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Is there an Association between Non-VA Medical Care Coordination and Utilization of Care?

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Walden University

College of Health Sciences

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Brenda Robinson

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Walden University 2016

Abstract

Is there an Association between Non-VA Medical Care Coordination and Utilization of Care?

by

Brenda J. Robinson

MSN, Walden University, 2011 BSN, SUNYIT, 2009

Project Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Nursing Practice

Walden University

March 2016

Abstract

The Non-Veteran Administration Care (NVC) is a program in which the Veterans Health Administration purchases health care when it cannot provide the health services needed for eligible Veterans. The rising cost of this program led to audits by the Office of the Inspector General and other entities. The scholarly problem for this DNP Project was the lack of oversight, accountability, and management, found throughout the audits of NVC, as well as a lack of evaluation of NVC. The purpose of this project was to ascertain if there was a relationship between the Non-VA Care Coordination program (NVCC) and utilization of care. The NVCC was implemented to eliminate the deficiencies cited by audits. Sleep study and chiropractic consults for FY 2013 (pre-NVCC) and FY 2014 (post-NVCC) were examined. Sleep apnea service was available at the local Veteran Administration Medical Center and chiropractic service was not. Utilization of care was determined by emergency room (ER) visits and admissions related to the consult. A logic model was used to conceptualize the project and the longer-term implementation and evaluation of NVCC, and descriptive statistics were used to analyze trends in the chiropractic data (sleep study consults were excluded from the analysis due to the minute number). There were a total of 859 chiropractic consults and 2,184 approved visits analyzed. The results revealed that Veterans who utilized the consults had no ER visits or admissions related to referrals for chiropractic consults. Completed chiropractic consults remained proportionality the same both years. NVCC had no association with the utilization of care. This scholarly project contributes to social change by empowering consumers and providing transparency in the government through audits that facilitate quality improvement and evaluation of the NVCC program.

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Dedication

This has been a long journey and I am thankful for my supportive daughters: Jah-Raii, Princess, Fruit-Asia, and Sha-Rain; and my grandchildren, who always lift my spirits. Life throws many curves. My mother, Edna, and the other strong women in my life taught me how to maneuver through the curves, the peaks, and the valleys! These women live within me and walk with me daily! This has been a long journey. I thank God for family and good friends.

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The guidance and support from my mentor, Rosetta Crawley, MSN, RN, has kept me on track and helped me to juggle life and this DNP program. My preceptors, Dr. Susan Burkart-Jayez and Colleen Hatman have been awesome; their intelligence and guidance have been priceless.

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Section 1: Nature of the Project

Introduction

"To fulfill its mission of providing health care to veterans, VHA purchases medical services from community health care providers under the Non-VA Medical Care Program" (Veterans Health Administration [VHA], 2012). Non-VA Care is medical care provided to eligible veterans of the VA system. This care was formerly known as "Fee Basis," "Purchased Care," or "Non-VA Care." According to the National Academy of Public Administration (NAPA), the cost of the VA's Fee Care Program has grown 275% since Fiscal Year (FY) 2005" (NAPA, 2011). There have been many issues with the program cited by NAPA, such as lack of oversight and accountability, which led to the exuberant cost and questionable return of investment for the veteran and the Veterans Health Administration. The government's answer to NAPA's identified issues of Non-VA Care was the creation of the centralized Non-VA Care Coordination (NVCC) program. This study assessed the coordination of care within the Veteran Administration Medical Center in order to evaluate this quality improvement program. Additionally, this study assessed if there was a significant association between NVCC and the utilization of care.

Non-VA Care is provided to veterans when the care through the VA medical system is not available, whether due to distance, lack of care provision, emergencies, or long wait times for appointments. There are federal eligibility requirements for Non-VA Care and this program was to be a temporary option, not an entitlement (Non-VA Care, 2014). The Government Accountability Office (GAO) identified three main areas of

utilization of Non-VA Care: services not available at the VA, long wait times, and travel expense (U.S. Department Veteran Affairs, Government Accountability Office [GAO], 2013). This study is a retrospective review of two consults: Sleep consults, which are available but had long wait times, and chiropractic consults, which are a service that is not available at the VA. These consults during the first quarter of Fiscal Year 2013 are compared to the first quarter of Fiscal Year 2014, which is pre- and post-implementation of NVCC. This study looked at three areas: access, utilization, and cost.

Background

Non-VA Care Coordination was established to provide care coordination within the Non-VA Care systems due to the numerous deficiencies found by NAPA and GAO audits. The Non-VA Medical Care Coordination program (NVCC) is a system of processes that provide one standard, uniform Non-VA Care process for the entire VHA. This process deals with front-end business processes, care coordination support, oversight, and accountability to improve all aspects of Non-VA Care (U.S. Department Veteran Affairs, n.d.). Non-VA Care is either emergent or preauthorized; this study is examining preauthorized care. Oversight of NVCC has been changed from the VHA Chief Business Office Purchased Care program to the national Non-VA Care Medical Program office.

NVCC has six core processes: Non-VA Care Referral Review, Appointment

Management, Pre- and Post-Appointment Patient Contact, Hospital Notification, Clinical

Review for Emergency Claims, and Administrative Appeals Management. Each process
has a standard operating procedure which is a national mandate for all VA Medical

Centers to follow. The first two core processes are the main processes of Non-VA Care preauthorized outpatient care: the referral process and appointment management following the referral process. The NVCC's appointment management (AM) process consists of contacting the veteran and coordinating the Non-VA appointment with the provider that the veteran designates, follow-up on the appointment, contacting the Non-VA Care provider, obtaining documentation of the visit, and scanning the visit note with an alert to the primary care provider (Figure 1). In the AM process, the primary care provider is contacted for such things as a Non-VA Care provider requiring specific blood work or x-ray before an appointment.

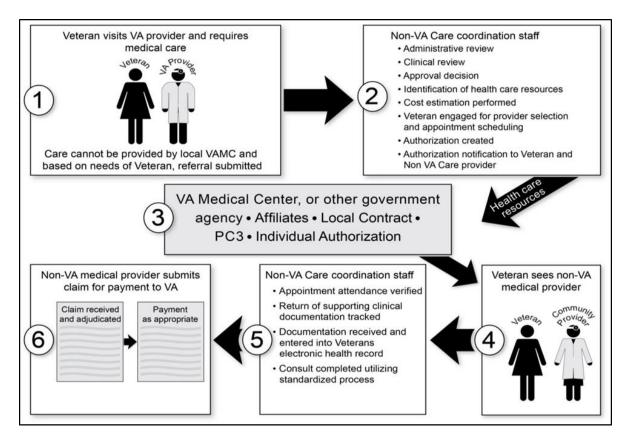


Figure 1. NVCC Process. Adapted from Non-VA Care Medical Care 101 ppt 5/1/2014.

Problem Statement

The Non-VA Care (NVC) program had many issues according to NAPA, including the actual organizational structure; no accountability; fragmented leadership and management; lack of universal process; lack of coordination of care; and flagrantly faulty business practices as evidenced by inappropriate billing. This program had no oversight and morphed into a huge governmental expense; NAPA's extensive program review shed light on the many areas of breakdown. Lack of coordination of care in the Non-VA Care Program led to poor utilization management, budget issues, questionable patient outcomes, and lack of data collection. The Non-VA Care Coordination program was implemented as a solution to the problems above. Further research is needed to evaluate if this program is effective. The impact and effectiveness of this program was reflected in the utilization of care.

The GAO mentioned the lack of monitoring and adherence to eligibility criteria as factors also adding to the problems of Non-VA Care (GAO, 2013). The Office of Inspector General (OIG) reported: "Our audits and reviews of fee care have identified significant weaknesses and inefficiencies. Specifically, we found that VA had not established effective policies and procedures to oversee and monitor services provided by Non-VA providers to ensure they are necessary, timely, high quality, and properly contracted and billed" (U.S. Department of Veteran Affairs, Office of Inspector [OIG], 2012). The 2009 OIG report of the Outpatient Non-VA Care also found that 72% of fee claims lacked documentation that justified the use of the care and 55% were not properly

authorized via the consult process. The cost of this Non-VA Care increased by 275% since fiscal year 2005 according to the NAPA 2011 report.

Purpose Statement and Project Objectives

Access

The primary purpose of this project proposal is to ascertain if there is a significant association between NVCC and utilization of care. The objective was to examine two consults, chiropractic care and sleep study; collect data; and review and compare these consults for the month of November in FY 2013 and FY 2014. These two areas of care were selected because chiropractic service is not available at the medical center and sleep study is an available service at the medical center. This provided a large sample for comparison pre- and post-Non-VA Care Coordination implementation, which was implemented in FY 2014.

The utilization of care was determined by emergency room visits and admissions related to the consult utilized by the eligible veterans. Eligibility is determined by federal regulation. ER and admissions was reviewed for the same date span of the specific consults and compared. This also determined if the cost of NVCC yielded a return on investment (ROI) by decreasing ER visits and admissions (ROI, 2012).

Significance/Relevance to Practice

The Veterans Health Administration would like to provide care to all our veterans but VA officials know that this is not always possible, and sometimes there is a need to use fee basis providers for timely care delivery and increased access (GAO, 2013).

Guidelines for the utilization of Non-VA Care include decreasing long wait times for

clinic visits and closer health care when travel is an issue (both geared toward increasing access). Ensuring health care programs deliver cost-effective care is also important. Non-VA Care provides access to chiropractic care (a service the Albany VA Medical Center does not have) and sleep study (when care cannot be offered in a timely way). This project showed that reviewing the NVCC program alongside the utilization of care is very important. As Non-VA Care has little research, this will be the foundation for many other studies which will improve quality of care and transparency.

"VHA Directive 2009-059" states that the VHA will deliver high-quality chiropractic service to our veterans. Individual treatment plans and evaluation of outcomes ensures proper utilization of this service (U.S, Department Veteran Affairs [DVA], 2009). The VA has guiding principles to be people-centric, results-driven, and forward-looking. The first of the three priority goals of the 2014-2020 strategic plan is to improve veteran access to benefits and service. According to Healthy People 2020, access to health care impacts overall patient health, health promotion and disease prevention, prevention of disability, preventable death, quality of life, life expectancy, and the identification and treatment of health problems (U.S. Dept. Health and Human Services, 2010).

Sleep and chiropractic care are important aspects of veteran care, and coordination of that care provides access and cost-effective, quality care. Sleep apnea is a common disorder, characterized by snoring, in which a person stops and starts breathing while sleeping. Often this goes unnoticed by the person, and it is instead a spouse or family member who notices the breathing pattern, according to the National Heart, Lung

and Blood Institute (National Institute of Health, 2014). The most common form of sleep apnea is Obstructive Sleep Apnea (OSA). Many sources, including the National Institute of Health, have linked obesity and sleep apnea. Sleep disorders are diagnosed by a polysomnograph, commonly called a sleep study. Eye movement, leg movement, oxygen level, and brain activity are recorded during a sleep study (Mayo Clinic, 2014). The American Sleep Apnea Association (2014) states that the sleep study is the only way to diagnose sleep apnea and the polysomnography is the gold standard.

Sleep apnea is linked to many illnesses. According to a study of 400 Australian residents done by Marshall, Wong, Stewart, Knuiman and Grunstein (2014), sleep apnea was associated with increased incident of stroke, cancer, and mortality. The Johns Hopkins Bloomberg School of Public Health (2000) studied 6,000 adult men and woman age 40 or older and found a link between sleep apnea and blood pressure; the study showed that those patients with at least 30 pauses in their sleep were twice as likely to have high blood pressure than those who did not have pauses in breathing while sleeping.

According to Green, Johnson, Lisi and Tucker (2009) chiropractic care was introduced in the U.S. Department of Veterans Affairs back in 2004 and it is available in 36 VA facilities. The VHA is governed by federal policies as well as both local and national directives. Although joint manipulation and mobilization are often symbolic of chiropractors, chiropractors are trained in many other therapies, such as mind-body therapies, acupuncture, and biologically based preparations. This care all falls under the umbrella of Complementary and Alternative Medicine (CAM), according to VHA

Directive 2009-059, Chiropractic Care. Chiropractors also provide soft tissue therapies, education, and physical modalities.

According to the National Center for Complementary and Alternative Medicine (NCCAM, 2014), a 2010 scientific review showed that services provided by a chiropractor, such as spinal manipulation, are beneficial for ailments such as low back pain, whiplash, and neck pain. Low back pain costs Americans more than \$90 billion yearly (Borczuk, 2013) and \$11.9 billion are out-of-pocket expenses according to NCCAM. Most chiropractic care focuses on spinal manipulation for the back. According to Kanodia et al. (2010), the 2002 National Health Interview Survey revealed that chiropractic care and massage are the most common CAM services and 40% to 60% of the U.S. population uses CAM yearly. Atlas & Deyo (2001) says the fifth most common reason to see a physician was for low back pain, with a cost of \$38 billion to \$50 billion annually in the United States.

The American College of Physicians (ACP) and the American Pain Society (APS) collaborated and published guidelines in the Annals of Internal Medicine (2007) for the diagnosis and treatment of low back pain; CAM was one of the recommendations. In review of the clinical guidelines, Chou et al. (2007) noted, "Approximately one quarter of U.S. adults reported having low back pain lasting at least 1 whole day in the past 3 months, and 7.6% reported at least 1 episode of severe acute low back pain within a 1-year period." Chiropractic care and sleep studies are clearly very important types of medical care, and the coordination of this care is a necessity for ensuring accessibility, quality, and cost-efficiency.

Although this project is looking at two specific NVC consults, this type of examination can span across the entire NVC program, eventually initiating studies on all consults. This showed the value of nursing research, transparency, accountability, and oversight. Socially, the nation will be more informed about the care of our veterans and how tax money is spent.

Utilization and Care Coordination

According to the Institute of Medicine (IOM), due to the changing needs of health care and increased lifespans, which result in more chronic conditions, there is huge void, a "chasm," between our present health care and what our health could and should be (Institute of Medicine [IOM], 2001). IOM (2001) further states that health care providers should communicate and work together and health care systems should not waste resources.

Care coordination is simply that: coordinating and organizing care between the patient and health care provider. This means oversight of the patient's care activities and communication with health care providers involved in the patient's care. The providers caring for different parts of patient health care needs will all communicate and care will be facilitated and managed (U.S. Department of Health & Human Services, 2013). The American Nurses Association (ANA) has adopted AHRQ's approach to care coordination (American Nurses Association [ANA], 2012). The ANA found that coordination of care reduced emergency room visits, improved health outcomes, increased safety, increased quality of care, and decreased costs (ANA, 2012). Unorganized care, in contrast, decreased positive patient outcomes and hindered patient safety, resulting in wasted time,

money, and manpower, as well as a lack of accountability (IOM, 2001). According to Nash, Reifsnyder, Fabius and Pracillo (2011), evidence shows that coordination of care decreases hospital readmissions, increases positive health outcomes and increases patient self-management of health conditions.

According to the National Survey, health care has evolved and factors that affect utilization of care are an aging population, socioeconomic status, and diseases (U.S. Department of Health and Human Services, 2004). As pointed out by the Institute of Medicine (2001), as we age, we develop chronic health conditions and disabilities and tend to use more hospital services due to these chronic conditions.

Budget Analysis

The actual funding for VHA is complex, confusing, and could be a study within itself. According to Sidath Panangala (2013), specialist in veteran's policy, there are four main funding accounts: medical administration, medical research, prosthetic research, and medical care. The total 2013 budget authority was \$55.672 billion and the total 2014 budget authority was \$57.669 billion (U.S. Dept. Veteran Affairs, 2013; U.S. Dept. Veteran Affairs, 2014a).

The VA Office of Inspector General cited problems with the Fee Basis program in 2009 and 2010. In 2009, the OIG audited the Non-VA Care Outpatient. "In FY 2008, VA medical centers (VAMCs) paid about \$3.2 million outpatient fee claims. For FY 2008, we estimate that these errors resulted in estimated total overpayments of \$47.8 million and underpayments of \$52 million" (OIG, 2009). OIG cited lack of policies, procedure, oversight, training, care coordination, and no supportive organizational structure as

contributing factors to these problems. The June 2010 OIG review of fraud management found that there was no process to detect fraud and that yearly fee payments grew from \$1.6 billion in FY 2005 to approximately \$3.8 billion in FY 2006. The August 2010 fraud review of Non-VA Care inpatient found that the VA improperly paid 28% of inpatient Non-VA care claims in the first six months of 2009 (OIG, 2010).

In 2011, after all the numerous reports of improper payments, mismanagement, and possible safety, fraud, and care issues, the Chief Business Office, who had oversight of the Fee Basis program, contracted NAPA to do an assessment. NAPA found that for FY 2008 to FY 2010, the number of new patients increased by 16% (820,000 to 952,000), while the number of paid claims increased 46% (\$3 billion to \$4.4 billion) for the same time frame (NAPA, 2011). NAPA also found, along with deficiencies (including those above), that the quality of care and ROI was questionable. Many recommendations were given. One area looked at was referrals (consults) which is the beginning of the Non-VA Care process. The GAO performed an audit from September 2012 to May 2013 and noted continued increase in utilization spending and that 80% of the spending, \$73.6 billion was due to preauthorized, outpatient Non-VA Care unique patients (GAO, 2012). Although providing quality, efficient care is the goal, cost often drives interventions and reorganization. NVCC was one of the many initiatives resulting from numerous reports that was deployed nationally across the VHA.

Project Question

Non-VA Medical Care Coordination is a fairly new implementation established to bring coordination of care to the Non-VA Care program. This study sets out to answer the following question: in the veteran population, is there a relationship between the implementation of the NVCC program and utilization of care? The utilization of care was determined by the number of emergency room visits and admissions related to the authorized, outpatient NVC consult.

Evidenced-based Significance for Project

Evidenced-based significance for this project coincides with the significance to practice mentioned above, along with scholarly evidence. Providing quality, cost-efficient care is very important to the Veterans Health Administration. Utilization of care and care coordination are key to quality of care. Through many audits, it was established that a change was needed in the coordination of care, as well as other areas. Taking a good look at the newly implemented NVCC program show if this implementation answered this need.

Implications for Social Change in Practice

"Walden University envisions a distinctively different 21st-century learning community where knowledge is judged worthy to the degree that it can be applied by its graduates to the immediate solutions of critical societal challenges, thereby advancing the greater global good" (Walden University Vision, 2014). I am a proponent and active participant of social change. This project fits into this category and is aligned with Walden's vision of social change because the VHA, being the largest health care system in the U.S., has programs and activities that certainly affect society and impact social change. As a doctoral student, assessing whether there was a correlation between the

newly implemented NVCC program and utilization of care was a worthy project because of its societal impact on the health of so many U.S. citizens.

Government waste has been a well-known, and unfortunately, sometimes accepted fact. This lack of process, accountability, oversight, and management can lead not only to waste, but also to a lack of quality, efficiency, and safety. Audits done by governmental and other agencies, as noted here, enlighten health care programs on possible milestones accomplished and areas that remain stagnant, wasteful, and perhaps in need of improvement. This study helps to empower the watchful consumer/stakeholder to seek quality and efficient care, as well as facilitate improvements in the health care system. Shedding light on imperfections yields accountability and positive change.

Milestones can be celebrated and deficiency can be identified.

In addition to preventing government waste, the government should also be transparent and the current presidential administration has made transparency its goal. President Barack Obama stated in 2014, "We will work together to ensure the public trust and establish a system of transparency, public participation, and collaboration. Openness will strengthen our democracy and promote efficiency and effectiveness in government" (Obama, 2014). Transparency promotes accountability and provides information for citizens about what their government is doing.

Definitions of Terms

Computerized Patient Record (CPRS): VAMC's electronic health record (DVA, 2014b).

VHA Decision Support System (DSS): consists of a set of programs that use relational databases to provide cost and other information needed by managers and clinicians. DSS has been implemented throughout the U.S. Department of Veterans Affairs (VA) health care system (DVA, 2014d).

U.S. Department of Veterans Affairs (DVA):

Fiscal Year: Fiscal years begin October 1 and end September 31 the following year. For example, FY 2013 is from October 1, 2012 through September 31, 2013.

U.S. Government Accountability Office (GAO): investigated federal government spending.

VA Inpatient Evaluation Center (IPEC): uses electronic data to measure people and resources in order to drive change (Render & Almendoff, 2004).

National Academy of Public (NAPA): "an independent, non-profit, and non-partisan organization established to assist government leaders in building more effective, efficient, accountable, and transparent organizations. The Academy's work is directed primarily by Congress or executive branch leadership who are seeking assistance with complex management problems that require the expertise and independence the Academy provides" (NAPA, 2011).

The National Center for Veterans Analysis and Statistics (NCVAS): this office analyzes the veteran population and VA programs and provides data for decision-making processes (DVA., 2014a).

National Non-VA Care Program Office (NNPO): oversees purchased/Fee
Based/Non-VA Care

VA Office of Inspector General (OIG): this office is the huge investigative arm of the Department of Veteran Affairs. The OIG oversees government programs and monitors, detects, and prevents fraud and other abuses.

Veterans Health Administration (VHA): comprised of the U.S. Department of Veterans Affairs, the Veterans Benefits Administration and the Veteran Cemetery Administration.

Veterans Health Information Systems and Technology Architecture (VistA):

VistA is the foundation for all software and technologies used at the Veterans Heath

Administration. (DVA, 2014c).

Assumptions and Limitations

An assumption that is detrimental to this project proposal is that the NVCC program is in place and operating according to the national NVCC policy. To decrease the assumption that NVCC is in place, this study audited elements of the NVCC for the consults as noted in the NVCC policy. To decrease this risk to the proposed study, adherence to the elements of the NVCC policy was verified via health record documentation and VHA metric reports (Figure 1).

A limitation to this retrospective study is the government's reputation for "red tape": numerous requirements for requests. This included the request for access to the many VHA websites and the data warehouse, which were only obtainable on the intranet. This limitation was mitigated by going through the extensive IRB process at the Albany VA Medical Center, as well as the WOC (Without Compensation), which is a detailed application process to receive an unpaid appointment in the VHA as student, researcher,

or similar. For any study completed at the Veterans Health Administration, the researcher must go through the IRB. This process was extensive but the research department was very helpful.

The Albany VA IRB has categories of research that deem a project's activity as non-research for the sake of the IRB, one of which is an evaluation of a VHA program (while meeting other criteria). The VA IRB approved this project as a quality improvement project, so the project did not have to go through the entire, rigorous steps of research.

Usually educational agreements are already in place and it is just a matter of printing them. I obtained my MSN from Walden and agreements were no issue. As I was the first VA DNP student from Walden University, no agreement existed for a DNP program. Therefore, this educational piece had to be established and the VHA was very difficult to deal with because they were unsure if the program met their standards, but eventually the agreement was obtained. This process required many approvals, including the chief of education and the medical center director.

A second limitation is that this is only a single study and thus by itself cannot generate valid evidence-based practice. One study does not necessarily provide enough support for any concrete conclusion; the study must be valid, reliable, and reproducible. Several studies with valid results provide the best evidence (White & Dudley-Brown, 2012). To increase consistency and reduce error in this study, all data was collected at the same time via the VHA electronic sources noted. Data was collected and stored on a

Microsoft Excel spread sheet. Original data reports were maintained at the VA facility. Statistical assistance was obtained.

Summary

The Non-VA Care program provides care to veterans when it is not available at a VA facility. The GAO identified three main areas of utilization of Non-VA Care: when services were not available, when there were long wait times, and when travel expenses were prohibitive (GAO, 2013). The National Academy of Public Administration, VA OIG, and the GAO identified waste management and other issues with the Non-VA Care program. In 2011 NAPA identified a 275% increase in cost since 2005. The astronomical cost of the Non-VA program and allegations of mismanagement has led to the many reports and audits. From these reviews, many initiatives were put forth to improve the Non-VA Care program. The Non-VA Care Coordination program was one of the initiatives chosen to be implemented nationally. The NVCC has six core processes: Non-VA Care Referral Review, Appointment Management, Pre/Post Appointment Patient Contact, Hospital Notification, Clinical Review for Emergency Claims, and Administrative Appeals Management. This process is the guideline for all Non-VA Care and is mandatory. This program has Non-VA Coordination staff to carry out the core process (Figure 1). Each step of this process has a government-wide, mandatory template for documentation into the patient's electronic health record.

The quality improvement here is increased access to care through NVC and decreased utilization of ER visits and inpatient admission for those using NVC. This retrospective study assessed the utilization of care within the Veteran Administration

Medical Center, evaluating the Non-VA Medical Care Coordination (NVCC) program. It assessed if there is an association between NVCC and the utilization of care by comparing consults of FY 2013 and consults of FY 2014. As mentioned by the Institute of Medicine (2001), people are living longer; therefore, one can expect more chronic conditions and increased utilization of health care in the population. Coordination of this care is important for quality and efficiency. Chiropractic care and sleep study are needed areas of care.

A national NVCC metric was developed to measure the performance of NVCC. The main categories of the metric are Increased Operational Efficiency; Adoption of NVCC Standardized Processes; Increased Satisfaction; and Enhanced Communication (NNPO Intranet, 2014). The Albany VAMC, one of the last to implement NVCC, completed fully deployment of the program in September 2013. The logic model has been evident and as mentioned by Hodges & Videto, 2011. The logic model not only assists in developing a program but is useful as the evaluation plan. This retrospective study showed there is positive return on investment and assessed the correlation between NVCC and the utilization of care. Examining pre- and post-deployment of NVCC will show if this program has improved Non-VA Care. Access, utilization, and cost are elements analyzed in this study.

Section 2: Review of Literature and Theoretical and Conceptual Framework

Introduction

Search words used were Non-VA Care, Non-VA Care Coordination, VHA fee, and Fee Basis. For this study, I began by reviewing laws and federal regulations pertaining to Non-VA Care which were available on the VA Intranet, searching Non-VA Care, NVCC, and eligibility. As the nation's largest integrated health care network, the VA is the most unique health care system in the world. The VHA is the only health care provider that will pay for care at another facility for a patient if they (the VAMC) are unable to provide the care, according to the VA policy and eligibility requirement. There are federal laws pertaining to this. The VAMC is sometimes confused with health insurance because it acts as such in cases of Non-VA Care. There is a gap in research relating to Non-VA Care due to its uniqueness.

Through my experience at the VHA, I was aware that the VA OIG and NAPA did audits on the Non-VA Care system and other areas, so I went to both websites and located the audits. PubMed Health yielded 85 results with keywords "veteran care coordination, Non-VA care"; data was extracted from 3 pertinent articles. I have found only one article, a systematic review, which compared Non-VA and VA care on the Veteran Affairs website, "Health Services Research & Development Service" (HSR&D), although I found many studies on the delivery of behavioral health care and women in the VHA and the community (DVA, 2011b).

NAPA's website (www.napawash.org) yielded the 2011 audit with the search of Veterans Health Administration. On the VA OIG website (www.va.gove/oig /), searching

Non-VA Care, Fee yielded 189 results. These audits were also available by name via simple google searches using "Non-VA Care, OIG; Non-VA Care, NAPA." I used search words "Non-VA care" for a Cinahl search, which had only 3 results that were not related to my topic, and the results were the same for searches "Non-VA Care and coordination." I searched the Web of Science using keywords Non-VA Care which yielded 298 results, refined adding veteran care in community, and the search yielded 10 results.

Specific Literature

The VHA is committed to their mission and providing care to veterans. According to federal regulation 38 USC 17.52, which governs all Non-VA Care, a VA Medical Center (VAMC) can authorize care at a private/community non-VA facility/service when the VAMC cannot provide this care due to services not being available due to distance or other reason per government policy (VBA, 38 USC 17.52, 2014). This was known as the VA Fee Care Program and the cost of this program rose 27% since FY 2005 (NAPA, 2011). The Office of Inspector General (OIG) reported: "Our audits and reviews of fee care have identified significant weaknesses and inefficiencies. Specifically, it was reported that the VA had not established effective policies and procedures to oversee and monitor services provided by Non-VA providers to ensure they are necessary, timely, high-quality, and properly contracted and billed" (OIG, 2012).

There have been many complaints about Non-VA Care and audits in response to these issues. The VHA has responded to these complaints and audits. As a result of a complaint, the VA OIG did an audit on the Phoenix VA Health Care system in 2011 and found mismanagement and a large budget shortfall (DVA, 2011c). The 2009 OIG report

of the outpatient Non-VA Care found, among other things, that 72% of fee claims lacked documentation that justified the use of the care and 55% were not properly authorized. The GAO performed an audit from September 2012 to May 2013 and noted continued increase in utilization spending, with 80% of the spending, amounting to \$73.6 billion, due to preauthorized, outpatient, Non-VA Care unique patients (GAO, 2013). Many audits have shown a lack of oversight and documentation with Non-VA care, therefore calling the quality of care into question. However, HSR&D did a comparison of quality of care at VA and Non-VA settings. This systematic review looked at 222 articles (2001-2004) addressing VA and Non-VA comparisons and found VA care was comparable to care in non-VA facilities, and that some outcomes were even better at the VA (HSR&D, 2010).

Looking at access to care, HSR&D (2011) did an evidence-based systematic review of literature. HSR&D reviewed 23 articles related to access and utilization of care for veterans. The review found that distance played a large role in utilization: the farther the distance, the less utilization. Increased co-pays also decreased utilization. Surprisingly, the review did not find that long wait times had an effect on mortality rates. This systemic review did conclude that improvement in access is needed.

NVCC has been in place since September 2013 at the Albany VA. Performance metrics are in place. The performance metrics (Figure 2) show adherence to the six core processes, the target, and whether the facility has met the target. For example, NVCC has a goal to decrease wait time. One performance measure is the number of days from the Non-VA Care referral to the Non-VA Care consult note; that is, the beginning to the end

of the process. The NVC consult note is entered when the patient has been seen by the NVC provider and the documentation from that visit has been scanned into the EHR, essentially closing the consult. The target is less than 90 days. The NVCC staff monitor the process, which has an impact on care coordination and utilization. This study is important to the patient, the facility, and all other stakeholders.

The Health Information Management Systems Society (2012) explains that return on investment not only includes cost, but quality, efficiency, and patient safety. Although this clear, increased cost often drives audits, investigations, and interventions. The 2009 OIG report indicated that \$3.2 billion was spent on Non-VA Care for FY 2008 with an estimated overpayment of \$47.8 million and underpayments of \$52 million" (OIG, 2009). OIG cited lack of policies, procedure, oversight, training, care coordination, and no supportive organizational structure as contributing factors. The June 2010 OIG review of fraud management found that "annual fee payments have grown from about \$1.6 billion in FY 2005 to about \$3.8 billion in According to Nash et al. (2011), evidence shows that coordination of care decreases hospital readmissions, increases positive health outcomes, and increases patient self-management of health conditions. The ANA also supports care coordination because it improves quality of care and decreases costs. As people live longer, the increased number of chronic conditions will require increased treatment and the cost of health care will also increase as more services are utilized (IOM, 2001). This study evaluated the correlation between NVCC and utilization of care by comparing chiropractic and sleep study consults during the first quarters of FY 2013 and FY 2014. Access, utilization, and cost were reviewed.

General Literature

Sleep study and chiropractic care are important elements of care. Marshall, Wong, Stewart, Knuiman, and Grunstein (2014) presented a study of 400 Australian residents that showed sleep apnea was associated with increased mortality and stroke. Sleep study is available at the Albany VA, but Non-VA Care is used when there are long wait times in order to increase access and efficiency of quality care. The American Sleep Apnea Association (2014) says the sleep study is the only way to diagnose sleep apnea and the polysomnography is the gold standard.

According to Green, Johnson, Lisi, and Tucker (2009), Chiropractic care was introduced in the U.S. Department of Veterans Affairs in 2004 and is available in 35 VA facilities, but not at the Albany facility. According to Dunn, Green, Formolo & Chicoine (2011) in the Journal of Rehabilitation Research & Development, low back pain is the most common chronic condition in veterans. "Low back pain is the fifth most common reason for all physician visits in the United States and the estimated annual national bill for the care of low back problems is \$38 to \$50 billion (Atlas & Deyo, 2001). In Lisi's (2010) retrospective study of Operation Iraqi Freedom and Operation Enduring Freedom veterans and chiropractic care, chiropractic care was found to be safe and beneficial.

Peikes, Chen, Schore & Brown (2009) did a study looking at Medicare patients to ascertain if care coordination decreased hospital admission and cost. Data from 18,309 Medicare patients were reviewed from 2002 to 2005 in 15 care coordination programs. Surprisingly none of the programs showed a Medicare net savings and only two of the program showed significant differences in hospitalization. Although this does not look

favorable, it does show that care coordination can be effective because two programs showed a decrease in hospitalizations (Peikes et al., 2009). A critical review of 41 research articles by Saultz & Lochner (2005) showed decreased cost, increased utilization, and improved care outcomes when care coordination was present.

Conceptual Models, Theoretical Frameworks

Change Theory

A change theory is always important in a quality-improvement program. Kurt Lewin's theory of change was used here. Lewin believed that there is a constant state of change in life and it merely is the degree of change that varies (Burnes, 2004). This theory has three well-known phases: unfreezing (unfreezing the current situation), moving (organization moving toward a new equilibrium), and refreezing (after the change is implemented and sustaining) (White & Dudley-Brown, 2012). These phases can be applied to the Non-VA Care program as follows:

Unfreezing phase. Several audits were done assessing the Non-VA Care program.

Problems were identified that this program was in need of improvements. Stakeholders were included in reviewing and identifying problems. Reports were made available to all, including the public. Several initiatives were approved

Moving phase. One of the initiatives was the NVCC program and this was agreed upon as the proposed solution to the problem. The problem to be corrected by the NVCC program was lack of care coordination, which included documentation and follow-up.

NVCC was presented to all staff who were involved in Non-VA Care. Training was given to all staff on each aspect of the NVCC process, as identified in Figure 1. Handouts

were given, as well as an NVCC contact list in case there were questions or concerns that arose.

Refreezing phase. The NVCC program was implemented. Deployment meetings were held weekly. A National Metrics Plan was developed by the NNPO (Figure 2), and a scorecard maintained by the Business Implementation Manager (BIM) assigned to each facility. Monthly and quarterly reporting was required, as well as audits. The Deployment group (consisting of BIMs, facility directors, NNPO key staff, and other leaders) gradually decreased the meetings until eventually the deployment was complete and meetings ended (one year after implementation). Evaluations have been ongoing throughout this implementation and continue post deployment. Unfreezing, moving, and refreezing facilitates change.

Section 3: Methodology

According to Nash et al. (2011), when studying quality improvement projects, it is best to measure specifically what you want to learn, not taking on more than what is necessary. Methodology includes systematic collection of data and analysis.

Project Design/Methods

This descriptive study evaluated and compared FY 2013 Non-VA Care data (pre-NVCC) to the FY 2014 Non-VA Care data (post-deployment of NVCC) using quantitative research methodology. The quantitative approach was used because it is an objective look at numerical data, the sample represents the population, it answers a clearly defined question, the study can be replicated, and findings can be used to predict and investigate. Non-VA Care of chiropractic care and sleep study consults for the first quarter (October, November, and December) of each fiscal year identified was examined. Data was collected from VHA electronic data sources. Care coordination means the presence of an approved consult, documented appointment, care documentation from the Non-VA Care visit, and follow-up by the ordering physician, as listed as the documented process in the NVCC policy, to be captured in a Microsoft Excel spreadsheet, with NVCC Consult and Admit/ER trackers as displayed in Appendix A. Utilization of care was determined by the number of admissions incurred by patients who received chiropractic or sleep consults; this was the same for ER visits. The comparison was made before the intervention of the Non-VA Care Coordination program, and after the implementation of the Non-VA Care Coordination program. Costs paid for the chiropractic and sleep study appointments in the community pre- and post-NVCC were

compared as well. The variables were the number of admissions, ER visits, and cost. This study was reviewed and approved by the Investigational Review Board (IRB) at the Albany VA Stratton Medical Center (VAMC). Updates and revisions were resubmitted to the VA IRB. This project was also approved by Walden University's IRB.

Population and Sampling

The eligible population for this study were veterans receiving Non-VA Care at the Albany VA Medical Center. The population sample were veterans who received Non-VA Care for chiropractic needs and sleep study during the first quarters of FY 2013 and FY 2014. This study took place at the Albany Stratton VA Medical Center where the NVC consults are authorized. This center serves veterans in 22 counties of upstate New York, Western Massachusetts, and Vermont. The Albany Stratton VA Medical Center has primary, specialty, inpatient, and outpatient care, along with 11 Community Based Outpatient Clinics (CBOCs). The VAMC is part of the Integrated VHA health care system which is the largest health care system in the U.S. The system is comprised of 152 medical centers and over 1,200 other VA health care sites. According to the VHA website (US Census), nearly 40% of veterans live in rural areas. According to Vetpop11 (Veteran Population Projection Model), the majority of the veterans in New York, Vermont, and Massachusetts are between 60-79 years of age. The first step of Non-VA Care is the Non-VA Care consult, which is initiated by the primary care provider at the Albany VA or at one of the many CBOCs.

Data Collection / Analysis

Data was collected for this project from electronic sources of the Veterans Health Administration such as: Intranet, CPRS (Computerized Patient Records System), VistA, and VHA Data warehouses, including VSSC, DSS, and IPEC. A statistical analysis of the quantitative data was used to evaluate the association between Non-VA Medical Care Coordination and Utilization of Care. Data was collected on the Microsoft Excel spreadsheet used with template headings for checklist (Appendix A). The data contains no PHI. This ensures the type of data collected for each consult was the same. Descriptive statistics used to compare the proportion of the population receiving Non-VA Care in FY 2013 (pre-NVCC implementation) and FY 2014 (post-NVCC implementation). The sample comparison was the number of ER visits and hospital admissions (variables) as designated to measure utilization of care. The comparison will show if there is a significant association between the two variables pre- and post-NVCC implementation. The presumed hypothesis was that the implementation of NVCC decreased the usage of ER visits and inpatient admissions. I received statistical assistance from a statistician.

Project Evaluation Plan

Projects should have an evaluation of the project goals and outcome (White & Dudley-Brown, 2012; Hodges & Videto, 2011). There are three key aspects of project evaluation, according to Hodges & Videto's (2011) description of the intervention; the intervention's usage; and description of the participants' reaction to the exposure to intervention. The quality improvement here is increased access to care through NVCC for

such areas as sleep study and chiropractic care and decreased ER visits and inpatient admission utilization for those using NVCC.

The logic model not only assists in developing a program, but is also useful as the evaluation plan (Hodges & Videto, 2011; Centers for Disease Control and Prevention, n.d.). The framework shows the flow of the program and how it is supposed to work, and is a good model to use to measure results of the program (Kettner, Moroney and Martin, 2008). There are many articles in support of this cost-effective method of evaluation. Hayes, Parchman, and Howard (2011) found the logic model to be an effective evaluation tool for the primary care practice-based research network.

The logic model is a great evaluation tool because it utilizes inputs, processes, outputs, outcomes, and impacts. According to Kettner et al. (2008) inputs are resources and raw material; process is activities in which resources are used to achieve goals/objectives; outputs are the measurement of the service provided; outcomes are the benefits of the program and impacts measurable change occurring in Non-VA Care (Table 1).

Table 1.

The Logic Model for Non-VA Care.

Inputs	Activities	Outputs	Outcomes/impacts
Money,	NVCC Process:	Non-VA Care	Access/Cost effectiveness/
Staff,	NVCC Referral Review	Appointment, Appeals.	Oversight/ Performance
Training	process, Appointment	Review of Non-VA Care,	Measures/ Accountability/
	and Documentation	Notification of	Accuracy/ Coordination/
	Management, Hospital	Admissions,	Standardization/ Increased
	Notification, Appeals	Documentation	Satisfaction/Increased
	Management		Communication

The National Non-VA Care Program Office (NNPO) developed this metric during planning, as well as training and a website showing the deployment from program inception through implementation and beyond (NNPO, 2014). This national metric was developed and implemented in order to measure the success of NVCC. The main goals are increased operational efficiency, adoption of NVCC standardized processes, increased satisfaction, and enhanced communication. Figure 2 is directly from the NVCC Intranet. Monthly reports are generated from all VAMCs. Evaluation planning should begin in the planning phase as depicted by the metrics below (Hodges & Videto, 2011).

Benefit/Performance Metric	Performance (month)	Target
Metric 2.2: Average number of days from referral submission to closure using the "Non-VA Care Consult Result Note"	# Days	<= 90 days
**Metric 2.7: Average number of days from FBCS authorization to date of service (DOS)	# Days*	<= 30 days
**Metric 2.8: Percent of FBCS authorizations entered after care provided	%	10% or less
Metric 5.1: Number of "Non-VA Hospital Notification Progress Notes" created	volume	Sustained Usage
Metric 5.2: Number of "Non-VA Care Coordination Progress Note" created	volume	Sustained Usage
Metric 5.3: Number of referrals with a "Non-VA Care Consult Result" Note	volume	Sustained Usage
*Average Number of Days is based on claims processed with an Authorization Period of <=3 months		

Figure 2. NVCC Metrics

Summary

Non-VA Care has many issues including lack of oversight and the utilization and coordination of care. This project proposal assessed the impact of the Non-VA Care Coordination program on utilization of care. Descriptive statistics were used to compare the proportion of the population receiving Non-VA Care in FY 2013 (pre-NVCC implementation) and FY 2014 (post-NVCC implementation). This quantitative, descriptive study had data collected on a Microsoft Excel spreadsheet and was analyzed using descriptive statistics, with the assistance of a statistician. The logic model is versatile and is used in the planning phase through to the evaluation phase. Sections 1 through 3 included the project overview, project design, data collection, and planned analysis. Section 4 describes my findings. I discuss the results, the implications of the findings, and how they relate to the future of the NVCC program.

Section 4: Findings, Discussion, and Implications

Introduction

The NVC program has many issues, such as utilization and coordination of care, and the NVCC program was implemented to correct these issues. It is unknown if the NVCC has a real impact on utilization of care. This descriptive study evaluated and compared FY 2013 Non-VA Care data (pre-NVCC) to the FY 2014 Non-VA Care data (post-deployment of NVCC) using quantitative research methodology.

The quantitative approach is used because it is an objective look at numerical data, the sample represents the population, it answers a clearly defined question, the study can be replicated, and the findings can be used to predict and investigate. Quality improvement is all about change, which is why Lewin's change theory was appropriate for this project proposal

Summary of Findings

The purpose of my project is to ascertain if there is a relationship between NVCC and utilization of care. I chose to use admissions and ER visits of veterans who had NVC consults as the marker for utilization of care, comparing the first quarters of FY 2013 and FY 2014. I used descriptive statistics, with the nominal variable being pre-NVCC (FY 2013) and post-NVCC (FY 2014) and the measurement variable being admissions and emergency room visits. I would compare the measurement variable respectively. I found that the Veterans who used NVC consults did not use the ER for back pain and were not admitted at the VA or in the community for low back pain (the diagnosis on the consults). Table 2

	FY 13	FY14
Total Consults Requested	310	549
Total Completed	65	116
Total Visits approved	1404	780
Total Visits paid	679	404
Admits/ER related to LBP	0	0
PCP visits (unscheduled)	0	0
related to LBP (other than		
routine visit)		

In FY 2014, there were 549 consults requested and in FY 2013, there were 310 consults requested. There were 116 completed chiropractic consults in FY 2014 and 65 completed chiropractic consults in FY 2013, all approved with diagnosis of low back pain, sciatica. Sleep study consults were less than 5, therefore excluded from the study. In FY 14, of these 181 consults, none of these veterans who used the consults were admitted or seen in the ER for low back pain. There were also no PCP visits specifically due to low back pain (see Appendix D)

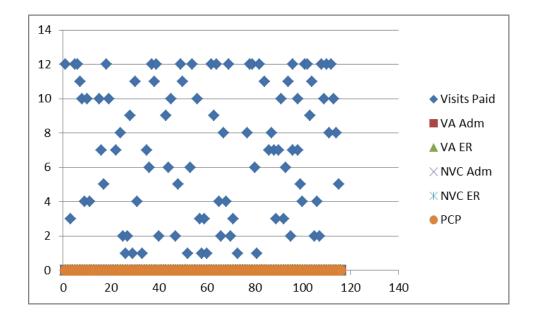


Figure 3. Scatter Plot to show relationship between NVC consults and Admissions, ER visits, and PCP visits

Other Findings

Recordings of NVC appointments made and the veterans that were actually seen were non-existent in FY 2013 and initial visits were recorded in FY 2014. To get an accurate account, the visits were retrieved from the FBCS (Fee Basis Claims System) which is the VHA payment system. The veteran was located in the system and the payments that correlated with the approved consult were tallied and reviewed. These visits were also cross-checked with the veteran's health record.

There were 56% more chiropractic consults requested in the first quarter of FY 2014 than FY 2013 (549 and 310 respectively). There were also 56% more consults completed in FY 2014 than FY 2013 (116 and 65 respectively). Yet the percentage of completed chiropractic consults compared to entire number of consults requested remained the same for FY 2014 and FY 2013 (21%), which is very surprising. Although there appeared to be a large increase in chiropractic visits, once investigated, they actually remained proportionately the same. The number of enrollees in FY 2014 was 619,099, with 41%, 251,612, being unique patients; in FY 2013 there were 612,353 enrollees, with 38%, or 231,113, unique patients.

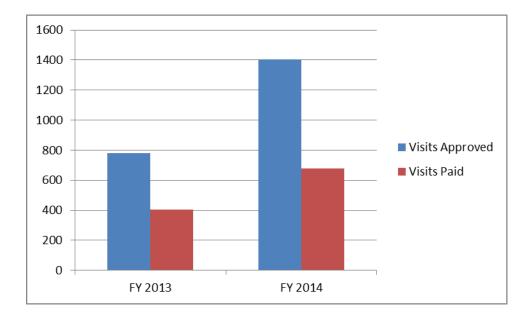
Approved Consult Usage

Further review of the consults yielded that in FY 2014 although 116 veterans had approved consults and were noted as having completed consults, 11 veterans did not use the chiropractic consult at all and only 18 veterans completed the entire 12 approved visits. In FY 2013, although 65 veterans had approved consults, 12 veterans did not use

the chiropractic consults at all and there were 12 veterans who completed the entire 12 visits approved. All the remaining veterans varied between 1-11 visits. Several of the veterans who did not use the consult used physical therapy, rehab, medicine, and other services at the VAMC instead. Removing the veterans who did not use the chiropractic consults changes the total percentage of chiropractic consults completed in FY 2014 from 21% to 19 % and FY 2013 from 21% to 17%.

Along with coordination of care, another major reason for the implementation of the NVCC program was cost. My findings did show that accountability was established. No duplicate payments were found in the payment system and many claims were rejected for payment for various documented reasons. In FY 2013, 52% of approved visits were paid, and in FY 2014, 48% of approved visits were paid. In FY 2014 there were 1,404 chiropractic visits approved and 679 visits presented by the NVC provider and paid. In FY 2013 there were 780 visits approved and 404 claims presented by the NVC provider for payment (minus the duplicates and rejected claims). This comparison is presented in Table 3.

NVC Visit / Payment Comparison



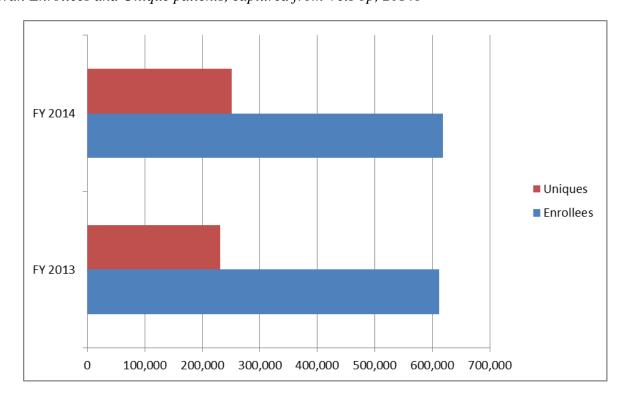
Documentation was yet another element identified as an issue with Non-VA Care. In FY 2013 there was no documentation of veteran consults, whether they had 12 chiropractic visits or none. In FY 2014, documentation was present on the actual consult and in the patient notes of the electronic health record, reflecting attempts to contact the veteran for appointments with the chiropractor, as well as requesting documentation of the chiropractic visits for scanning into the patient's health record (U.S. Dept. Veteran Affairs, 2011a). As mentioned above, the 2009 OIG report found that 72% of fee claims lacked documentation that justified the use of the care and 55% were not properly authorized via the consult process. All the consults reviewed in this study had electronic consults that included the justification and were properly authorized by the Chief of Staff or designee.

There were 56% more chiropractic consults requested in 1st FY 14 than FY 2013 compared to the total number of all consults. Yet the percentage of completed chiropractic consults compared to entire number of consults requested, remained the

same for FY 2014 and FY2013 (21%) this finding was very surprising. Although there appeared to be large increase in Chiropractic visits, once investigated, they actually remained the same. The number of enrollees in FY 14 619, 099, with 41% unique patients; in FY 13 was 612, 353, with 38% unique patients (251, 612; 231,113 respectively). In 2011, NAPA reported that the NVC program (Fee), payment increased by 46% in FY 2008, when the number of unique patients rose by only 16% for the same period (NAPA, 2011). See table 4.

Table 4.

Veteran Enrollees and Unique patients, captured from VetPop, 2014b



Discussion of Findings in the Context of Literature and Frameworks

Change must be ongoing if we are to grow and improve health care. Unexpected outcomes are a part of change, and hence growth. The measuring tool I used to identify

utilization of care was not effective in answering the project question because the variables were not exhibited. There were no ER visits, admissions, or PCP visits to analyze. However, the data collected with the measuring tool did yield other pertinent information.

The numbers of visits were calculated by the number of visits that were paid in the FBCS system, which is the Non-VA Care program. Unfortunately, each NVC visit was not noted in any of the many systems used by the VHA. The percentage of approved visits paid (52% in FY 2013 and 48% in FY 2014) can mean many things. This percentage is based on the number of visits that were actually approved for payment. Many elements affect this percentage and its validity. Not all of the 1,404 FY 2014 visits were utilized, and the exact number is unknown because there was no documentation of each and every visit. Visits were tabulated from the number of visits paid in the FBCS system. Therefore, if there were visits that occurred and were not paid for, there was no way to ascertain that with this study, unless a claim was submitted by the Non-VA Care provider. Visits based on the FBCS do not verify the exact number of visits used by the veteran. 52% of visits paid may mean that only 52% of the visits were actually used. With NVC having a history of over- and under-payment, one cannot take it for granted that the number paid definitely matches the number of visits used. The positive, as mentioned, was that there were no duplicate payments made.

Unexpected Findings

Although I expected to find admissions, ER, or PCP visits related to the chiropractic consults and found none, unexpected findings do occur and are not

uncommon. The American Psychological Association presented an article by Iles & Kirschen (2014) about planning for unexpected results in human research. Although these doctors spoke of planning for incidental findings in genetic research and the neuroimaging of human beings, being prepared for any results in all types of research is important. Incidental and unexpected findings have to be handled ethically in research. There are many aspects of quality in a good quality improvement program. How one uses the unexpected finding dictates whether or not the analyzed data will effect a positive change.

Implications

Non-VA Care is a program that expedites quality care to our veterans. NVC has a goal to prevent health care delays and to provide quality care by using providers in the community. Although this research did not answer if the NVCC has an impact on utilization of care, it yielded other information. This study did show that there was an increase in documentation and there was no increase in usage of consults compared to the populations served. It is recommended that evaluation of NVCC should be done regularly.

Future Research

This study will support ongoing evaluations of the NVCC program as well as other research on Non-VA Care. This study has presented me with many other questions, which are signs of a good research project. These questions include, "What type of CAM is used at each chiropractic visit that the VA has paid for?" "What is the most common CAM used by veterans in NVC, and the most effective?" and, "How does the Non-VA

Care program compare to the New Choice program, which provides care from community providers for veterans who are waiting more than 30 days for a VA appointment or require excessive travel to a VA facility?" Although there is a chasm between research and practice, research can certainly be the gateway to quality improvements when it is translated to a usable form.

Social Change

As mentioned earlier, Walden University says the way in which information is used and applied in society to answer and create positive change determines the worth of that information or data. The Veterans Health Administration is the largest health care system in the U.S. Research on Non-VA Care certainly will have a great impact that spans globally, as our veterans span the globe. Additionally, transparency is a large part of information, knowledge, and trust of the government. Society wants to know if Non-VA Care actually does what tax dollars are supposed to pay for, and health care as a whole benefit from shared best practices. Research on Non-VA Care shares this knowledge and best practices.

Project Strengths and Limitations

An outstanding strength of this project was the Veteran Administration's computerized health records, data warehouses, and reporting systems. The Albany VA Medical Center went paperless back in 1994, therefore data was extremely accessible. In fact, there were so many areas where data was stored it was overwhelming at times. I experienced no access problems.

Although I was told to fear the research process, the IRB process of the Albany VA Medical Center was a positive learning experience. The Albany VA provided education and resources throughout the process. Actually, the director of the Albany VAMC was very supportive of this project, which increased cooperation from all areas of the facility.

Analysis of Self

Looking at oneself and the journey that one has chosen to take can be a hard thing to do unless it is a positive journey. Although I have had disappointments along the way, the journey has been positive. Someone once said you will never know success unless you taste failure. Although I don't see areas of my journey as failures, I can say there were many struggles, trials, and tribulations which I overcame. This DNP project forced me to multitask as a scholar, project manager, and practitioner. I went from the passenger in the vehicle, to the driver, while multitasking as the guidance system.

Eliminating health care disparities has been my goal from the very beginning of my educational journey. It happened to be Essential II of the DNP Eight Essentials outlined by the ANA for the DNP program (American Association of the Colleges of Nursing, 2006). As I continued my education the nursing realm became larger and larger; the picture became bigger and bigger. Now I feel I am to the point where I have the foundation to make a difference, whether it will be in presenting ideas, reports, projects to the community, or presenting research and quality improvement programs. Regardless of what paths I utilize, the foundation is very strong. Although discrimination is present in all areas of the health care delivery system, in nursing, and in academia, I plan to forge

onward and upward. I am confident that I can drive this health care vehicle and create positive outcomes.

Ensuring accountability for the delivery of quality health care is very important to me. This project is an example of that. The problem of the NVC system was identified and a new program was implemented. Every fix is not the correct fix. This is the start of Non-VA Care research. As mentioned earlier, there has been very little research in this area and I plan to provide more in the future.

Is there an Association between NVCC and Utilization of Care?

Brenda Robinson

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Abstract

Non-VA Care is a program in which the Veterans Health Administration purchases health care when the Veterans Health Administration cannot provide the health service needed. It has been noted over several years that Non-VA Care had grown to cost billions of dollars. Lack of oversight, coordination of care, and accountability, as well as fraud and mismanagement, was found to be a common theme throughout the audits done by the Office of Inspector General and other entities. The Non-VA Care Coordination (NVCC) program was implemented to provide coordination of care and oversight, as well as eliminate the deficiencies cited by audits. The research question to be answered in this project is, "Is there an association between NVCC and utilization of care?" Lewin's change theory guided this descriptive study. This research project compared Fiscal Year 2013 and Fiscal Year 2014, pre- and post-deployment of the NVCC program at the Albany VA Medical Center. This project reviewed two consults: chiropractic and sleep study. Utilization of care was defined as the number of emergency room visits and admissions for veterans who used the chiropractic and sleep study consults. Descriptive statistics were used for data analysis. Surprisingly, after data collection and analysis, there was no ER visits or admissions related to the consults used by any of the veterans. Other relevant findings were gleaned from this research. Two relevant results were that documentation had improved post-deployment of NVCC and there were no duplicate payments found. Change is an ongoing process and the implementation of new programs requires ongoing evaluations that identify areas that are working well as well as areas in need of improvement. This research will inspire more research on the Non-VA Care program.

Keywords: Non-VA Care, Non-VA Care Coordination program, Purchased Care

Introduction

"To fulfill its mission of providing health care to veterans, VHA purchases medical services from community health care providers under the Non-VA Medical Care Program" (Veterans Health Administration [VHA], 2012). Non-VA Care is medical care provided to eligible veterans outside of the VA system. This care was formerly known as "Fee Basis," "Purchased Care," or "Non-VA Care." According to the National Academy of Public Administration (NAPA), the cost of the VA's Fee Care Program has grown

275% since Fiscal Year (FY) 2005" (NAPA, 2011). There have been many issues with the program cited by NAPA, such as lack of oversight and accountability, which led to the exuberant cost and questionable return of investment for the veteran and the Veterans Health Administration. The government's answer to NAPA's identified issues of Non-VA Care was the creation of the centralized Non-VA Care Medical Coordination (NVCC) program. This study assessed the coordination of care within the Veteran Administration Medical Center in order to evaluate this quality improvement program. Additionally, this study assessed if there is a significant association between NVCC and the utilization of care.

Background

Non-VA Care Coordination was established to provide care coordination within the Non-VA Care systems due to the numerous deficiencies found by NAPA and the Government Accountability Office (GAO) audits. The NVCC is a system of processes that provide one standard, uniform Non-VA Care process for the entire VHA. This process deals with front-end business processes, care coordination support, oversight and accountability to improve all aspects of Non-VA Care (U.S. Department Veteran Affairs, n.d.). Non-VA Care is either emergent or preauthorized; this study is examining preauthorized care. Oversight of NVCC has been changed from the VHA Chief Business Office; Purchased Care program to the national Non –VA Care Medical Program office.

NVCC has six core processes: Non-VA Care Referral Review, Appointment Management, Pre/Post Appointment Patient Contact, Hospital Notification, and Clinical Review for Emergency Claims, and Administrative Appeals Management. Each process has a standard operating procedure, which is a national mandate for all VAMCs (VA Medical Center) to follow. The first two core processes are the main processes of Non-VA Care preauthorized outpatient care: the referral process and appointment management following the referral process, the NVCC's appointment management process (AM) consists of contacting the Veteran and coordinating the Non-VA appointment with the provider which the Veteran designates, follow up on the appointment, contacting the Non-VA Care provider, obtaining documentation of the visit, and scanning the visit note with an alert to the primary care provider. In the AM process, the primary care provider is contacted for such things as a Non-VA Care provider requiring specific blood work or x-ray before an appointment.

Problem Statement

The Non-VA Care (NVC) Program had many issues, according to NAPA, including the actual organizational structure, no accountability, fragmented leadership & management, lack of universal process, lack of coordination of care, and flagrant faulty business practices as evidence by inappropriate billing. This program had no oversight and morphed into a huge governmental expense; NAPA's extensive program review shed light on the many areas of breakdown. Lack of coordination of care in the Non-VA Care Program led to poor utilization management, budget issues, questionable patient outcomes and lack of data collection. The Non-VA Care Coordination program was implemented as a solution to the problems above. Further research was needed to

evaluate if this program is effective. The impact and effectiveness of this program was reflective in the utilization of care.

The GAO (2011), mentioned the lack of monitoring and adherence to eligibility criteria as factors also adding to the problems of Non-VA Care. The Office of Inspector General (OIG) reported: "Our audits and reviews of fee care have identified significant weaknesses and inefficiencies. Specifically, we found that VA had not established effective policies and procedures to oversee and monitor services provided by Non-VA providers to ensure they are necessary, timely, high quality, and properly contracted and billed" (OIG, 2012). The 2009 OIG report of the Outpatient Non-VA Care also found that 72% of fee claims lacked documentation that justified the use of the care and 55% was not properly authorized via the consult process. The cost of this Non-VA Care increased by 275% since fiscal year 2005 according to the NAPA 2011 report. This project assessed the impact of the NVCC Program on access and utilization of care.

Significance/Relevance to Practice

Access

The Veterans Health Administration would like to provide care to all our veterans but VA officials know that this is not always possible, and sometimes there is a need to use fee basis providers for timely care delivery and increased access (GAO, 2013). Guidelines for the utilization of Non-VA Care include decreasing long wait times for a clinic visits and closer health care when travel is an issue (both geared toward increasing access). Ensuring health care programs deliver cost-effective care is also important. Non-VA Care provides access to chiropractic care (a service the Albany VAMC does not have) and sleep study (when care cannot be offered in a timely way). This project showed that reviewing the NVCC program alongside the utilization of care is very important. As NVC has little research, this will be the foundation for many other studies which will improve quality of care and transparency.

Utilization and Care Coordination

According to the Institute of Medicine (IOM), due to the changing needs of health care and increased lifespans, which result in more chronic conditions, there is huge void, a "chasm," between our present health care and what our health could and should be (IOM, 2011). IOM further states that health care providers should communicate and work together and health care systems should not waste resources (p. 4).

Care coordination is simply that: coordinating and organizing care between the patient and health care provider. This means oversight of the patient's care activities and communication with health care providers involved in the patient 's care. The providers caring for different parts of patient health care needs will all communicate and care will be facilitated and managed (Agency for Healthcare Research & Quality [AHRQ] 2011). The American Nurses Association (ANA) has adopted AHRQ's approach to care coordination (ANA, 2012). The ANA found that coordination of care reduced emergency room visits, improved health outcomes, increased safety, increased quality of care, and decreased costs (ANA, 2012). Unorganized care, in contrast, decreased positive patient

outcomes and hindered patient safety, resulting in wasted time, money, and man power, as well as a lack of accountability (IOM, 2001). According to Nash, Reifsnyder, Fabius & Pracillo (2011), evidence shows that coordination of care decreases hospital readmissions, increases positive health outcomes and increases patient self-management of health conditions.

According to the National Survey, health care has evolved and factors that affect utilization of care are an aging population, socioeconomic status, and diseases (U.S. Department of Health and Human Services, 2004). As pointed out by the Institute of Medicine (2001), as we age, we develop chronic health conditions and disability and tend to use more hospital services due to these chronic conditions.

Budget Analysis

The actual funding for VHA is complex, confusing, and could be a study within itself. According to Sidath Panangala (2013), specialist in veteran's policy, there are four main funding accounts: medical administration, medical research, prosthetic research, and medical care. The total 2013 budget authority was \$55.672 billion and the total 2014 budget authority was \$57.669 billion (U.S. Dept. Veteran Affairs, 2013; U.S. Dept. Veteran Affairs, 2014a).

The VA Office of Inspector General cited problems with the Fee Basis program in 2009 and 2010. In 2009, the OIG audited the Non-VA Care Outpatient. "In FY 2008, VA medical centers paid about \$3.2 million outpatient fee claims. For FY 2008, we estimate that these errors resulted in estimated total overpayments of \$47.8 million and underpayments of \$52 million" (OIG, 2009). OIG cited lack of policies, procedure, oversight, training, care coordination, and no supportive organizational structure as contributing factors to these problems. The June 2010 OIG review of fraud management found that there was no process to detect fraud and that yearly fee payments grew from \$1.6 billion in FY 2005 to approximately \$3.8 billion in FY 2006. The August 2010 fraud review of Non-VA Care inpatient found that the VA improperly paid 28% of inpatient Non-VA care claims in the first six months of 2009 (OIG, 2010).

In 2011, after all the numerous reports of improper payments, mismanagement, and possible safety, fraud, and care issues, the Chief Business Office, who had oversight of the Fee Basis program, contracted NAPA to do an assessment. NAPA found that for FY 2008 to FY 2010, the number of new patients increased by 16% (820,000 to 952,000), while the number of paid claims increased 46% (\$3 billion to \$4.4 billion) for the same time frame (NAPA, 2011). NAPA also found, along with deficiencies (including those above), that the quality of care and ROI was questionable. Many recommendations were given. One area looked at was referrals (consults) which is the beginning of the Non-VA Care process. The GAO performed an audit from September 2012 to May 2013 and noted continued increase in utilization spending and that 80% of the spending, \$73.6 billion, was due to preauthorized, outpatient Non-VA Care unique patients (GAO, 2012). Although providing quality, efficient care is the goal, cost often drives interventions and reorganization. NVCC was one of the many initiatives resulting from the many reports and was deployed nationally across the VHA.

Project Question

Non-VA Medical Care Coordination is a fairly new implementation established to bring coordination of care to the Non-VA Care program. This study sets out to answer the following question: in the veteran population, is there a relationship between the implementation of the NVCC program and utilization of care? The utilization of care was determined by the number of emergency room visits and admissions related to the authorized, outpatient NVC consult.

Project Design/Methods Design

According to Nash et al. (2011), when studying quality improvement projects, it is best to measure specifically what you want to learn, not taking on more than what is necessary. This descriptive study evaluated and compared FY 2013 Non-VA Care data (pre-NVCC) to the FY 2014 Non-VA Care data (post-deployment of NVCC) using quantitative research methodology. The quantitative approach is used because it is an objective look at numerical data, the sample represents the population, it answers a clearly defined question, the study can be replicated, and findings can be used to predict and investigate. Non-VA Care of chiropractic care and sleep study consults for the first quarter (October, November, and December) of each fiscal year identified was examined. Data was collected from VHA electronic data sources. Care coordination means the presence of an approved consult, documented appointment, care documentation from the Non-VA Care visit, and follow-up by the ordering physician, as listed as the documented process in the NVCC policy, to be captured in a Microsoft Excel spreadsheet, with NVCC Consult and Admit/ER trackers as displayed in Appendix A. Utilization of care was determined by the number of admissions incurred by patients who received chiropractic or sleep consults; this was the same for ER visits. The comparison was made before the intervention of the Non-VA Care Coordination program, and after the implementation of the Non-VA Care Coordination program. Costs paid for the chiropractic and sleep study appointments in the community pre- and post-NVCC was compared as well. The variables were the number of admissions, ER visits, and cost. This study was reviewed and approved by the Investigational Review Board (IRB) at the Albany VA Stratton Medical Center. Updates and revisions were resubmitted to the VA IRB. This project was also approved by Walden University's IRB.

Population and Sampling

The eligible population for this study were veterans receiving Non-VA Care at the Albany VA Medical Center. The population sample were veterans who received Non-VA Care for chiropractic needs and sleep study during the first quarters of FY 2013 and FY 2014. This study took place at the Albany Stratton VA Medical Center where the NVC consults are authorized. This center serves veterans in 22 counties of upstate New York, Western Massachusetts, and Vermont. The Albany Stratton VA Medical Center has primary, specialty, inpatient, and outpatient care, along with 11 Community Based Outpatient Clinics (CBOCs). The VAMC is part of the Integrated VHA health care system which is the largest health care system in the U.S. The system is comprised of 152

medical centers and over 1,200 other VA health care sites. According to the VHA website (US Census), nearly 40% of veterans live in rural areas. According to Vetpop11 (Veteran Population Projection Model), the majority of the veterans in New York, Vermont, and Massachusetts are between 60-79 years of age. The first step of Non-VA

FY 13	FY14

Care is the Non-VA Care consult, which is initiated by the primary care provider at the Albany VA or at one of the many CBOCs.

Data Collection / Analysis

Data were collected for this project from electronic sources of the Veterans Health Administration such as: Intranet, CPRS (Computerized Patient Records System), VistA, and VHA Data warehouses, including VSSC, DSS, and IPEC. A statistical analysis of the quantitative data was used to evaluate the association between Non-VA Medical Care Coordination and Utilization of Care. Data was collected on the Microsoft Excel spreadsheet used with template headings for checklist (Appendix A). The data contains no PHI. This ensures that the type of data collected for each consult is the same. Descriptive statistics were used to compare the proportion of the population receiving Non-VA Care in FY 2013 (pre-NVCC implementation) and FY 2014 (post-NVCC implementation). The sample comparison was the number of ER visits and hospital admissions (variables) as designated to measure utilization of care. The comparison will show if there is a significant association between the two variables pre- and post-NVCC implementation. The presumed hypothesis is that the implementation of NVCC decreases the usage of ER visits and inpatient admissions. I received statistical assistance from Dr. Gao, Ph.D., statistician.

Summary of Findings

The purpose of my project was to ascertain if there is a relationship between NVCC and utilization of care. I chose to use admissions and ER visits of veterans who had NVC consults as the marker for utilization of care, comparing the first quarters of FY 2013 and FY 2014. I used descriptive statistics, to review pre-NVCC (FY 2013) and post-NVCC (FY 2014). I found that the veterans who had NVC consults did not use the ER for back pain and were not admitted at the VA or in the community for low back pain (the diagnosis on the consults).

Total Consults Requested	310	549
Total Completed	65	116
Total Visits approved	1404	780
Total Visits paid	679	404
Admits/ER related to LBP	0	0
PCP visits (unscheduled)	0	0
related to LBP (other than		
routine visit)		

Table 2: Chiropractic Consults FY 13 and FY 14 Results

In FY 2014, there were 549 consults requested and in FY 2013, there were 310 consults requested. There were 116 completed chiropractic consults in FY 2014 and 65 completed chiropractic consults in FY 2013, all approved with diagnosis of low back pain, sciatica. Sleep study consults were less than 5, therefore excluded from the study. In FY 14, of these 181 consults, none of these veterans who used the consults were admitted or seen in the ER for low back pain. There were also no PCP visits specifically due to low back pain (see Appendix D).

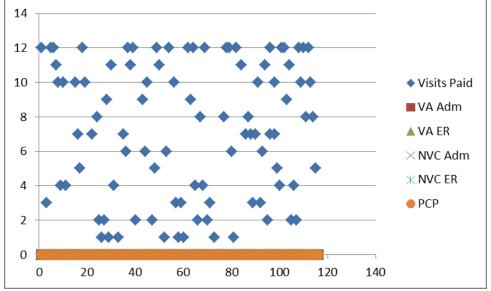


Figure 3. Scatter Plot to show relationship between NVC consults and Admissions, ER visits, and PCP visits

Other Findings

Recordings of NVC appointments made and the veterans that were actually were non-existent in FY 2013 and initial visits were recorded in FY 2014. To get an accurate account, the visits were retrieved from the FBCS (Fee Basis Claims System) which is the VHA payment system. The veteran was located in the system and the payments that

correlated with the approved consult were tallied and reviewed. These visits were also cross-checked with the veteran's health record.

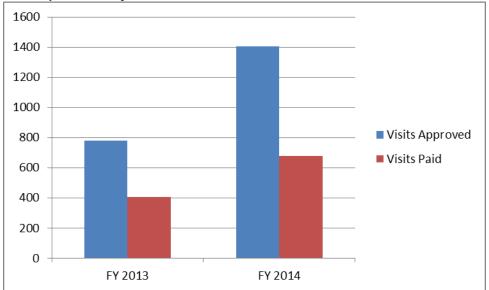
There were 56% more chiropractic consults requested in the first quarter of FY 2014 than FY 2013 (549 and 310 respectively). There were also 56% more consults completed in FY 2014 than FY 2013 (116 and 65 respectively). Yet the percentage of completed chiropractic consults compared to entire number of consults requested remained the same for FY 2014 and FY 2013 (21%), which is very surprising. Although there appeared to be a large increase in chiropractic visits, once investigated, they actually remained proportionately the same. The number of enrollees in was FY 2014 was 619,099, with 41%, 251,612, being unique patients; in FY 2013 there were 612,353 enrollees, with 38%, or 231,113, unique patients.

Approved Consult Usage

Further review of the consults yielded that in FY 2014 although 116 veterans had approved consults and were noted as having completed consults, 11 veterans did not use the chiropractic consult at all and only 18 veterans completed the entire 12 approved visits. In FY 2013, although 65 veterans had approved consults, 12 veterans did not use the chiropractic consults at all and there were 12 veterans who completed the entire 12 visits approved. All the remaining veterans varied between 1-11 visits. Several of the veterans who did not use the consult used physical therapy, rehab, medicine, and other services at the VAMC instead. Removing the veterans who did not use the chiropractic consults changes the total percentage of chiropractic consults completed in FY 2014 from 21% to 19 % and FY 2013 from 21% to 17%.

Along with coordination of care, another major reason for the implementation of the NVCC program was cost. My findings did show that accountability was established. No duplicate payments were found in the payment system and many claims were rejected for payment for various documented reasons. In FY 2013, 52% of approved visits were paid, and in FY 2014, 48% of approved visits were paid. In FY 2014 there were 1,404 chiropractic visits approved and 679 visits presented by the NVC provider and paid. In FY 2013 there were 780 visits approved and 404 claims presented by the NVC provider for payment (minus the duplicates and rejected claims). This comparison is presented in Table 3.

Table 3. *NVC Visit / Payment Comparison*

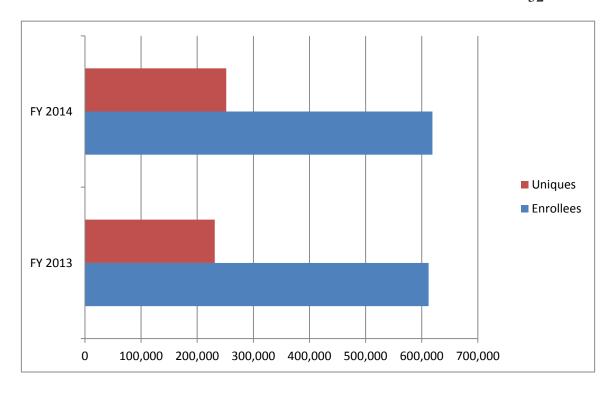


Documentation was yet another element identified as an issue with Non-VA Care. In FY 2013 there was no documentation of veteran consults, whether they had 12 chiropractic visits or none. In FY 2014, documentation was present on the actual consult and in the patient notes of the electronic health record, reflecting attempts to contact the veteran for appointments with the chiropractor, as well as requesting documentation of the chiropractic visits for scanning into the patient's health record. As mentioned above, the 2009 OIG report found that 72% of fee claims lacked documentation that justified the use of the care and 55% were not properly authorized via the consult process. All the consults reviewed in this study had electronic consults that included the justification and were properly authorized by the Chief of Staff or designee.

There were 56% more chiropractic consults requested in 1st FY 14 than FY 2013 compared to the total number of all consults. Yet the percentage of completed chiropractic consults compared to entire number of consults requested, remained the same for FY 2014 and FY2013 (21%) this finding was very surprising. Although there appeared to be large increase in Chiropractic visits, once investigated, they actually remained the same. The number of enrollees in FY 14 619, 099, with 41% unique patients; in FY 13 was 612, 353, with 38% unique patients (251, 612; 231,113 respectively). In 2011. Napa reported that the NVC program (Fee), payment increased by 46% in FY 2008, when the number of uniques rose by only 16% for the same period (NAPA, 2011). See table 4.

Table 4.

Veteran Enrollees and Unique patients, captured from VetPop, 2014b



Discussion of Findings in the Context of Literature and Frameworks

Change must be ongoing if we are to grow and improve health care. Unexpected outcomes are a part of change, and hence growth. The measuring tool I used to identify utilization of care was not effective in answering the project question because the variables were not exhibited. There were no ER visits, admissions, or PCP visits to analyze. However, the data collected with the measuring tool did yield other pertinent information.

The numbers of visits were calculated by the number of visits that were paid in the FBCS system, which is the Non-VA Care program. Unfortunately, each NVC visit was not noted in any of the many systems used by the VHA. The percentage of approved visits paid (52% in FY 2013 and 48% in FY 2014) can mean many things. This percentage is based on the number of visits that were actually approved for payment. Many elements affect this percentage and its validity. Not all of the 1,404 FY 2014 visits were utilized, and the exact number is unknown because there was no documentation of each and every visit. Visits were tabulated from the number of visits paid in the FBCS system. Therefore, if there were visits that occurred and were not paid for, there was no way to ascertain that with this study, unless a claim was submitted by the Non-VA Care provider. Visits based on the FBCS do not verify the exact number of visits used by the veteran. 52% of visits paid may mean that only 52% of the visits were actually used. With NVC having a history of over- and under-payment, one cannot take it for granted that the number paid definitely matches the number of visits used. The positive, as mentioned, was that there were no duplicate payments made.

Social Change

As mentioned earlier, Walden University maintains that the way in which information is used and applied in society to answer and create positive change determines the worth of that information or data. The Veterans Health Administration is the largest health care system in the U.S. Research on Non-VA Care certainly will have a great impact that spans globally, as our veterans span the globe. Additionally, transparency is a large part of information, knowledge, and trust of the government. Society wants to know if Non-VA Care actually does what tax dollars are supposed to pay for, and health care as a whole benefits from shared best practices. Research on Non-VA Care shares this knowledge and best practices.

References

- American Association of the Colleges of Nursing. (2006). *The essentials of doctoral*education for advance nursing practice. Retrieved from

 http://www.aacn.nche.edu/dnp/Essentials.pdf
- American Nurses Association. (2012). *The value of nursing care coordination of care*.

 Retrieved from www.nursingworld.org/carecoordinationwhitepaper
- American Sleep Apnea Association. (2014). *Getting a diagnosis*. Retrieved from http://www.sleepapnea.org/treat/diagnosis.html
- Atlas, S. & Deyo, R. (2001). Evaluating and managing acute low back pain in the primary care setting. *Springer Journal of General Internal Medicine*. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1495170/
- Borczuk, P. (2013). An evidence-based approach to the evaluation and treatment of low back pain in the emergency department. *Emergency Medicine Practice*. Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/24044786
- Burnes, B. (2004), Kurt Lewin and the Planned Approach to Change: A Re-appraisal. *Journal of Management Studies*, 41, 977–1002. doi: 10.1111/j.1467-6486.2004.00463.x
- Centers for Disease Control and Prevention. (n.d.). Identifying the components of the logic model. Retrieved from http://www.cdc.gov/std/Program/pupestd/Components%20of%20a%20Logic%20 Model.pdf
- Chou, R., Qaseem, A., Snow, V., Casey, D., Cross, T., Shekelle, P. & Owens, K. (2007).

- Diagnosis and Treatment of Low Back Pain: A joint clinical practice guideline from the American college of physicians and the American pain society. *Annals of Internal Medicine*. Retrieved from http://annals.org/article.aspx?articleid=736814
- Dunn, A., Green, B., Formolo, L. R., & Chicoine, D. (2011). Retrospective case series of clinical outcomes associated with chiropractic management for veterans with low back pain. *Journal of Rehabilitation Research & Development*, 48(8), 927-934. doi:10.1682/JRRD.2010.10.0202
- Green, B., Johnson, C., Lisi, A. & Tucker, J. (2009). Chiropractic practice in military and Veterans health care: the state of the literature. *The Journal of the Canadian Chiropractic Association*, 83(3), 194-204.
- Hayes, H, Parchman, L, & Howard, R. (2011). A logic model framework for evaluation and planning in a primary care practice-based research network (PBRN). NIH.

 Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3266837/
- Hodges, B. C., & Videto, D. M. (2011). *Assessment and planning in health programs* (2nd ed.). Sudbury, MA: Jones & Bartlett Learning.
- Iles, J. & Kirschen, M. (2014). *Ethically speaking: unexpected findings*. Retrieved from http://www.apa.org/monitor/2014/03/unexpected-findings.aspx
- Institute of Medicine. (2001) Crossing the chasm: a new health care system for the 21 century. Retrieved from www.nap.edu/html/quality_chasm/reportbrief.pdf
- Johns Hopkins Bloomberg School of Public Health. (2000) *High blood pressure linked to sleep apnea*. Retrieved from http://www.jhsph.edu/news/news-

- releases/2000/apnea-hypertension.html
- Kanodia A. K., Legedza A. T., Davis R. B., Eisenberg, D. M. & Phillips, R. S. (2010).

 Perceived benefit of complementary and alternative medicine (CAM) for back pain: a national survey. *Journal of the American Board of Family Medicine*, 23(3), 354–362.
- Kettner, P. M., Moroney, R. M., & Martin, L. L. (2008). *Designing and managing*programs: An effectiveness-based approach (3rd ed.). Thousand Oaks, CA: Sage.
- Lisi, A. (2010). Management of Operation Iraqi Freedom and Operation Enduring

 Freedom veterans in a Veterans Health Administration chiropractic clinic: a case series. *Journal of Rehabilitation Research & Development*, 47(1), 1-6.

 doi:10.1682/JRRD.2009.07.0095
- Marshall, N., Wong, K., Stewart, R.J., Knuiman, M. & Grunstein, R. (2014). Sleep apnea and 20-year follow-up for all-cause mortality, stroke, and cancer incidence and mortality in the Busselton health study cohort. *Journal of Clinical Sleep Medicine*, 10(4), 355-362.
- Mayo Clinic (2014). *Polysomnography (sleep study)*. Retrieved from http://www.mayoclinic.org/ss-procedures/polysomnography/basics/definition/prc-20013229
- Nash, D., Reifsnyder, J., Fabius, R. & Pracillo, V. (2011). *Population health: creating a culture of wellness*. Sudbury, MA: Jones and Bartlett Learning.
- National Academy of Public Administration. (2011). Veterans Health Administration Fee Care Program White Paper. Retrieved from http://www.napawash.org/wp-

- content/uploads/2011/11/White_Paper11012011webposting.pdf
- National Center for Complementary and Alternative Medicine. (2014). *Chiropractic: an introduction*. Retrieved from http://nccam.nih.gov/health/chiropractic/introduction.htm#hed5
- National Institute of Health. (2014). National Heart, Lung, and Blood Institute. Retrieved from http://www.nhlbi.nih.gov/health/health-topics/topics/sleepapnea/printall-index.html
- NNPO INTRANET. (2014.) Retrieved from http://www.nonvacare.va.gov/
- Obama, Barack. (2014). *Transparency and Open Government*. Retrieved from http://www.whitehouse.gov/the_press_office/TransparencyandOpenGovernment
- Panangala, S. (2013). Veteran's Medical Care: FY 2014 appropriation. Congressional Research Service. Retrieved from http://www.fas.org/sgp/crs/misc/R43179.pdf
- Peikes, D., Chen, A., Schore, J., & Brown, R. (2009). Effects of care coordination on hospitalization, quality of care, and health care expenditures among Medicare beneficiaries: 15 randomized trials. *Jama*, 301(6), 603-618.
- Render, M., Almendoff, P. (2004). The Veterans Health Affairs experience in measuring and reporting inpatient mortality. Retrieved from http://www.ahrq.gov/professionals/quality-patientsafety/qualityresources/tools/mortality/VAMort.pdf.
- ROI Research in Healthcare, Return on investment for accountable care organizations.

 (2012, February). *HIMSS Analytics*. Retrieved from

 http://www.himss.org/transformation/docs/ResearchReport2ACOs.pdf

- Saultz, J. W., & Lochner, J. (2005). Interpersonal continuity of care and care outcomes: a critical review. *The Annals of Family Medicine*, *3*(2), 159-166.
- U.S. Department of Health & Human Services, Agency for Healthcare Research and Quality. (2013). *Chapter 2: What is care coordination?* Retrieved from http://www.ahrq.gov/professionals/prevention-chronic-care/improve/coordination/atlas2014/chapter2.html
- U.S. Department of Health and Human Services. (2010). Healthy People 2020. Retrieved from http://www.healthypeople.gov/2020/TopicsObjectives2020/pdfs/HP2020_brochur e.pdf
- U.S. Department of Health and Human Services, Center for Disease Control Prevention, National Center for Health Statistics. (2004). *Health care in America trends in utilization*. Pub. No. 4004-1031 Retrieved from http://www.cdc.gov/nchs/data/misc/healthcare.pdf
- U.S. Department of Veteran Affairs. (n.d.). *Institutional Review Board (IRB) at the Albany VA medical center*, Retrieved from http://www.visn2.va.gov/research/alb/committees.asp
- U.S. Department of Veteran Affairs. (n.d.). Non-VA Care Coordinated Program. Wm.
 Jennings Bryan Dorn VAMC. Retrieved from
 http://www.columbiasc.va.gov/services/Non_VA_Coordinated_Care_Program.as
 p
- U.S. Department Veteran Affairs. (2014a). National Center for Veterans Analysis and

- Statistics. Retrieved from http://www.va.gov/vetdata/
- U.S. Department Veteran Affairs. (2014b) VetPop. *NVCC Intranet*. Retrieved from http://nonvacare.hac.med.va.gov/nvcc/metrics.asp
- U.S. Department Veteran Affairs. (2014c). VistA monograph. *E-Health*. Retrieved from http://www.ehealth.va.gov/VistA_Monograph.asp
- U.S. Department Veteran Affairs, Health Economics Resource Center (HERC). (2014d).
 Decision support system. Retrieved from
 http://www.herc.research.va.gov/data/dss.asp
- U.S. Department of Veterans Affairs. (2013). Volume II medical programs & information technology programs congressional submission, FY 2013 Funding and FY 2014 advance appropriations request.
- U.S. Department of Veteran Affairs, Health Services Research & Development. (2010).

 Comparison of quality of care in VA and Non-VA Settings. Retrieved from http://www.hsrd.research.va.gov/publications/esp/quality.pdf
- U.S. Department of Veteran Affairs. (2011a). Department of Veterans Affairs electronic health record: providing information for clinical care and data for VA health research. Retrieved from http://ddpehr.nist.gov/pdf/Quinn-__033011_SuccessVAEHR_Bethesda.pdf
- U.S. Department of Veteran Affairs, Health Services Research & Development. (2011b).

 Interventions to improve Veteran's access of care: a systematic review of the

 literature. Retrieved from

 http://www.hsrd.research.va.gov/publications/esp/Access-REPORT.pdf

- U.S. Department of Veterans Affairs, Office of Audits and Evaluation. (2011c). Review of alleged mismanagement of Non-VA Fee Care Funds at the Phoenix VA health care System; Retrieved from http://www.va.gov/oig/pubs/VAOIG-11-02280-23.pdf
- U.S. Department of Veteran Affairs, Veteran Health Administration (2009). VHA

 Directive 2009-059, Chiropractic care. Retrieved from

 http://www.va.gov/vhapublications/ViewPublication.asp?pub_ID=2117
- U.S. Department of Veteran Affairs. Office of Inspector General Website. (2014)

 Retrieved from http://www.va.gov/oig/about/immediate-office.asp
- U.S. Department Veteran Affairs Office of Inspector General. (2012). Statement of Office of Inspector General Department of Veteran Affairs hearing on VA fee basis:

 Examining Solutions to a Flawed System. Retrieved from www.va.gov/oig/pubs/statements/VAOIG-statement-20120914.pdf
- U.S. Department Veteran Affairs Office Inspector General, Office of Audits and Evaluations. (2010). Veterans health administration review of fraud management for the Non-VA fee care program. Retrieved from http://www.va.gov/oig/52/reports/2010/VAOIG-10-00004-166.pdf
- U.S. Department Veteran Affairs Office of Inspector General. (2009). *Audit of veterans*health administration's Non-VA outpatient fee care Program. Retrieved from

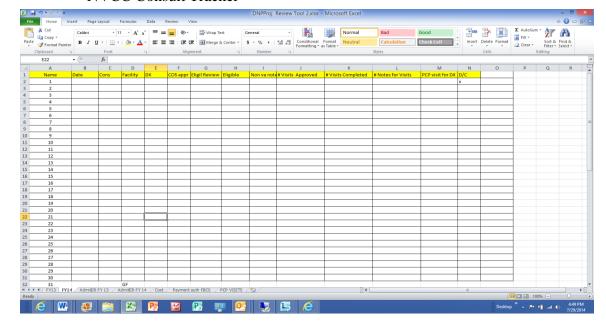
 http://www.va.gov/oig/52/reports/2009/VAOIG-08-02901-185.pdf
- U. S. Government Accountability Office. (2013). VA health care: management of oversight of fee basis care need improvement. Retrieved from

www.gao.gov/assets/660/654979.pdf

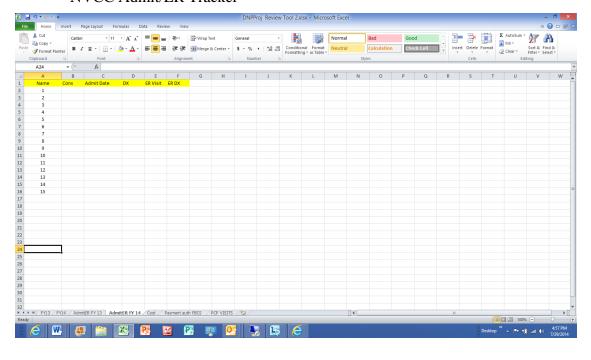
- Veteran Benefits Administration. (2014). 38 USC 17.52. Use of public or private hospitals. Retrieved from
 - http://www.benefits.va.gov/WARMS/docs/regs/38cfr/booki/part17/s17_52.doc
- Walden University. (2014). 2014 Walden University catalog. Retrieved from http://catalog.waldenu.edu
- White, K., & Dudley-Brown, S. (2012). *Translation of evidence into nursing and health care practice*. New York: Springer Publishing Company.

Appendix A: Trackers

NVCC Consult Tracker



NVCC Admit/ER Tracker



Appendix B: Population Proportions

Percentage of sample who have ER visits and Admission between November 1 through

January 31.

FY 13 =November 2012 FY14 =November 2013 (post NVCC deployment)

$$\frac{\text{ER Visits}}{\text{Sample Size (n)}} = \text{Sample Proportion } \rho$$

$$\frac{\text{Admissions Visits}}{\text{Sample Size (n)}} = \text{Sample Proportion } \rho$$

Sample Proportion ρ # in sample with ER visits/sample size

Claimed Value=\rho0

$$\sqrt{\frac{\rho - \rho 0}{sample \ size \ (N)}}$$

Appendix C: Data Collection

I. Consult Information: Source: VistA

- 1. Sign into VistA
- 2. Go to Consult Menu
- 3. Go to Consult Tracking Reports
- 4. CP: Consults Completed or pending Resolution
- 5. Select Service/Specialty
- 6. Select: Non-VA Care Grouper AL
- 7. List starting date: 10/1/13
- 8. List to this ending date: 12/31/13
- 9. Full Report displays all consults groped by titles, alphabetical order: report also includes patient name, consult status, last action, request date and patient location.

II. Data for Variables: Source: CPRS (Computerized Patient Record System)

- 1. Sign into CPRS
- 2. Enter Patient's name
- 3. Go to Report tab
- 4. Select clinical reports

A Visit/Admissions

- a. Select Admission/Discharge
- b. Select date range
- c. report gives all admissions with all diagnosis (ICD-9)
- B. Past Clinic Visits
- a. Select Admission/Discharge
- b. Select date range
- 5. CPRS also gives detailed outpatient and inpatient information (completed electronic medical report)