrick, J. J. (2012). Registered nurse job satisfaction with the professional practice model. *Journal of Nursing Management, 20*(2), 260-265. doi:10.1111/j.1365-2834.2011.01351.x

McHugh, M. D. (2011). Hospital nurse staffing and public health emergency preparedness: Implications for policy. *Public Health Nursing, 27*(5), 442-449. doi:10.1111/j1525-1446.2010.00877

McHugh, M. D., Kutney-Lee, A, Cimiotti, J. P., Sloane, D. M., & Aiken, L. H. (2011). Nurses' widespread job dissatisfaction, burnout, and frustration with health benefits signal problems for patient care. *Health Affairs, 30*, 202-210. doi:10.1377/hlthaff.2010.0100

McHugh, M. D., & Ma, C. (2014). Wage, work environment, and staffing: Effects on nurse outcomes. *Policy, Politics, & Nursing Practice, 15*(3-4)*,* 72-80. doi:10.1177/1527154414546868

Menon, S., Singh, H., Meyer, A. N., Belmont, E. & Sittig, D. F. Electronic health record-related safety concerns: A cross-sectional survey. *Journal of Healthcare Risk Management, 34*(1), 14-26. doi:10.1002/jhrm.21146

Merriam, S. B. (2014). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Wiley

Metcalf, L., & Benn, S. (2013). Leadership for sustainability: An evolution of leadership ability. *Journal of Business Ethics, 112*(3)*,* 369-384. doi:10.1007/s10551-012-1278-6

Meyer, V., Diorgenes, M. & Lucilaine, P. (2014). Managerialism in nonprofit hospitals: Experiencing strategic practices in complex and hybrid organizations. Conference Paper. 45-66. Retrieved from http://www.researchgate.net

Meyer, R. M., & O'Brien-Pallas. (2010). Nursing services delivery: An open system approach. *Journal of Advanced Nursing, 66*(12), 2828-2838. doi:10.1111/j.1365-2648.2010.05449.x

Moote, M., Krsek, C., Kleinpeil, R., & Todd, B. (2011). Physician Assistant and Nurse Practitioner utilization in academic medical centers. *American Journal of Medical Quality, 26*(6), 452-460. doi:10.1177/1062860611402964

Moustakas, C. E. (1994). *Phenomenological Research Methods.* Thousand Oaks, CA: Sage

Mulready-Shick, J., & Flanagan, K. (2014). Building the evidence for dedicated education unit sustainability and partnership success. *Nursing Education Perspectives, 35*(5), 287-294. doi:10.5480/14-1379

Munoz, E., Munoz, W. III, & Wise, L. (2010). National and surgical health care expenditures, 2005-2025. *Annals of Surgery, 251*(2), 195-200. doi:10.1097/SLA.0b013e3181cbcc9a

Murphy, K. (2011). Advanced Practice Nurses: Prime candidates to become primary caregivers in relation to increasing physician shortages due to health care reform. *Journal of Nursing Law, 14*(3-4), 117-119. doi:10.1891/1073-7472.14.3.4.117

Nasco, T. J., Miller, R. S., & Holt, K. D. (2011). The potential impact of reduction in federal GME funding. *Journal of Graduate Medical Education, 3*(4), 585-590. doi:10.4300/JGME-03-04-33

Needleman, J., Buerhaus, P., Pankratz, S., Leibson, C. L., Stevens, S. R., & Harris, M.

(2011). Nurse staffing and inpatient hospital mortality. *New England Journal of Medicine, 364,* 1037-1045. doi:10.1056/NEJMsa1001025

NIH. (2011). Office of Human Subjects Research. *Regulations and ethical guidelines: The Belmont report*. 1-10. Retrieved from: http://ohsr.od.nih.gov

Nuttall, P., Shankar, A., Beverland, M. B., & Hooper, C. S. (2011). Mapping the unarticulated potential of qualitative research. *Journal of Advertising Research, 51*(1)*,* 153-163. doi:10.2501/JAR-51-1-153-166

NVivo10 (2011). QSR international. *NVivo10.* para.1-6. Retrieved from http://www.qsrinternational.com/products_nvivo.aspx

O'Reilly, K. Paper, D., & Marx, S. (2012). Demystifying grounded theory for business research. *Organizational Research Methods, 15*(2)*,* 247-262. doi:10.1177/1094428111434559

O'Reilly, M., & Parker, N. (2013). Unsatisfactory Saturation: a critical exploration of the notion of saturated sample sizes in qualitative research. *Qualitative Research*, *13*(2)*,* 190-197. doi:10.1177/1468794112446106

Ozaki, N. (2011). A review of qualitative research in counseling and psychotherapy. *The Qualitative Report, 16*(6), 1749-1752. Retrieved from http://www.nova.edu/ssss/QR/QR16-6

Pennel, C. L., McLeroy, K. R., Burdine, J. N., & Matarrita-Cascante, D. (2015). Nonprofit hospitals' approach to community health needs assessment. *American Journal of Public Health, 105*(3)*,* E103-E113. doi:10.2105/AJPH.2014.302286

Perkins, B. B. (2010). Designing high cost medicine: Hospital surveys, health planning, and the paradox of progressive reform. *American Journal of Public Health, 100*(2), 223-233. doi:10.2105/AJPH.2008.155838

Peters, D. H. (2014). The application of systems thinking in health: Why use systems thinking? *Health Research Policy and Systems, 12,* 51. doi:10.1186/1478-4505-12-51

Petterson, S. M., Liaw, O. R., Phillips Jr., R. L., Radin, D. L., Meyers, D. S., & Bazemore, A. W. (2012). Projecting US primary care physician workforce needs: 2010-2025. *Annals of Family Medicine, 10,* 503-509. doi:10.1370/afm.1431

Pittman, P. (2013). Nursing workforce education, migration, and the quality of health care: A global challenge. *International Journal Quality Health Care, 25*(4)*,* 349-351. doi:10.1093/intqhe/mtz048

Porter, T. & Derry, R. (2012). Sustainability and business in a complex world. *Business and Society Review, 117*(1)*,* 33-53. doi:10.111/j.1467-8594.2012.00398.x.

Rajkumar, R., Patel, A., Murphy, K., Colmers, J., Blum, J., Conway, P. H....Sharfotein, J. M. (2014). Maryland's all-payer approach to delivery-system reform. *New England Journal of Medicine, 370,* 493-495. doi:10.1056/NEJMp1314868

Restuccia, J. D., Cohen, A. B., Horwitt, J. N., & Schwartz, M. (2012). Hospital implementation of health information technology & quality of care: Are they related? *BMC Medical Informatics & Decision-Making, 12,* 1-8. Retrieved from http://www.biomedcentral.com

Richardson, E. L. (2011). The quantitative examination of the relationship of perceived pay equity and commitment among registered nurses in the state of Tennessee (Doctoral Dissertation). Available from ProQuest Dissertations and Theses database. (UMI No.3454106)

Ridder, H. G., & McCandless, A. (2010). Influences on the architecture of human resource management in nonprofit organizations: An analytical framework. *Nonprofit and Voluntary Sector Quarterly, 39*(1), 124-141. doi:10.1177/0899764008328182

Riley, T. A., & Janosky, J. E. (2012). Moving beyond the medical model to enhance primary care. *Population Health Management, 15*(3)*,* 189-193. doi:10.1089/pop.2011.0106

Robboy, S. J., Gupta, S., Crawford, J. M., Cohen, M. B., Karcher, D. S., Leonard, D. G. B....Black-Schaffer, W. S. (2015). The pathologist workforce in the United States: An interactive modeling tool for analyzing future qualitative and quantitative staffing demands for services. *Archives of Pathology Lab Medicine, 139*(11)*,* 1413-1430. doi:10.5858/arpa.2014-0559-OA

Robert Wood Johnson Foundation. (2013). The future of nursing: Leading change, advancing health. *Institute of Medicine,* 1-18. Retrieved from http://www.rwjf.org

Rosseter, R. J. (2014). Fact sheet: The impact of education on nursing practice. *American Association of Colleges of Nursing,* 1-2. Retrieved from http://www.aacn.nch

Rossman, A. (2011). The U.S. nursing shortage and nonprofits. *SPNHA Review, 6*(1)*,* 71-86. Retrieved from http://scholarworks.gvsu.edu

Rowley, J., Jones, R., Vassiliou, M., & Hanna, S. (2012). Using card-based games to enhance the value of semistructured interviews. *International Journal of Market Research, 54*(1)*,* 93-110. doi:10.2501/UMR-54-1-093-110

Schlesinger, M., Grub, R., & Schaller, D. (2015). Using patient-reported information to improve clinical practice. *Health Services Research, 420*(50), 2116-2145. doi:10.1111/1475_6773.12

Searl, M. M., Borgi, L., & Chermali, Z. (2010). It is time to talk about people: A human-centered healthcare system. *Health Research Policy and Systems, 8*(35), 1-7. doi:10.1186/1478-4505-8-35

Simon, M. K. (2011). Dissertation and scholarly research: Recipes for success. Dissertation Success, LLC. Retrieved from http://dissertationrecipes.com

Sloper, T. F., & Hall, T. J. (2011). The Triple Bottom Line: What is it and how does it work? *Indiana Business Review, 86*(1)*,* 4-8. Retrieved from http://www.ibrc.indiana.edu

Society of Teachers of Family Medicine, & Physician Assistant Education Association (2012). Educating primary care teams for the future: Family medicine and Physician Assistant interprofessional education. *Journal of Physician Assistant Education, 23*(3)*,* 33-41. Retrieved from http://www2.paeaonline.org

Soo, C., Tran, A., Teo, S., & Cordley, J. (2012). Intellectual capital-enhancing human resources, absorptive capacity and innovation. Business School, University of Western Australia. Retrieved from aut.researchgateway.ac.nz/

Staiger, D. O., Auerbach, D. I., & Buerhaus, P. I. (2012). Registered nurse labor supply

and the recession-Are we in a bubble? *New England Journal of Medicine, 366,* 1463-1465. doi:10.1056/NEJMp1200641

State of Maryland DHMH (2010). Report on the community service expansion on the Eastern Shore related to the closure of the USCMHC, 1-6. Retrieved from www.dhmh.state.md.us

Stuckey, H. L. (2013). Three types of interviews: Qualitative research methods in social health. *Journal of Social Health & Didactics, 1*(2)*,* 56-59. doi:10.4103/2321-0656.115294

Sturmberg, J. P., & Martin, C. M. (2012). Leadership and transitions: Maintaining the science in complexity and complex systems. *Journal of Evaluation in Clinical Practice, 18,* 186-189. doi:10.1111/j.1365-2753.2011.01789.x

Sturmberg, J. P., O'Halloran, D. M., & Martin, C. M. (2012). Understanding health system reform-a complex adaptive systems perspective. *Journal of Evaluation in Clinical Practice, 18*(1)*,* 202-208. doi:10.1111/j.1365-2753.2011.01792.x

Tankwanchi, A. B. S., Ozden, C., & Vermund, S. H. (2013). Physician emigration from Sub-Saharan Africa to the United States: Analysis of the 2011 AMA Physician Masterfile. *PLOS Medicine, 10*(7)*,* e1001513, 1-28. doi:10.1371/journal.pmed.1001513

Taylor, J., Dossick, C., & Garvin, M. (2011). Meeting the burden of proof with case study research. *Journal of Construction Engineering Management, 137*(4)*,* 303-311. doi:10.1061/(ASCE)CO.1943-7862.0000283

Teddlie, C., & Tashakkori, A. (2012). Common "core" characteristics of mixed methods

research: A review of critical issues and call for greater convergence. *American Behavioral Scientist, 56,* 774-788. doi:10.1177/0002764211433795

Tellez, M. (2012). Work satisfaction among California registered nurses: A longitudinal comparative analysis. *Nursing Economics, 30*(2)*,* 73-81. Retrieved from http://www.connection.ebscohost.com

Tower, M., Rowe, J., & Wallis, M. (2012). Investigating patients' experiences: Methodological usefulness of interpretive interactionism. *Nursing Research, 20,* 39-44. Retrieved from http://www.ncbi.nlm.nih.gov/

Tsasis, P., Evans, J. M., & Owen, S. (2012). Reframing the challenges to integrated care: A complex-adaptive systems perspective. *International Journal of Integrated Care, 18,* 190-198. Retrieved from http://www.ncbi.nih.gov

Tyler, E. T. (2013). "Small places close to home": Toward a health and human rights strategy for the U. S. *Health and Human Rights Journal, 15*(2), 3604-3620. Retrieved from http://www.hhrjournal.org

U.S. Department of Health and Human Services. (2010). Read the law: Patient Protection and Affordable Care Act. HHS.gov/HealthCare. Retrieved from http://www.hhs.gov/healthcare/rights/law/index.html.

U.S. Department of Health and Human Services. (September 26, 2014). From the desk of the Secretary: The Affordable Care Act is working. Retrieved from http://www.hhs.gov/blog/2014/09/desk-secretary-affordable-care-act-working.html

U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. (2013). Projecting the supply and demand for primary care practitioners through 2020. Rockville, Maryland: U.S. Department of Health and Human Services, 2013. Retrieved from http://bhpr.hrsa.gov

U.S. Senate. (2010). H. R. 3590: The Patient Protection and Affordable Care Act. *One Hundred Eleventh Congress of the United States of America.* Retrieved from https://democrats.senate.gov/pdfs/reform/patient-protection-affordable-care-act-as-passed-pdf

Varjavand, N., Novack, D. H., & Schindler, B. A. (2012). Returning physicians to the workforce: History, progress, and challenges. *Journal of Continuing Education in the Health Professions, 32*(2)*,* 142-147. doi:10.1002/chp.21137

Visser, W., & Courtis, P. (2011). Sustainability leadership: Linking theory & practice. *SSRN Working Paper Series, 21,* 1-13. Retrieved from http://www.academia.edu

von Bertalanffy, L. (1948). The history and status of General Systems Theory. *Academy of Management Journal, 15*(4)*,* 407-426. doi:10.2807/255189

Walker, K. O., Ryan, G., Ramey, R., Nunez, F. L., Beltran, R., Splawn, R. G., & Brown, A. F. (2010). Recruiting and retaining primary care physicians in urban underserved communities: The importance of having a mission to serve. *American Journal of Public Health, 100*(5)*,* 2168-2175. doi:10.2105/AJPH.2009.181669

Wester, K. L. (2011). Publishing ethical research: A step-by-step overview. *Journal of Counseling & Development, 89*(3)*,* 301-307. doi:10.1002/j.1556-6678.2011.tb00093.x

Williams, H. F., Lopes, G., Lewis, K. (2013). Certification-Good for business. *Nephrology Nursing Journal, 40*(4), 247-254. Retrieved from http://www.annanurse.org/nnj

Wikstrom, P. (2010). Sustainability and organizational activities-Three approaches. *Sustainable Development, 18*(2), 99-107. doi:10.1002/5d.449

Wilson, A., Whitaker, N., & Whitford, D. (2012). Rising to the challenge of health care reform with entrepreneurial and intrapreneurial nursing initiatives. *Online Journal of Issues in Nursing, 17*(2)*.* doi:10.3912/OJIN.Vol17No02Man05.

Woodson, W., & Jenkins (2010). Payment reform: How should your organization prepare? *Healthcare Financial Management, 64*(1)*,* 74-79. Retrieved from http://www.ncbi.nlm.nih.gov

Woolhandler, S., & Himmelstein, D. (2011). Healthcare reform 2.0. *Social Research, 78*(3), 719-730. Retrieved from http://www1.cuny.edu

World Commission on Environment and Development. (1987). Report of the World Commission on environment and development: Our common future. Retrieved from http://www.un-documents.net/our-common-future.pdf

Xue, Y. & Brewer, C. (2014). Racial and ethnic diversity of the U.S. national nurse workforce 1988-2013. *Policy, Politics, & Nursing Practice, 15*(3-4), 102-140. doi:10.177/1527154414560291

Yasnoff, W. A., Sweeney, L. & Shortliffe, E. H. (2013). Putting health IT on the path to success. *Journal of the American Medical Association, 309*(10), 989-990. doi:10.1001/jama.2013.1474

York, R., Kaufman, K., & Grube, M. (2013). Decline in utilization rates signals a change in the inpatient business model. *Health Affairs Blog.* Retrieved from http://healthaffairs.org

Zhang, T., Lapine, J. A., Buckman, B. R., & Feng, W. (2014). It's not fair…or is it? The role of justice and leadership in explaining work stressor-job performance relationships. *Academy of Management Journal, 57,* 675-697. doi:10.5465/amj.2011.1110

Zigmond, J. (2011, October 3). MODERNPHYSICIAN.Com. Accreditation Association for Ambulatory Health Care. "Doc, hospital groups urge supercommittee on GME". Retrieved from http://www.modernphysician.com

Zinn, J. L., Guglielmi, C. L., Davis, P. P., & Moses, C. (2012). Addressing the nursing shortage: The need for nurse residency programs. *Association of Operating Room Nurses Journal, 96,* 652-657. doi:10.1016/j.aorn.2012.09.011

Zismer, D. K. (2013). How might a reforming U.S. healthcare marketplace threaten balance sheet liquidity for community health systems? *Journal of Healthcare Management, 58,* 168-172. Retrieved from http://www.ncbi.nlm.nih.gov

Appendix A: Interview Instrument

1. How have the changing economic climate and health care reforms impacted operational systems in your organization over the past 5 to10 years?
2. How has the United States economy and health care reforms initiated in 2010 affected sustainability in your organization?
3. What strategies have your hospital leaders used to deal with systematic adjustment of processes to reduce the impact, if any, for your organization?
4. What strategies have your executive organization leaders used to deal with the effect of the shortages of staff on delivery of adequate patient care?
5. What best practices have your hospital leaders used to meet the regulations imposed by the new health care reform legislation?
6. What strategies have your hospital leaders used to reduce costs associated with business operations?
7. What else would you like to add pertaining to the purpose of this study or concerning an issue not covered in the interview questions?

Appendix B: Consent Form

CONFIDENTIALITY/CONSENT FORM

You are invited to take part in a research study of the sustainability of nonprofit hospitals in Maryland when faced with the challenges of diminished resources, healthcare reforms, staff shortages, and increased costs of operations. You were chosen for the study because of your experience and expertise in healthcare, having been employed in healthcare for 5 years or more in a Maryland hospital. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Carmela J. Lynch, M.A., B.S.N., who is a doctoral/master's student at Walden University. You may already have knowledge of the researcher as a member of the healthcare industry, but that role is not as a participant role for this study. Participation is completely voluntary and does not present any conflict of interest between the participants and the researcher.

Background Information:
The purpose of this study is to identify issues affecting the sustainability of nonprofit hospitals in Maryland and best practice strategies used by executive management to ensure long-term viability of operations.

Procedures:
If you agree to be in this study, you will be asked to:

- Meet with the researcher and engage in a face-to-face interview lasting approximately 1 hour including time for additional questions posed, if any
- Answer 7 survey questions posed by the researcher

Voluntary Nature of the Study:
Your participation in this study is voluntary. This means that everyone will respect your decision of whether or not you want to be in the study. No one at any of the institutions involved in the study will treat you differently if you decide not to be in the study. If you decide to join the study now, you can still change your mind during the study. If you feel stressed during the study you may stop at any time. You may skip any questions that you feel are too personal or you just may not want to answer.

Risks and Benefits of Being in the Study:
There is no known risk for being a study participant. The benefit of being a participant in the study includes exposure to the knowledge of proven strategies in operations of nonprofit hospitals within the State of Maryland that can be used by hospital executives in strategic decision making for long-term viability of their organizations.

Compensation:
There is no compensation offered for participating in the study.

Confidentiality:
Any information you provide will be kept confidential. The researcher will not use your information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in any reports of the study.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher via home phone at 410-557-XXXX. If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 1-800-925-3368, extension 1210. Walden University's approval number for this study is **IRB 05-12-15-0163080** and it expires on 05-11-16**.**

The researcher will give you a copy of this form to keep.

Statement of Consent:

I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By signing below, I am agreeing to the terms described above.

Printed Name of Participant ______________________________

Date of consent ______________________________

Participant's Written or Electronic* Signature ______________________________

Researcher's Written or Electronic* Signature ______________________________

Electronic signatures are regulated by the Uniform Electronic Transactions Act. Legally, an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically.