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Assessing Provider Use of Veterans Health Administration Tobacco-Cessation Guideline

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,

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Abstract

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MSN, Walden University, 2014

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Abstract

Cigarette use is more prevalent among veterans who have mental disorders than it is in the general population. Rates of tobacco use are also high among individuals who suffer from posttraumatic stress disorder, addiction, and human immune deficiency disease. Approximately 22.7 million American veterans and their families are at risk of tobacco-related health problems. Concerned about heavy tobacco use among veterans, the U.S. Department of Veterans Affairs developed a Tobacco-Cessation Guideline to be used nationally. This guideline was updated in 2008 to include the "5A" mnemonic (ask, assess, advise, assist, and arrange) and is recommended for use by physicians, nurses, nurse practitioners, social service providers, and psychologists in Veterans Health Administration facilities when screening veterans for tobacco use. This doctoral capstone project involved evaluation of the Tobacco-Cessation Guideline by deploying a retrospective chart audit to assess implementation by first-line clinicians. Randomization of patient identifiers was used so that 18 Health Insurance Portability and Accountability Act patient identifiers were not recorded. The project was conducted at a Domiciliary and Residential Rehabilitation Treatment Program located in an urban area in the southern United States. Results of this project included raised awareness of first-line clinicians through electronic health record reminders, clinical outcome evaluations, and patient satisfaction surveys. These initiatives improved providers' effectiveness in documenting interventions, in addition to substantially improving the treatment progress made by each veteran. The sustainability of this effort will require long-term organizational commitment that will help to drive a change in practice and encourage positive attitudes toward tobacco cessation in the general population.

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Dedication

To my family: Julian and Anthony, mom, Assumpta and Emma; you have been my motivation and strength.

Acknowledgments

To God Almighty for the things He hath done.

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Section 1: Nature of the Project; Background

Smoking is preventable and is a cause of morbidity and mortality in the United States (Veterans Health Administration [VHA], 2006), yet smoking cessation continues to pose challenges for individuals, families, and communities. The veteran population is notable for heavy tobacco use, with the problem being especially prevalent among veterans who have mental disorders. Veterans themselves have identified cigarette use is endemic in the military (Gierisch et al., 2012).

According to the U.S. Department of Veterans Affairs (2016), the rate of tobacco use is high in persons who suffer posttraumatic stress disorder (PTSD), and addiction, as well as those who have human immune-deficiency virus. Among individuals with PTSD, the rate of tobacco use has been reported to be twice the rate in people without PTSD (U.S. Department of Veterans Affairs, 2016). The U.S. Department of Veterans Affairs also found that tobacco use was high in persons with depression, mood disorders, and schizophrenia, stating that veterans who smoke are likely to experience anxiety, depression, panic, and suicidal thoughts. According to a 2015 statistic, one in three cigarettes sold is sold to an individual who has a mental disorder (Centers for Disease Control and Prevention [CDC], 2016b).

In a similar study, Gierisch et al. (2012) found that stress, anxiety, and sleep problems are triggers for tobacco use in veterans; veterans with mental illness self-report that they smoke to relieve or cope with the symptoms of anxiety and stress. Zhang et al. (2014) argued that the high rate of tobacco use among veterans is linked to the mental health disorders that surface after military service.

Attempting to address tobacco use without first paying attention to and reconciling the mental health issues that trigger it is like pouring water on a rock. It is important therefore that healthcare organizations such as the VHA and the mental health professionals who work in it develop strategies that include restructuring activities and programs to mitigate these problems. A patient-aligned care team (PACT) model that already exists in the VHA emphasizes patient-driven, proactive, personalized, team-oriented approaches to provide preventive services for quality patient outcomes (U.S. Department of Veterans Affairs, 2017a). In a PACT model, healthcare professionals such as nurses, physicians, and licensed clinical social workers used a patient-centered approach to identify the mental as well as physical health issues that veterans have, and healthcare interventions are then coordinated, and care outcomes monitored.

Because smoking is widespread in military culture as a means of stress relief (Dawson, 2014) and tobacco use may continue after active duty, a broader approach to preventing tobacco initiation and achieving cessation during military life is overdue. Discussion to develop such an approach should include identification of strategies to reduce those stressors in the military that encourage smoking initiation as well as the triggers of continued use. This might be achieved through changes such as restructuring military activities and reducing the frequency of (or even banning) smoke breaks.

Tobacco Use by Gender, Education, and Poverty Level

Rates of tobacco use have been found to be highest in the following groups: non-Hispanic Native American Indian/Alaskan Native, White (Non-Hispanic), African American (Non-Hispanic), and Hispanic (CDC, 2016b). Additionally, the VHA has reported that the heaviest tobacco use occurs among persons with low income and low

education, and among those who suffer from psychiatric and or substance abuse problems (VHA, 2012). Both GED holders and individuals who are at or below poverty level use tobacco at higher rates (CDC, 2016b).

Tobacco is used by people of every race, gender, educational background, and socioeconomic class. Tobacco is used in the home environment, in the workplace, in automobiles, in hospitals, and in other places of public gathering. The extent to which tobacco is used in the general population and among American veterans calls for an approach to tobacco cessation that is comprehensive, and consistent with individual, and communal values, and preferences so that there is full participation from tobacco users and non-users alike. Beginning with tobacco use screening and ending with follow-up care, tobacco-cessation services can be provided by an interdisciplinary team consisting of a registered nurse, a nurse practitioner, a licensed clinical social worker, a psychologist, a psychiatrist, and a pharmacist.

Problem Statement

The problem is that tobacco is a preventable cause of death, yet 50% of tobacco users die prematurely due to tobacco use (VHA, 2012), tobacco continues to be heavily used among veterans (Gierisch et al., 2012) despite efforts to combat use in this population. Continued and heavy tobacco use among veterans (Gierisch et al., 2012) may suggest that guidelines for smoking cessation in veterans have not been used effectively. Continued use could also be due to lack of attention to, and failure to properly address, the numerous physical and mental health issues such as stress, anxiety, PTSD, illicit substance use, and infection with human immunodeficiency virus/AIDS that are associated with smoking (U.S. Department of Veterans Affairs, 2016).

Implications for the Tobacco User

Cigarette use not only can cause social, physical, and behavioral health problems for smokers themselves, but also can harm individuals who do not smoke such as smokers' family members. Zhang et al. (2014) found that 23 million American veterans and their families are at risk for tobacco-related health effects as well as the health risks that come with exposure from secondhand smoke.

According to the U.S. Department of Veterans Affairs, the health effects of tobacco can be noted in virtually every organ or system in the body. For instance, smoking is linked to worsening asthma, respiratory and lung diseases, and cardiovascular problems (Zhang et al., 2014) for both those who use tobacco (smokers) and those who do not but encounter secondhand smoke through exposure from family members, coworkers, and passers-by. Each year, in the United States alone, 480,000 deaths occur that are linked to tobacco, with the financial burden of tobacco totaling around $300 billion (CDC, 2016b).

The social implications of smoking are well described in the article "Stigma and Smoking: The Consequences of Our Good Intentions" by Stuber, Galea, and Link (n.d). In this article, Brandt described cigarette smoke as a substance that is repulsive, has a foul odor, and can lead to social secrecy (as cited in Stuber et al., n.d.). Individuals who use tobacco may lose respect and suffer isolation in society. Because tobacco use is associated with stress, anxiety (Gierisch et al., 2012), PTSD, schizophrenia, addiction, and physical health problems such as infection with human immunodeficiency virus (U.S. Department of Veterans Affairs, 2016) that are associated with stigma, individuals

who smoke cigarettes may also suffer social stigma and, as such, may be isolated from family, friends, and the community.

In order to combat tobacco use among veterans, it is important to implement measures that will enhance adoption of the VHA Tobacco-Cessation Guideline, including instituting facility practices that foster learning, resilience, and empowerment. It is also important that healthcare providers address those life experiences or situations that are triggers of tobacco use, such as anxiety, and stress as well as the other mental health problems that prompt smoking. Trying to encourage a veteran to stop smoking without adequately addressing these issues often does little or nothing to initiate cessation, given the potential for a veteran's anxiety and stress to worsen, leading to relapse.

Additionally, the manufacturing, distribution, and sale of tobacco despite the medical and financial burdens associated with it strongly suggest that the use of tobacco still merits significant attention. In various places where people gather, including schools, churches, mosques, workplaces, restaurants, and court houses, one can see people smoking, sometimes in designated areas and sometimes in open areas. Not only does tobacco predispose users to serious health problems; secondhand smoke exposure affecting family members, friends, and bystanders is problematic and represents an ethical concern.

Purpose of the Project

The purpose of this project was to assess provider use (registered nurse, nurse practitioner, social worker, psychologist, and physician) of a VHA Tobacco-Cessation Guideline by means of chart review.

Implications for Nursing

Tobacco use is a serious public health issue and requires a comprehensive, integrated, and coordinated effort that focuses not only on the individual smoker, but also on the family and community. This doctoral project aimed to fulfil the Essentials of Doctoral Nursing Practice "practice-focused" initiative (American Association of Colleges of Nursing [AACN], 2006). This initiative is intended to improve practice outcomes through a wide range of interventions that a doctorate-prepared nurse can initiate, oversee, and bring to fruition.

Efforts to institute change and achieve positive results should begin with needs assessment. A nurse who possesses a Doctor of Nursing Practice (DNP) degree can identify a population in need, develop a plan to address the need, identify persons of interest or stakeholders, design programs and activities, and develop an evaluation method to monitor the progress of interventions. A DNP-prepared nurse has a professional responsibility to deploy his or her education and skills to design programs within the healthcare arena that emulate best clinical practices, including, in this case, the facilitation of provider use of a tobacco-cessation guideline.

The responsibilities of DNP-prepared nurses extend beyond the outpatient and inpatient care settings and include education for patients regarding the context of risk factors, resources for those indicating readiness for tobacco cessation, and implementation of science-based management strategies proven to be successful with chronic care management (Glasgow et al., 2001). While providers have an ethical responsibility to follow best practice clinical guidelines, lack of a strategic plan to coordinate all aspects of care may inhibit positive outcomes despite the best of intentions.

A doctorate-prepared nurse has the qualifications needed to be a coordinator-in-chief based on advanced education and clinical expertise. A nurse leader, along with provider practitioners, can implement an effective tobacco-screening assessment, assist patients in making choices, recommend preferred therapy (combination of medication and behavioral modification, including professional counseling), and complete follow-up care while embracing the "5A" mnemonic (ask, assess, advise, assist, and arrange). Through this encounter (provider-patient contact), the nurse can develop a partnership with the patient, which can help to motivate the patient to engage in self-care activities that are necessary for positive outcomes; these self-care activities can be incorporated into the patient's day-to-day life (Riegel, Jaarsma, & Stromberg, 2012) as well as the establishment and reinforcement of an individualized treatment plan.

A doctorate-prepared nurse has the education and training needed to improve practice and outcomes in the healthcare delivery system (AACN, 2006). Because the advanced practice nurse possesses knowledge that is deeply rooted in science, DNP graduates can transform health knowledge for the benefit of the patient and for sound practice outcomes.

A DNP graduate can use nursing theories as well as other related theories to evaluate new care methods (AACN, 2006). According to Doody and Doody (2016), a nurse should assess evidence from theory for quality, feasibility, appropriateness, and effectiveness prior to applying it to clinical practice.

This effort to combat tobacco use required me to design a project and perform improvement initiatives through the mobilization and use of organizational resources (administrative and clinical staff) while measuring care outcomes.

Objectives of the Project

- Increase provider adoption of VHA Tobacco-Cessation Guideline.
- Increase readiness to quit in veterans who use tobacco.
- Create a strategic plan consistent with the elements of the chronic care model that has been adopted by the Veterans Administration through patient-centered medical home (PCMH)/patient-aligned care team (PACT).

Among the objectives of the PCMH are improvements in patient satisfaction and safety (U.S. Department of Veterans Affairs, 2017a). Achieving these objectives has been possible because of the active role that the patient plays in the caregiving process and because patient-centeredness entails moving focus away from the caregiver and toward the patient. This approach places power in the hands of the patient, who chooses what services he or she desires and how such services can be delivered, with staff providing education and support. Both PCMH and PACT use comprehensive approaches that include education, coaching, consulting, and screening services to deliver holistic care. Combining the PACT/PCMH model and the elements of the Chronic Care Model (CCM), the healthcare provider used a coordinated and collaborative approach, delivered interventions, and evaluated outcomes of care. A practice chart audit was completed, and information was obtained on the following:

- Tobacco screen, medication therapy, behavioral modification, and follow-up care
- Quit attempt

The doctorate-prepared nurse, as a leader in healthcare, can initiate quality-improvement efforts to boost organizational goals and can delegate tasks as well as

arrange for training and retraining of staff in the performance of duties required while monitoring outcomes. Such a nurse leader can coordinate care and collaborate with an interdisciplinary team to ensure that the assigned/delegated duties are completed.

To combat tobacco, use and improve quality of life for U.S. veterans, the VHA in 2006 developed a Tobacco-Cessation Guideline, "Integrating Tobacco-Cessation Guideline Into Mental Health Care, a Preceptor Training Program to Improve the Delivery of Tobacco-Cessation Treatment for Veterans with Mental Disorders," for use by VHA providers who counsel veterans concerning tobacco use. Although the VHA has stressed the importance of tobacco cessation, access to care, and effective tobacco-cessation treatment and has developed a guideline (in 2006, with an update in 2008) to aid this effort, the extent to which this guideline is used in the VHA has needed to be determined.

The good news is that U.S. servicemen and women appear to have interest in quitting smoking and have cited reasons to quit (Gierisch et al., 2012). According to the CDC (2016a), over 80% of individuals who use tobacco visit their healthcare providers annually, want their providers to talk to them about quitting, and are willing to discuss tobacco cessation. Similarly, at the VHA, 70% of all smokers want to quit (VHA, 2014), and one out of every two veterans who attempt to quit is successful (VHA, 2016).

For veterans with psychiatric disorders such as PTSD, depression, schizophrenia, and mood disorders, 50% have an interest in quitting; these groups of veterans' report that physician advice can increase the chance of quitting (VHA, 2016). Some veterans have also cited bad habit, bad breath, and bad teeth as motivators for quitting (Gierisch et al., 2012). Among the other reasons cited for quitting are a sense of happiness and ability

to concentrate a year after quitting (VHA, 2016). Veterans who want to quit smoking have cited such reasons as desire for healthy breathing and healthy living, becoming physically active, improving health, and not suffering from cancer (Gierisch et al., 2012).

The VHA pledges to provide patient-centered care to American veterans and seeks support from family, friends, and the community in the effort to help veterans quit smoking (VHA, 2016). Although some veterans can quit smoking with little or no support from family and friends, the VHA has argued that many veterans need support from their healthcare providers, noting that a physician's advice will likely increase a veteran's chance of quitting.

Although the effort to control smoking in public places and even in institutions can be challenging, there remains a need for individuals and society to embrace a comprehensive approach to tobacco-cessation beginning at the individual and family levels and progressing to the community and organization levels. Individuals and family members, friends, and healthcare professionals can help veterans quit smoking by offering support and assisting during times of relapse. Individuals who offer support to veterans can do so by showing vet smokers images of the benefits they can derive from quitting. For example, when a veteran quits smoking for 20 minutes, his or her blood pressure reduces.

Similarly, 1-9 months after a veteran quits using tobacco, the nerve endings start to regenerate while the organs of taste and smell return to normal functioning (Canadian Health Atlas, 2016). Five years after quitting smoking, the risk of stroke is the same that it would be for an individual who never smoked, and by 10 years following smoking cessation, the risk of smoking-associated cancers drops up to 50%. The U.S. National

Library of Medicine (2017) found that in one year of quitting smoking, the risk of coronary heart disease is half when compared with someone who continues to smoke cigarette.

The benefits of addressing the problem of heavy tobacco use in the veteran population (Gierisch et al., 2012) include improved health outcomes and socially-enjoyable health behaviors, some of which smokers tend to neglect or ignore. These individuals instead engage in unhealthy lifestyles such as smoking cigarettes which can predispose to life-threatening illnesses.

The U.S. Department of Veterans Affairs (2014) has stated that helping a veteran quit smoking means saving life. To join this effort, healthcare providers in the VHA can effectively adopt the VHA Tobacco-Cessation Guideline and offer tobacco-cessation services, including screening, medication therapy, and behavioral counseling (VHA 2006, 2008), as recommended in the VHA Guideline, upon provider-patient contact. In performing chart review for this capstone project, I sought information regarding which of these services was offered and to what extent.

The VHA has a developed a National Smoking and Tobacco Use Cessation Program that emphasizes a public health approach focused on evidence-based tobacco cessation and counseling (VHA, 2014). The VHA advocates policies that undermine the prevalence of tobacco, including increasing tobacco taxes as well as implementing no-smoking zones in public places such as work areas, bars, and restaurants.

Healthcare professionals, individuals, families, and communities can also help veterans quit smoking. Programs aimed at tobacco cessation can be incorporated into a hospital telephone advisory system through which nurses and other healthcare

professionals can complete assessments such as tobacco screening. Additionally, efforts should be aimed at providing education on the dangers of secondhand smoke, including associated cancers, worsening respiratory problems, lung and kidney diseases, preterm birth, and stillbirth (CDC, 2016c). Health-awareness efforts should also emphasize the social effects of tobacco use, which veterans themselves describe as "embarrassing" (Gierisch et al., 2012).

When veterans stop using tobacco, they have more money to meet their other needs. Achieving smoking cessation means lessening the burden of tobacco both physically and financially. According to the VHA (2006), the annual financial cost of tobacco-related health expenses is $75 billion, in addition to $82 billion in lost productivity every year from tobacco-related illness and mortality. Addressing the issue of tobacco helps to cut down costs while promoting healthy living, thereby reducing the burden of secondhand smoke.

According to the VHA (2006), brief intervention services using the "5A" model (ask, advise, assess, assist, and arrange) are effective in addressing tobacco use. With a comprehensive approach to tobacco cessation such as the "5A" model, which is elaborated in the nationally developed VHA Tobacco-Cessation Guideline (VHA, 2006), the practitioner not only seeks information about tobacco use, but also assists the patient in making personal choices toward achieving a goal. Small and Kennedy (as cited in Medscape, 2017) also found that a few minutes during which a provider talks to a patient about quitting can yield positive outcomes.

It has been 11 years since the VHA's initial guidelines concerning tobacco cessation were adopted (VHA, 2006) and 9 years since the guideline' 2008 update, yet

the problem remains that individuals who have mental disorders use more tobacco compared with persons who do not have mental disorders (VHA, 2006) and as such are at risk for tobacco-related health problems. Concern regarding heavy tobacco use (Gierisch et al., 2012) was the clinical reason that an effort was made through this initiative (project) to assess provider use of the VHA guideline.

Although the primary motive for this initiative was to evaluate the use of an established process (i.e., a guideline), this assessment may also give insight into a developing problem that could require a practice change. In this regard, the advance practice nurse should continue to assess and reassess health outcomes and develop interventions that have positive impacts. In the case of this project, the role of the advance practice nurse involved the use of best practices that have been shown to help with tobacco cessation, such as tobacco screening, pharmaco-therapy, behavioral modification, and follow-up services.

Although mental illness cannot be cured, the symptoms of mental illness can be successfully managed so that the individual who has mental illness can be productive in society. To help individuals who have mental illness recover and successfully transition into society, Robert Wood Johnson Foundation in 1998 convened a panel of researchers, clinicians, and mental health consumers, and their families to deliberate on mental health improvement processes (as cited in State of Connecticut, Department of Mental Health and Addictive Services, 2016). From this interdisciplinary effort emerged evidence-based practices such as standardized pharmacotherapy and lifestyle modification; these approaches are contained in the VHA Tobacco-Cessation Guideline and can be successfully integrated to address tobacco use.

Section 2: Background and Context

Literature Review

Kelly, Sido, and Rosenheck (2016) found cigarette use to be a significant problem among veterans who used healthcare services at the VHA. According to Kelly et al., veterans who used intensive tobacco-cessation services were homeless and had existing mental health and substance use problems. Kelly et al. argued that veterans who suffered homelessness and had psychiatric and/or substance abuse problems used more VHA services than those veterans who did not have such coexisting problems. Tobacco use is a common problem in the veteran population, especially for those veterans who are mentally ill and homeless.

Gierisch et al. (2012) stated that tobacco use is a common problem among U.S. servicemen and women. Using veterans' own words, Gierisch et al. described triggers for using, veterans' willingness to quit, and the health and social impacts of tobacco on veterans' personal and family lives.

According to the CDC (2016a), more than 80% of individuals who use tobacco visit their healthcare provider every year and want their healthcare provider to talk to them about quitting. Veterans' interest in quitting smoking could imply that they understand the health effects of tobacco; it may also indicate that they want to save money. Veterans' interest in quitting smoking (Gierisch et al., 2012) is evident in veterans stating in their own words a desire to quit using tobacco. The already-established VHA Tobacco-Cessation Guideline helps to facilitate providers' efforts to offer the services contained in the guideline as well as use of those services by veterans. Brief intervention services between the patient and the provider that are aimed at initiating

cessation have been found to be an effective approach to combating tobacco use (National Center for Biotechnology Information, 2008).

The CDC (2016e) is emphasizing tobacco reduction through health-promotion efforts that foster healthy lifestyles. Hence, the CDC advocates for increases in the prices of tobacco as well as for smoke-free policies and strives to end media campaigns that promote tobacco use. As federal and state agencies seek avenues to address tobacco use, individual and societal contributions to bolster this effort are crucial to achieving tobacco use reduction.

According to the CDC (2016b), the problem of tobacco use is not limited to the veteran population. Tobacco also poses a broader problem affecting every gender, race, and socioeconomic class. The CDC also found that tobacco is used more by individuals who have disabilities when compared with those who are not disabled (2016b).

Local Background

The VHA updated its tobacco treatment guideline to address the growing health concerns that tobacco poses. In the 2008 guideline update, ten recommendations were added for providers to use when discussing the issue of tobacco use with veterans. Emphasized in the update was the importance of clinician understanding of the chronicity of tobacco dependence, including the possibility of relapses, the likelihood of several quit attempts leading to repeated treatments, and the desired outcomes (National Center for Biotechnology Information, 2008).

Both counseling services and medication therapy (bupropion, nicotine gum, nicotine inhaler, nicotine lozenge, nicotine spray, and varenicline) are available in the updated guideline (National Center for Biotechnology Information, 2008). The guideline

encourages providers to offer these treatment options as well as motivational therapy for those veterans who are yet unwilling to quit while urging healthcare organizations to offer clinicians support that is critical for positive outcomes. The VHA argued that no health condition is more lethal yet suffers so much negligence by society amidst the numerous interventions available to help individuals quit using.

The 2008 VHA Clinical Practice Guideline emphasizes the need for the clinician to ask veterans two questions: Do you smoke? And do you want to quit? The guideline also emphasizes the importance of educating veterans on the effective treatment opportunities that are available, emphasizing that such services produce long-term abstinence from tobacco (VHA, 2008). Further, the guideline suggests that providers should offer counseling services to veterans who want to quit, along with cessation medications.

According to Gierisch et al., (2012), 70% of veterans want to quit using; thus, there is a need for treatment approaches that begin with tobacco screening for every veteran who uses tobacco. The U.S. Department of Health and Human Services (HHS) has suggested that clinicians should provide tobacco counseling services to veterans who show willingness to quit, except when there is a contraindication, as in cases of pregnancy, smokeless tobacco use, light smoking, and adolescents (HHS, 2008).

The 70% of veterans who want to quit using (Gierisch et al., 2012) want their healthcare provider to complete counseling sessions during patient-provider contact. Upon counseling to determine usage as well prior quit attempts, both the veteran and provider can agree on what other treatment modalities are appropriate and are preferred

by the veteran, including pharmacological therapies that have been proven to be effective in helping users to quit (U.S. Department of Veterans Affairs, 2014).

Conceptual Framework

Glasgow, Orleans, Curry, Solberg, and Wagner (2001) argued that healthcare delivery has long been centered on the diagnosis and treatment of acute diseases. Researchers have found that there is a lack of balance between care for acute illnesses and care for chronic diseases. This imbalance in care is in part due to a constellation of issues that could range from organizational flaws to provider practices and patient ignorance on disease management. Glasgow et al., argued that attention to acute illnesses has drawn the focus of healthcare professionals away from delivering interventions for the management of chronic diseases.

Researchers have also found that chronic diseases are on the rise, in part due to challenges that face the health system, including failure to follow established practice guidelines (Glasgow et al., 2001). According to Glasgow et al. (2001), screening and counseling services which tends to help with early detection, and timely provision of health interventions is less frequently used when compared with medical practices and procedures; hence, the infrequent attention to preventive services could result in late detection and treatment for diseases that could otherwise have been treated early.

Researchers contend that this lack of adherence to practice guidelines is, in part, the reason for the growing number of chronic diseases (Glasgow et al., 2001). Glasgow and Strycker (as cited in Glasgow et al., 2001) argued that screening and counseling for preventive services are much less common than the treatment or procedures for chronic diseases. Hence, proponents of the chronic care model (CCM) seek the restructuring of

those care approaches that undermine care for individuals who have chronic illnesses (e.g., through nonadherence to established practice guidelines) while seeking a collaborative approach that includes both the patient and provider in the plan of care.

The six elements of the CCM—community resources and policies, health system organization of care, self-management support, delivery system design, decision support, and clinical information system (Hung et al., 2007)—can be incorporated into a tobacco-cessation program. Positive outcomes of such a program require dedicated, skillful effort by a qualified expert such as a doctorate-prepared nurse, who can use his or her vast educational background and knowledge to allocate resources and liaise with various departmental, case management, or community health personnel to ensure that resources are sent to areas where there are needed to better educate, screen, and prescribe, as well as oversee follow-up patient care activities.

A comprehensive effort that includes family and community support can be effective as well. Mass campaigns by healthcare professionals to discuss the health effects of tobacco as well as the cessation options that are available should be organized at places of public gathering such as churches, schools, and community centers, and tobacco-users should be encouraged to attend. Organizational programs that incorporate case management and community health interventions are critical to achieving this purpose and averting a major lifestyle risk factor for a broad range of illnesses such as asthma and other lung and respiratory diseases.

A care approach using a CCM (Hung et al., 2007) that emphasizes the need to focus on the delivery of preventive services for managing chronic illnesses such as those caused by tobacco can be effective in promoting tobacco cessation. The CCM's emphasis

on increasing screening and counseling services is ideally suited to the effort to assess and increase provider use of a guideline. The application of the six elements of this model helps to increase patient-provider interaction/collaboration, information sharing, and joint decision making. Quitting tobacco can be challenging and requires dedication and perseverance; hence, provider support during the process is important.

The U.S. Department of Health and Human Services (HHS, 2008) has emphasized that every clinician should identify tobacco users at every visit by implementing a system-wide strategy to ensure that every veteran at every clinic visit is screened for tobacco and that the outcome of such screening is documented. The agency warns clinicians, however, not to perform repeated screenings if a veteran has never used tobacco or has not used tobacco for several years (HHS, 2008).

One of the duties of a healthcare provider is to establish a communication approach that enhances two-way information exchange. The provider must use one-to-one moments to listen, educate, and recommend healthful information to patients. For those veterans who engage in heavy tobacco usage (Gierisch et al., 2012), providers should elaborate on the health effects of tobacco, including how the substance (tobacco) affects various body organs/systems. Providers should also make use of any available audiovisual tools that display pictures that portray the effects of tobacco on the organs of the body. It is also important for providers to discuss the effects of tobacco on nonusers.

Providers should understand that the stress of deployment and the culture of smoking that is inherent in the military (National Institute of Drug Abuse, 2013) may complicate a veteran's attempt to quit. In light of these pressures, providers need to be

supportive of patients while continuing to encourage them to make healthful choices that negate smoking.

The National Institute of Drug Abuse (2013) also found that many veterans do not seek healthcare due fear of lack of confidentiality. Lack of confidentiality can result in lack of trust in the practitioner; therefore, there is a need for an approach to care wherein the healthcare provider engages in appropriate ethical behaviors such as the protection of patient health information, which every healthcare organization should uphold.

The VHA (2012) has recommended that providers such as registered nurses, nurse practitioners, licensed clinical social workers, psychologists, and physicians use the "5A" mnemonic (ask, advise, assess, assist, and arrange) when determining if a veteran uses tobacco and the veteran's interest in quitting. According to the VHA, the "5A" mnemonic is helpful in evaluating a veteran's readiness to quit while encouraging and assisting the veteran in quitting, through provider offering of cessation-services such as counseling, medication therapy or a combination of both, and arranging for follow-up appointments to determine care outcomes. The VHA (2012) has also suggested that healthcare providers use the "5A" model to help smokers who are in the process of quitting, indicating that it is important that healthcare providers send clear and strong messages while using an individualized approach, given that each veteran is unique.

Although cessation services such as behavioral modification, medication therapy, and follow-up services are available to help veterans quit smoking, quitting can be challenging, and relapse sometimes occurs; hence, it is important to assess for readiness to quit, assist, and offer support while addressing the barriers the veteran may have (VHA, 2008). According to the VHA (2012), quitting can be a cyclical process, and

veterans' readiness to stop using can change as they go through a cycle that includes not thinking about quitting, thinking about quitting, being ready to quit, having recently quit, and relapsing.

For those veterans who are ready to quit, using the "5A" model can help the provider assess readiness to quit. A provider's inquiry into readiness should include obtaining the history of tobacco use, how much has been used, any relapses that have occurred, and for how long tobacco was used (VHA, 2012). When the veteran used tobacco, how much the veteran used, and any breaks in usage are among the measures used to determine the treatment choices that are offered. Assessing use also means discussing the key issues or barriers that the patient may have encountered in relation to the quitting process (VHA, 2012).

Barriers to quitting may be social, health-related, or financial (VHA, 2012). A patient who is unemployed may not have the finances to purchase nicotine gum or bupropion, for example; it is important therefore that the professional identify if there are barriers to treatment and then address the barrier(s) appropriately, including referral to social services as needed. The provider should also be aware of the challenges that women may have regarding quitting, including fear of weight gain after quitting, concern that they may suffer depression, and the effect that estrogen may have on cessation medication (VHA, 2012). Both men and women may have concerns related to physical problems such as chest tightness, cough, dry throat, irritability, hunger, and lack of sleep (VHA, 2012). Healthcare providers should be supportive of patients with these concerns while emphasizing that most of these symptoms are temporary and will resolve in 2-4 weeks, although some may last for months or even years (2012).

The health effects of tobacco have been described by Laniado-Laborin (2010), who found that 100 million deaths occurred during the 20th century from tobacco use. Researchers have suggested that counseling, medication therapy (e.g., bupropion, varenicline), and/or nicotine replacement therapy may be effective, with combination therapy being more effective for heavy users and for those patients who have been unable to achieve cessation with monotherapy or who experience breakthrough cravings (2010).

The elements of the CCM emphasize interactions between the patient and the professional (nurse, physician, or psychologist) and include the delivery of services and making sure that patients and their families understand what is said and the intervention provided (Glasgow et al., 2001). With self-management support, veterans can learn new skills and engage in lifestyle modifications that can help them achieve tobacco cessation. Laniado-Laborin (2010) found that approximately 7-16% success rates can be achieved with behavioral intervention, whereas a 24% success rate can be achieved with combination therapy.

The CDC (2016e) has suggested banning cigarette smoking in public places such as bars, restaurants, and workplaces. This effort at banning smoking in places of public gathering may help smokers to quit using, enable healthy living , disease-prevention and health promotion.

A literature review matrix can be viewed in Appendix A.

Section 3: Data Collection and Analysis of the Evidence

Institutional Review Board (IRB)

The Walden University (2016) IRB offers guidance to students completing projects or research that involve the collection and analysis of data. The IRB process is

designed to ensure that all required federal regulations and ethical standards are followed, including appropriate use of patient information (2016).

The Walden University IRB is responsible for ensuring that all ethical standards as well as federal regulations are observed by each student prior to the collection of human data (2016). It is therefore a requirement that all students who are completing quality improvement projects at Walden University abide by the institution's IRB guidelines (Walden, 2016) as well as the guidelines of the institution where the project is conducted.

Detailed information regarding the doctoral capstone project, including processes and methods, was submitted to the IRB committee prior to collecting any data. Any recommendations about the project that were suggested by the DNP chair as well as the IRB were accepted, and revisions were made as appropriate prior to submitting the project to the committee and University Research Reviewer (URR) for final approval. The data collected included the following:

- Facility guideline for tobacco cessation
- Tobacco screening
- Cessation service provided: Medication, behavioral modification, or both, and/or follow-up

Practice-Focused Questions

Practice-focused questions were developed and may require long-term commitment from the organization; this was the recommendation, as the outcome of the assessment suggested further action by the organization. As a result, the project was

separated to specify the portion of the project that I addressed (in the time frame allotted for the DNP program) as well as that which would be addressed by the organization.

Organizational Perspective—Long Term

At the organizational level, the population/patient/problem, intervention, comparison, outcome, and time (PICOT) question, as indicated below, was comprehensive and revealed a larger picture of the project that was beyond the scope of this doctoral program.

Practice-Focused Question—Long Term

At a veterans' hospital situated in the urban southern United States, how did provider adoption of the VHA Tobacco-Cessation Guideline impact veterans' tobacco use (measured 3 months after full guideline implementation) as compared to not adopting the guideline?

DNP Student Perspective—Short Term

This section of the DNP project (student perspective of the DNP practice question) was a shortened version and included the planning phase of the long-term (organizational) project, as shown below.

Practice-Focused Question—Student Perspective

In the veteran population at a veterans' hospital situated in the urban southern United States, how effective was the quality improvement planning associated with assessment of provider use of the VHA Tobacco-Cessation Guideline, as measured in 4 weeks by formative outcome achievement through evaluation of VHA Tobacco-Cessation Guideline and current provider practices (as they relate to guideline use).

Sources of Data

Upon IRB approval of project, a retrospective chart audit was obtained to determine current facility/provider practices regarding use of the guideline. Data were collected through a review of medical records of veterans who resided at the local facility where this project was conducted. Thirty (30) charts were randomly selected. There was also randomization of patient identifiers so that none of the 18 Health Insurance Portability and Accountability Act (HIPAA) patient identifiers, including but not limited to name, age, geographic location, telephone number, email address, fax number, account number, and medical record number (UC Berkeley, 2017), of the patients was recorded in the quality improvement project.

The following information were obtained:

- Facility guidelines for tobacco cessation
- Information on tobacco screening
- Other tobacco-cessation services: medication, behavioral modification, follow-up completed

Overview of the guideline helped in identifying their contents and their appropriateness in addressing the problem of heavy tobacco use among veterans. Chart review also revealed how and to what extent the cessation-services were used by veterans, especially those who admitted to using tobacco, and included information such as the type of service that was offered and received, as well as whether follow-up was completed.

Data were recorded on an Excel spreadsheet and developed into PowerPoint slides. Data were interpreted in percentages and rates, and displayed in pie and bar charts, as shown in the Figures section in appendix B.

Outcome Evaluation

According to the CDC (2016d), outcome evaluation helps in determining how program interventions meet intended objectives. Outcome evaluation helps in the effect of the intervention on the population of study (2016d)—in this case, whether tobacco screening was completed and whether cessation services were offered to veterans (who used tobacco) at the time of residence at the local facility where this project was conducted.

For this doctoral project, the findings of the chart audit were the outcome of the quality improvement initiative and the conclusion of the project. The results thus obtained (which included information on the following: tobacco screening, medication therapy, behavioral modification, and follow-up services, measured using the "5A" model [ask, assess, advise, assist, and arrange] as a guide) were displayed on a pie or bar chart as appropriate.

Based on the findings of the chart audit, it was recommended that the facility (project site) embark on quality improvement benchmarks to assess the effectiveness of the evidence-based practice change. It was also recommended that the facility continue to adopt the "5A" model when assessing and assisting with tobacco cessation and integrate the key elements of the PACT/PCMH model: patient-driven, team-based, and coordinated approaches (U.S. Department of Veterans Affairs, 2017) as well as mental and physical health issues that veterans may have such as HIV, addiction, anxiety, and stress, as well as other mental health disorders that could perpetuate use and undermine overall cessation efforts.

As a nurse and healthcare leader poised to take charge, I designed, collected, and analyzed data tailored for the effective delivery of cessation services that are instrumental in tobacco cessation, such as tobacco screening, medication therapy, and/or behavioral modification and follow-up care. I emphasized provider use of the PACT model to facilitate patient-provider interaction. Within this model, veterans can visit their primary care provider or any member of the team and/or communicate with team members via telephone or send secure messages through MyHealthyVet (2017).

Incorporating these measures without also monitoring the progress of the interventions that have been implemented would results in an incomplete effort. It is therefore important that the facility take measures to evaluate outcomes such as complete audits to determine whether the guideline is being used and whether veterans are using cessation services. In addition, it was recommended that the facility complete the above measures pre-implementation and 6 months postimplementation relative to the practice change. The facility can perform long-term outcome evaluation of the tobacco-cessation efforts/interventions (as deemed necessary) using chart audits and by performing the following:

- Ongoing tobacco screenings in inpatient and outpatient care areas.
- Monthly assessment of provider adherence (Shershneva, Larrison, Sobertson, & Speight, 2011) regarding guideline use.
- Cessation rates (Shershneva et al., 2011). Evaluation of tobacco-use reduction or quit rate will be determined.

In addition to assessing population health, a doctorate-prepared nurse (Stewart, 2014) can design healthcare interventions aimed toward evaluating the outcomes of

services. From an organizational perspective, evaluation of outcomes will include designating and training healthcare professionals such as nurses, psychologists, and psychiatrists, who will complete chart audits to determine compliance as well as service use. It will also be suggested that the monitors (as the facility deems necessary) complete outcome evaluations and report the findings to the appropriate committee. Institutional efforts toward achieving tobacco cessation should also embrace practices that strengthen patient participation and empowerment in programs such as PACT/PCMH.

Section 4: Findings, Discussion, Implications

The completed quality improvement project was my responsibility as the doctoral student. The project involved identification of a population in need, appraisal of literature related to tobacco cessation, collection and analysis of data, and interpretation of results.

Summary and Evaluation of Findings

Literature related to tobacco cessation from primary sources such as the VHA (2006, 2008), CDC (2016a, 2016b, 2016c, 2016e, 2017), and Gierisch et al., (2012) was reviewed. The VHA Tobacco-Cessation Guideline developed in 2006 and updated in 2008 provides generous information on the tobacco-cessation services that are available to veterans who use tobacco and who receive medical care from the VHA (VHA, 2006, 2088). In the VHA Tobacco-Cessation Guideline are recommendations for providers that include the "5A" mnemonic (ask, assess, advice, assist, and arrange; VHA, 2006).

For veterans who admit to tobacco use, the VHA (2006) has suggested that providers conduct an assessment to determine readiness to quit, advise veterans to quit, and assist and arrange for aftercare. The VHA (2006) urges providers to use motivational interventions for those veterans who are not to ready to quit. Because quitting can be a

lengthy process and can involve periods of relapse, the VHA (2006) urges providers to determine if the individual has challenges to quitting and to offer support if so.

The CCM, "5A," PACT/ PCMH models, all of which show strong support for care integration, collaboration, and coordination, were at the center of this project. Because it is a well-established fact that tobacco is a risk factor for several chronic illnesses such as oral and lung cancers, cardiac and kidney diseases, and other respiratory diseases, organizational programs that foster productivity as found in the key elements of the CCM (community resources and policies, health system organization of care, self-management support, delivery system design, decision support, and clinical information system; Hunt et al., 2007), can be employed for preventive medicine and to minimize the health effects of tobacco.

Using these key elements, the provider can maximize use of "5A" model while assisting the patient in making personal choices about treatment for tobacco and tobacco-use disorder. Additionally, the elements of the CCM can be incorporated into the PACT and PCMH models. Healthcare providers in PACT and PCMH are suited to the delivery of tobacco-cessation services in outpatient centers/clinics and in the patient home environment. In the PACT and PCMH models, both nurses and other medical personnel to work together, engage in combined decision making, and seek that which is for the utmost good of the patient. Both community resources and the clinical information system (elements of the CCM) help to reinforce PCMH care. Because the health effects of tobacco go far beyond the individual smoker himself or herself and may extend to other family members and the community, a combined approach that involves individuals and the community could yield successful results.

Implications for Practice

Tobacco use is a serious public health issue and requires a comprehensive, integrated, and coordinated effort that focuses not only on the individual smoker, but also on the family, and community. To address tobacco, use and improve the quality of life for U.S. veterans, the VHA (2006) developed a Tobacco-Cessation Guideline titled "Integrating Tobacco-Cessation Guideline into Mental Health Care, a Preceptor Training Program to Improve the Delivery of Tobacco Cessation Treatment for Veterans with Mental Disorders." Contained in the guideline is the "5A" model recommended for use by VHA providers (VHA, 2006) such as nurses, physicians, social service providers, and psychologists when completing tobacco screening.

To improve practice and address the issue of heavy tobacco use among veterans, it is critical that VHA and its providers employ strategies that include restructuring of activities and programs within the system and use of PACT and PCMH models as avenues for continuing tobacco screening and cessation services. PACT uses patient-driven, proactive, personalized, team-oriented approaches to provide preventive services for quality patient outcomes (U.S. Department of Veterans Affairs, 2017a). Using the PACT model, healthcare professionals such as nurses, physicians, and licensed clinical social workers use patient-centered initiatives to evaluate the problem list of each veteran, including social, mental, and physical health issues, and then develop a plan of care while coordinating activities/programs.

In 1998, the Robert Wood Johnson Foundation convened a panel of researchers, clinicians, and mental health consumers and their families to deliberate on mental health improvement processes (as cited in the State of Connecticut, Department of Mental

Health and Addictive Services, 2016). Through the interdisciplinary effort of these individuals emerged practices that include standardized pharmacotherapy and lifestyle modifications that have strong support from evidence; these approaches are contained in the VHA Tobacco-Cessation Guideline and can be successfully integrated to help address tobacco use.

Impact for Social Change

The emergence and application of evidence in the healthcare arena not only boost nursing knowledge, but also help to create awareness at the individual, family, and community levels. In the case of this project, which involved assessing providers' use of a tobacco cessation guideline, a new initiative emerged that may be used by nurses and other providers in the VHA when addressing tobacco use. The new initiative helps to provide direction concerning how individuals are assessed for tobacco use and/or for service delivery. The evidence derived has also given insight into how interventions are documented in the electronic health record system, as well as how any progress is monitored. This new knowledge may guide providers in identifying the challenges to quitting and how they can be addressed.

Section 5: Scholarly Project for Dissemination

Tobacco use is preventable but remains a cause of death for many Americans, including veterans (Veterans Health Administration [VHA], 2006). About 50% of tobacco users die prematurely because of using, sometimes due to tobacco-associated illnesses such as oral and lung cancers, respiratory diseases, worsening asthma, and premature birth and stillbirth (U.S. Department of Veterans Affairs, 2014). In the United States alone, 480,000 deaths occur each year that are linked to tobacco, with the financial burden of tobacco reaching around $300 billion per year (Centers for Disease Control and Prevention [CDC], 2016b).

Despite the debilitating effects of tobacco on health and the fight against tobacco use, there continues to be heavy tobacco use by veterans (Gierisch et al., 2012). Continued and heavy tobacco use among veterans (Gierisch et al., 2012) may be the outcome of system practices and procedures that suggest ineffective documentation of healthcare interventions. Continued use of tobacco could also be due to lack of attention to and failure to properly address numerous physical and mental health issues such as stress, anxiety (Gierisch et al., 2012), posttraumatic stress disorder (PTSD), illicit substance use, infection with human immunodeficiency virus/acquired immune deficiency syndrome (AIDS), which are associated with smoking (U.S. Department of Veterans Affairs, 2016).

The selection of an appropriate method of dissemination for a research effort is critical to ensure that the target audience is reached. For this manuscript, I have applied the manuscript guidelines of the *Australian Journal of Advanced Nursing* (AJAN). AJAN (2017) encourages the dissemination of evidence-based practice with the aim to improve

quality nursing care. AJAN is indexed to major databases such as the Cumulative Index to Nursing and Allied Health Literature (CINAHL), Medline, EBSCO, International Nursing Index, and British Nursing Index (AJAN, 2017). These dissemination sites ensure that a broad range of nursing and allied health staff and students have access to AJAN's information, including those providers who work in mental health institutions and with individuals with mental illness and/or substance abuse disorders.

The findings of the project were shared with the nurse manager, her assistant, and the medical director of the facility where the project was completed. A report containing the result or outcome of the project and a recommendation for the facility to adopt was shared with the health leaders; there was an opportunity for questions and answers. The Agency for Healthcare Research and Quality (AHRQ, 2017) argued that evidence should be disseminated to the target audience using clear and easy-to-understand language to help increase the awareness and use of such evidence.

The results of the project are presented in graphic form in Appendix B.

Interpretation of Findings

The data gathered from chart audit between January 2014 and December 2016 showed that VHA providers used the "5A" model (ask, assess, advice, assist, and arrange) at all times during veterans' admission to the facility. One hundred percent adherence to the use of the "5A" model was seen in all 30 charts that were reviewed (see Figure B1). The chart audit also showed that providers offered treatment options to residents who showed willingness to quit. Willingness to quit (as in the case of this project) was noted as a resident's desire to use one or more of the cessation methods---tobacco cessation class (TCC), pharmacotherapy (PT), and a combination of TCC and

PT---at the residential facility in the effort to quit smoking. A lack of desire or readiness to quit was documented as declined or refused treatment (DT).

Veterans' ages in relation to tobacco use are shown in the Figure B2 in Appendix B. While those veterans between the ages of 64 and 86 showed no evidence of using (based on the charts reviewed), veterans between the ages of 18 and 40 used 40% of the time and veterans aged 41-63 used the most, at 60%. Whether a patient's age correlates with patterns of use or how much has been used and how long he or she has been smoking is yet to be determined and could warrant future evaluation.

Information obtained from the chart review also showed that veterans between the ages of 41 and 63 used tobacco almost twice more when compared with the younger group of veterans (18-40) and the older age group (64-86); the older age group (64-86 years of age) reported no tobacco use, according to chart information. Further improvement effort or research is needed to determine whether veterans' age and era of duty played a role in when initial use began, how much cigarette is smoked per day, patterns of use, reasons for using, desire or refusal to use treatment, and type of treatment used.

For those veterans who were willing to quit (as indicated at the time of the assessment), providers offered one or more cessation-service options in the form of nicotine replacement therapy (NRT), Chantix, and/or behavioral therapy/counseling/ tobacco-cessation class. Of the 30 charts that were audited, the number of veterans who expressed a desire to quit or who were interested in quitting was 17; see Figure B3. Out of this number, 17 or 36% of veterans showed readiness to quit; readiness to quit was expressed as use of one or more cessation services. One out of 30 veterans or two percent

of the charts audited showed readiness to quit as evidenced by veteran attendance of tobacco-cessation class. Thirteen or 28% of the audited charts used medications or Pharmacotherapeutic agents such as NRT or Chantix only; see Figure B3. Although NRT and Chantix were the only medications used, majority of the veterans used NRT in the form of nicotine patches, nicotine lozenges, and/or nicotine gum, and two veterans used Chantix. Although most of the residents used NRT, residents' choice of pharmacotherapeutic agents were based on the veterans' personal preference; however, the reason for the increased use of NRT is unknown and could be the focus of future quality improvement efforts.

Twelve or 43% of veterans reported that they were not ready to quit. This group of veterans (not ready to quit) were documented as having refused or declined treatment; see Figure B4.

A breakdown (in number and percentage) of the tobacco-cessation treatment used by veterans is shown below:

- Tobacco-cessation class/counseling only (1, 2%)
- Pharmacotherapy only (13, 28%)
- Tobacco-cessation class and pharmacotherapy combined (17, 57%). This assessment indicated that the total number of veterans who used combined treatment (class and pharmacotherapy) was slightly more than half of the total population—hence the suggestion that combined treatment with pharmacotherapy and counseling improves the outcomes of treatment (VHA, 2012).

- Declined treatment (13, 43%). Data showed that when the total number of veterans who received treatment was compared with the number of those veterans who declined treatment, 13 out of 30 veterans who indicated they were not ready to quit as evidenced by the veteran declining to use a tobacco-cessation service; see Figure B4.

Because tobacco use is a learned habit that the individual user may have engaged in for months or years, quitting could take weeks, months, or even years to accomplish. It is important, therefore, that those who are responsible for providing care for tobacco users are aware of the challenges that veterans may have regarding quitting and thus provide support as needed.

Recommendations and Opportunities for Improvement

If the majority of the 80% of veterans who smoke and who visit their healthcare providers every year want providers to discuss tobacco cessation (CDC, 2016a), and if 70% of veterans are interested in quitting smoking (Gierisch et al., 2012), data may indicate ineffective use of the recommended guideline. A poor approach to addressing cigarette use could be the reason for continued and heavy use of tobacco by veterans. It is critical, therefore, that healthcare organizations and the providers that work therein revisit available methods and approaches as well as provider practices to determine their effectiveness.

It is also important that veterans who use tobacco, providers, and healthcare leaders within the VHA establish a system of practice in which the most effective approach to care is adopted so that individuals and families are fully aware of the danger that tobacco presents to the body. Approaches that may be used during counseling

include graphics or illustrations that show the health effects of tobacco as well as the benefits of not using may be used. For those veterans who report non readiness to quit, especially at the time of initial assessment, the VHA urges providers to use motivational interventions, which, according to the VHA, increase the likelihood of future quit attempts; the VHA found that the strength of evidence for motivational technique is rated B (VHA, 2012).

It is also important to look at the timeliness of interventions such as whether the time of admission to the facility is the most appropriate time to complete a tobacco screening, bearing in mind that the time of admission could be a time to address the immediate physical and/or psychological stressors that the patient may experience, such as anxiety, homelessness, and/or hunger, which deserve consideration by organizational leaders. Hence, it is critical that the facility review the timing of tobacco-use assessment (the initial assessment that is completed on admission to facility) to such a period when VHA providers have addressed the immediate needs of the veteran, especially the physical and psychological issues for which the veteran is seeking care, such as anxiety, hunger, and shelter, before addressing those needs that are considered not immediate or not urgent. It is likely that if the immediate health needs are addressed first, the individual will have fewer stressors and will likely have a positive outlook and become receptive to tobacco-cessation treatment.

Data from the chart revealed that the number of veterans who attended tobacco-cessation class/group (by itself) was 2%, medication therapy (by itself) 28% and combined therapy: pharmacotherapy and cessation class (PT/TCC) 36%. Veterans' attendance at tobacco-cessation class, which was at the two-percentile level, could

suggest insufficient provider engagement, as evidenced in part by the once-weekly tobacco-cessation class held at the facility. A recommendation in this regard is for providers to engage in more therapeutic contacts with tobacco users and conduct tobacco-cessation class up to three times per week, as this would likely increase veterans' desire to quit. Additionally, the VHA (2012) finding that individual sessions held greater than eight times produced up to 24% abstinence rate further supports the need for more class/counseling sessions. More frequent class sessions provide an opportunity for the provider to talk to veterans about the benefits of not smoking, such as improved breath odor, reduced blood pressure, improved social interactions, and elimination of secondhand smoke (Canadian Environmental Health Atlas, 2016), as well as the health risks of tobacco.

The effort to achieve tobacco cessation therefore required a combined and more consistent approach in delivery services that are evidence based. According to the VHA (2012), minimal interventions that are less than three (3) minutes in length as well as more intense sessions have been successful.

More frequent provider-patient meetings (in the form of counseling/class) provide a forum for the provider and the veteran to build a therapeutic relationship that can help both the provider and the veteran monitor progress as well as address any challenges that the veteran may have regarding quitting. It is also recommended that tobacco-cessation services be continued even after the veteran is discharged from the facility.

While it is important to continue tobacco screening in outpatient and inpatient care areas including the emergency room and mental health ward, it is also important to continue tobacco-cessation group (individual and or group sessions) in these areas and to

monitor progress made by each individual veteran. The effective delivery of tobacco-cessation services can be successfully achieved if these services are integrated into the patient-aligned care team (PACT) and patient-centered medical home (PCMH) that are already in existence in the VHA. The integration of these activities into PACT and PCMH will also lead to a more coordinated effort to achieve cessation.

Because using may have occurred over several months or years, quitting can be protracted and challenging. Hence, there is a need for integration and coordination of effort at all levels: veteran, family, provider, and organization. There is need for disciplines to work together when completing tobacco screening and in treatment continuation. The need to coordinate activities in both outpatient and inpatient care areas is also critical. It is imperative that each time a tobacco screening is completed and treatment is offered and used, documentation is performed in the patient's record, with add-ons made with subsequent therapy sessions. This is important not only to monitor progress made by each veteran at each contact, but also to ensure continuity while noting and addressing challenges to quitting.

It is recommended that the VHA develop a template titled "Tobacco-Cessation Class" specifically for documenting provider-patient interactions or interventions that relate to tobacco-use treatment. On this template would be recorded each tobacco-cessation group or class that is held, progress made by each veteran, challenges to quitting, and how such challenges can be or were addressed.

Further improvement effort or research is needed to determine whether a veteran's age and era of military duty play a role in when initial tobacco use starts. According to the audit, the age range with the greatest tobacco use was 41-63, followed

by 18-40, whereas no tobacco use was reported for ages 64-86; see Figure B below. Using veteran's age, as indicated above, it was also important to determine whether the era of duty influenced the amount of cigarette use, patterns of use, reasons/s for use, and desire to use or refuse treatment, as well as if any of these factors played a role in the type of treatment used.

Strengths

One of the strengths of this project is that the facility had a paper trail for the veterans who resided at the facility, including the date of admission and the date of discharge from the facility. This paper trail or record not only helped me in completing random sampling, but also helped me to save time.

Data from the chart audit showed that providers used the "5A" model (ask, assess, advice, assist, and arrange), and documentation of veterans' responses to the questions that were asked (by nurses) during admission nursing assessment. Records also revealed that for those veterans who were willing to quit, the cessation service used, whether it was medication, counseling /tobacco-cessation class, or both medication and counseling, was well documented. There was also documentation of those veterans who refused treatment for tobacco cessation.

A veteran's ability to make a treatment choice is an indication that the veteran participated in his or her plan of care. A veteran making his or her own choice of treatment leads to empowerment, and the provider honoring this treatment choice (as the record showed) strongly suggested strength and patient empowerment.

Limitations

The absence of a template for documenting tobacco-cessation interventions such as: group or counseling was the most profound limitation of the project. The absence of a template to document group or tobacco-cessation class held created some difficulty in navigating the records in search of documents and was indeed time consuming.

The individuals who were admitted to this facility and whose charts were audited had a history of homelessness, mental illness, substance use disorder, or a combination of the above. Although effort was made by VHA providers at this facility to locate housing so that veterans could be placed in the community at the time of discharge, it was difficult to adequately evaluate the outcome of cessation services delivered, especially when aftercare upon discharge from the treatment facility indicated “no show” for the appointment.

Analysis of Self

Nurses play an integral role in the healthcare system. Nurses spend time in the healthcare environment, whether with the patient or in administrative/leadership roles. As a result, nurses have the obligation to fully embrace and contribute to the environment in which they work by participating in improvement projects and in policy making.

As an advanced practitioner, I have the knowledge and skill required to conduct a needs assessment, plan to address identified need(s), implement interventions, evaluate outcomes, and disseminate the findings of a project. Hence, in this doctoral program, I conducted a need assessment, collected and analyzed data, and developed a method to disseminate the results of the project. The effort to identify and address the needs of the individual or community in this case came with some challenges, which were

successfully resolved. The completion of this project in its entirety required time, commitment, and perseverance, which were all invested for successful completion.

As I move forward in my career, my goal is to continue to educate veterans on the health risks of tobacco while advocating for cessation. As a scholar-practitioner with knowledge of the health risks of tobacco to those who smoke as well as to nonsmokers, I see no greater challenge than becoming part of a healthcare system and a profession that seeks to evaluate practices and procedures while embracing evidence-based medicine.

Summary and Conclusion

Tobacco can pose a serious health issue. Efforts to combat its use should stress both the dangerous effects of tobacco as well as the benefits of quitting—hence the call for VHA providers to use clear and strong messages during screening and counseling (VHA, 2012).

Studies have indicated that most veterans want to quit smoking (Gierisch et al., 2012). Helping a veteran to quit using tobacco should involve frequent patient-provider interactions that include assessments or discussions relating to readiness to quit and assisting the veteran in making choices that will help him or her to successfully quit.

The VHA (2006) has recommended that providers use the "5A" model when completing tobacco screening; components of the model include ask, assess, advise, assist, and arrange. This model can be used in both inpatient and outpatient care settings and can be incorporated into individualized treatment plans. It is also imperative to employ an integrative approach that involves the veteran and nonveteran, family members, and friends as well as the healthcare system. Using PACT/PCMH models that already exist in the VHA (U.S. Department of Veterans Affairs, 2017a) and the elements

of the CCM (Glasgow et al., 2001), it is expected that healthcare providers will use a coordinated and collaborative approach when delivering interventions, monitoring interventions, and evaluating outcomes of care.

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Appendix A: Literature Review Matrix

Full reference	Theoretical/ conceptual framework	Research question(s)/ hypotheses	Research methodology	Analysis & results	Conclusions	Grading the evidence
Centers for Disease Control and Prevention. (2016b). *Best practices for comprehensive tobacco control programs*. Retrieved from http://www.cdc.gov/tobacco/stateandcommunity/bestpractices/pdfs/2014/sectionA-III.pdf	NA	NA	NA	NA		Level I
Doody, C., & Doody, O. (2016). Introducing evidence into nursing practice using the IOWA model. Retrieved from https://ulir.ul.ie/bitstream/handle/10344/1801/Doody.pdf	IOWA model	NA	Peer review	NA	Effective care and treatment are dependent on the quality of care, which is based on best practice. IOWA model can help nurses with evidence-based practice.	Level I
Gierisch, J., Straits-Troser, K., Calhoun, P., Acheson, S., Hamlett-Berry, K., & Beckham, J. (2012). Tobacco use among Iraq- and Afghanistan-era veterans: A qualitative study of barriers, facilitators and treatment preferences. Retrieved from http://www.cdc.gov/pcd/issues/2012/11_0131.htm	NA	NA	Qualitative study. Focus groups	Qualitative content analysis, coding and themes and by calculating frequencies and means.	Veterans see smoking as endemic in the military. Veterans want to quit smoking but cite obstacles that interfere with attempt to quit.	Level V
Glasgow, R., Orleans, T., Wagner, E., Curry, S., & Solberg, S. (2001). Does the chronic care model serve also as a template for improving prevention? *Milbank Quarterly, 4,* 579-612.	Model	NA	Randomized study, meta-analysis, systematic reviews	When implemented at a program, showed positive behavioral, clinical, and economic outcomes. Results showed a 15.5% drop in prevalence of tobacco use in 1994 from 25% in 1985.	There is overlap between preventive care and the management of chronic diseases. CCM can be used to improve clinical preventive services and can be used to close the gap between best practices and usual practice for the management of chronic illnesses.	1

(*table continues*)

Full reference	Theoretical/ conceptual framework	Research question(s)/ hypotheses	Research methodology	Analysis & results	Conclusions	Grading the evidence
Hung, D., Rundall, T., Tallia, A., Cohen, D., Halpin, H., & Crabtree, B. (2007). Rethinking prevention in primary care: Applying chronic care to address health risk behaviors. Retrieved from https://www.researchgate.net/publication/6486099_Rethinking_Prevention_in_Primary_Care_Applying_the_Chronic_Care_Model_to_Address_Health_Risk_Behaviors	Framework		Cross-sectional survey instruments	Multivariate regression analysis, 5-point Likert-scale.	Chronic care model (CCM) is a framework for preventive care. Implementing CCM into primary care practices may benefit from implementation of CCM.	1
Kelly, M., Sido, H., & Rosenheck, R. (2016). Rates and correlates of tobacco cessation service use nationally in the Veteran Health Administration. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/27148953	NA	NA	Analysis of VHA administration data	Increasing one visit for every 100 veterans will increase the % of veterans involved in tobacco-cessation by 35%.	Veterans who have substance use disorder underuse VHA tobacco-cessation services.	1
Laniado-Laborin, R. (2010). Smoking cessation intervention: An evidence-based approach. Retrieved from https://www.ncbi.nlm.nih.gov/pubmed/20203458/	NA	NA	Longitudinal studies, systematic reviews, randomized clinical trials. Delphi method.	Statistical method.	Combined therapy using medications and behavioral modification are more effective agents.	1
National Center for Biotechnology Information. (2008). Treating tobacco use and dependence: 2008 update. Retrieved from https://www.ncbi.nlm.nih.gov/books/NBK63952/	Clinical practice guideline	NA			Clinicians can best intervene in tobacco-cessation effort when they have institutional support.	
U.S. Department of Health and Human Services. (2008). *Clinical practice guideline: Treating tobacco-use and dependence—2008 update*. Retrieved from http://bphc.hrsa.gov/buckets/treatingtobacco.pdf	NA	NA	Collection and screening of articles and literature. Systematic reviews, randomized controlled trials, meta-analysis, expert panel reviews.	Guideline data analysis.	Healthcare policies have significant impact on a smoker's likelihood of receiving effective tobacco-cessation treatment and successfully quitting smoking. Clinicians need information on multiple effective	1

(*table continues*)

Full reference	Theoretical/ conceptual framework	Research question(s)/ hypotheses	Research methodology	Analysis & results	Conclusions	Grading the evidence
					treatment options and organizational support to use the options. Joint effort by clinicians, insurers, administrators, and purchasers that embraces a culture of care that meets optimal standards while admitting that failure to intervene with providing care to a tobacco-user is not consistent with standard of care.	
Veterans' Health Administration. (2006). *Integrating tobacco-cessation treatment into mental health care: A preceptor training program to improve the delivery of tobacco cessation treatment for veterans with mental disorders*. Retrieved from http://www.publichealth.va.gov/docs/smoking/smoking_mentalhealth.pdf	Train-the-trainer model	NA	Randomized controlled clinical trial. Integrated care approach.	NA	It is feasible ad more effective to incorporate practice-guideline-based smoking cessation treatment into routine mental health care delivery for patient who has post-traumatic stress disorder (PTSD).	1

Appendix B: Presentation of Findings

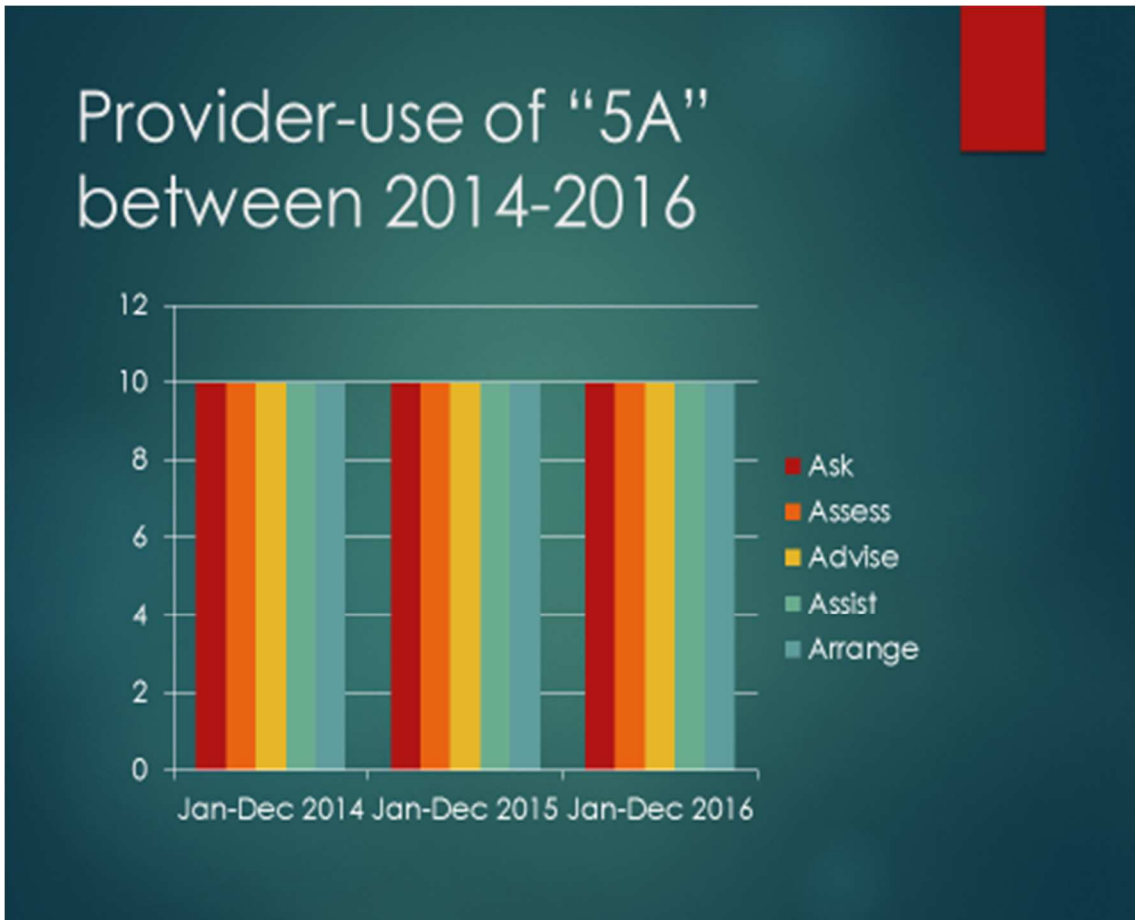

Figure B1. Provider use of "5A" model. The graph above shows how providers used the "5A" model (ask, assess, advice, assist and arrange) when delivering tobacco-cessation services.

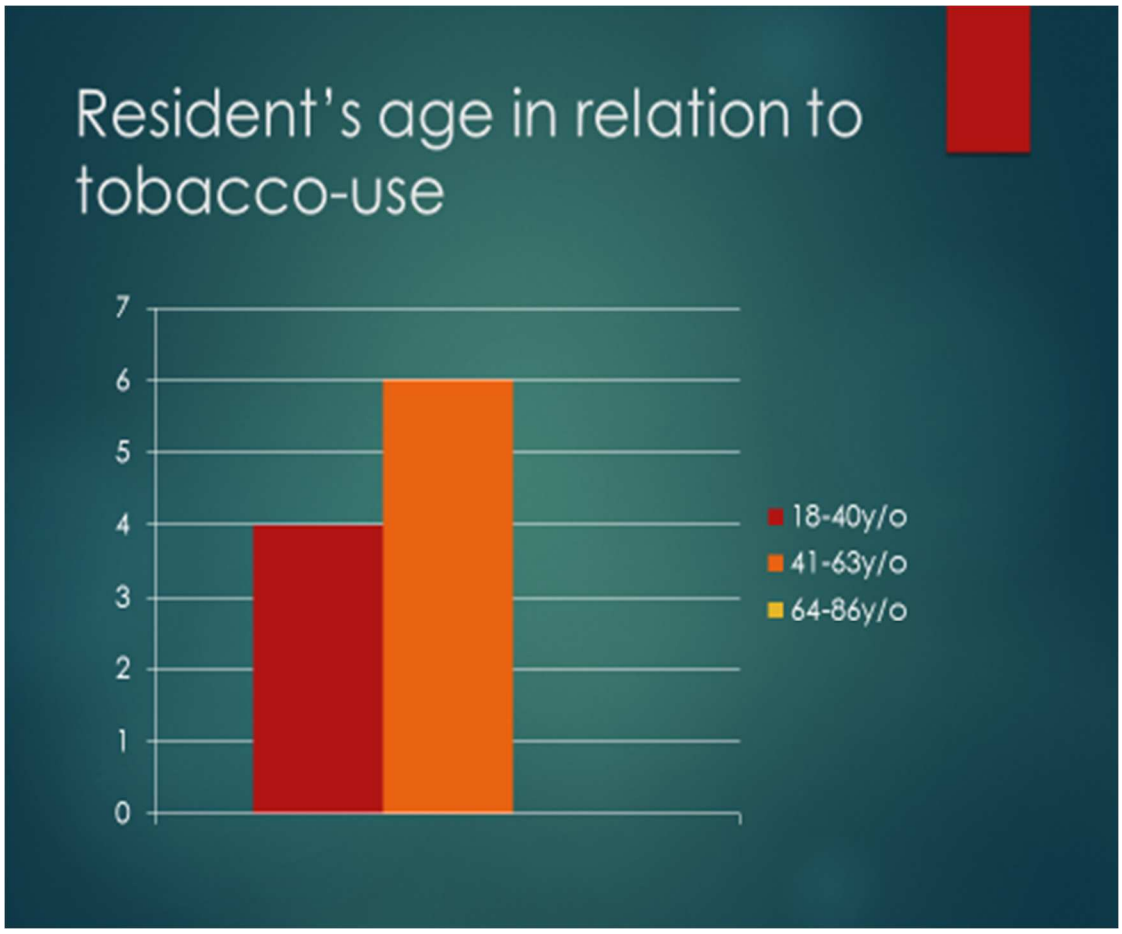

Figure B2. Resident's age in relation to tobacco use. Graph above shows age of resident as it relates to tobacco use.

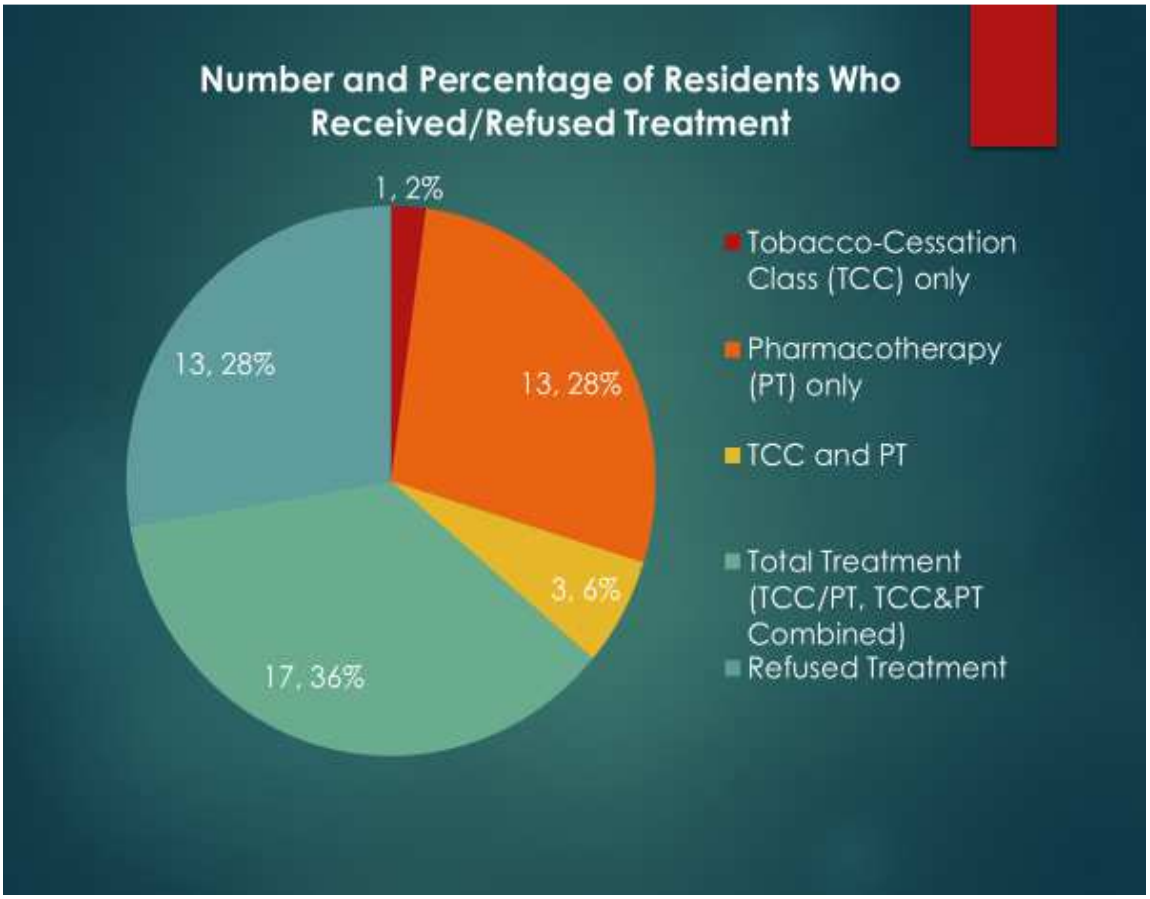

Figure B3. Total number/percentage of residents who received or declined treatment. The above is a breakdown of the number and percentage of treatment received for tobacco-cessation: medication/s (nicotine replacement therapy, Chantix, and a combination of both), counseling (tobacco-cessation class), and both medication and counseling combined. The above graph also shows the number and percentage of residents who declined or refused treatment.

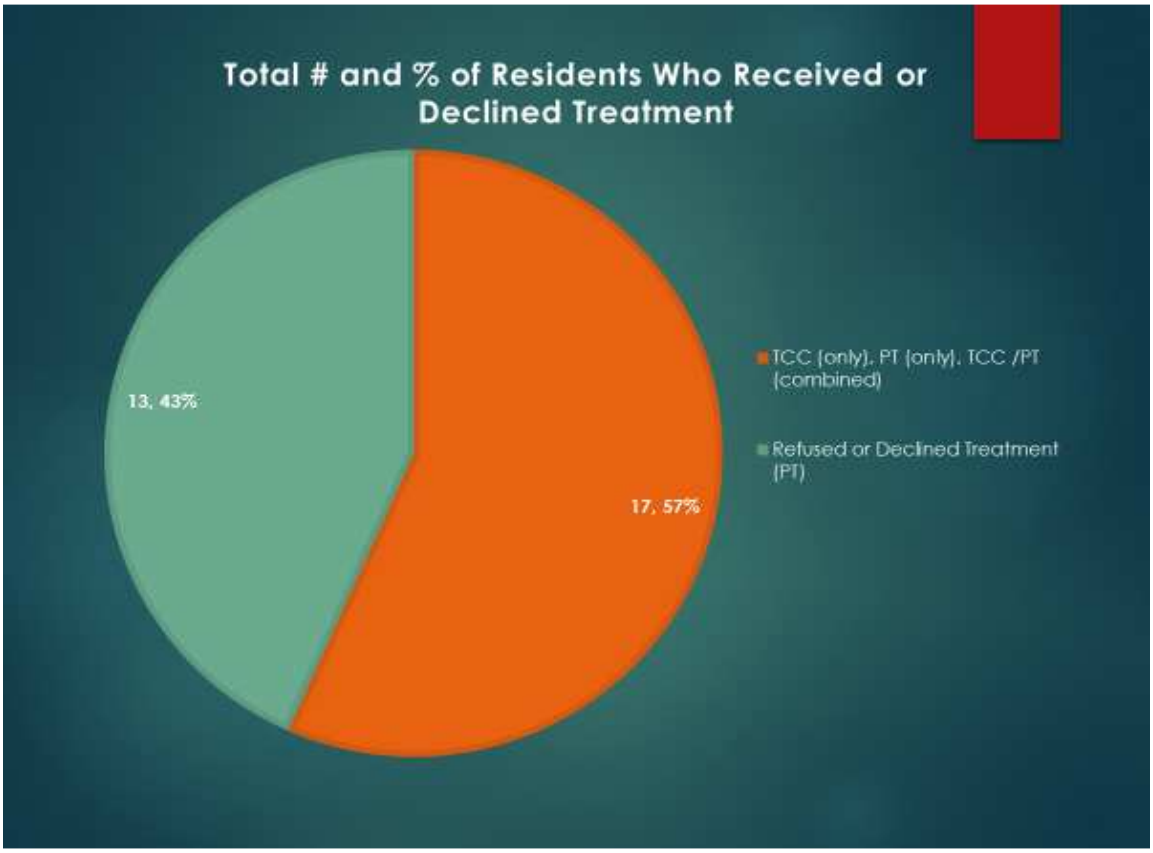

Figure B4. Treatment used and treatment declined or refused. The above graph is a comparison of the number and percentage of residents who received or refused treatment for tobacco.

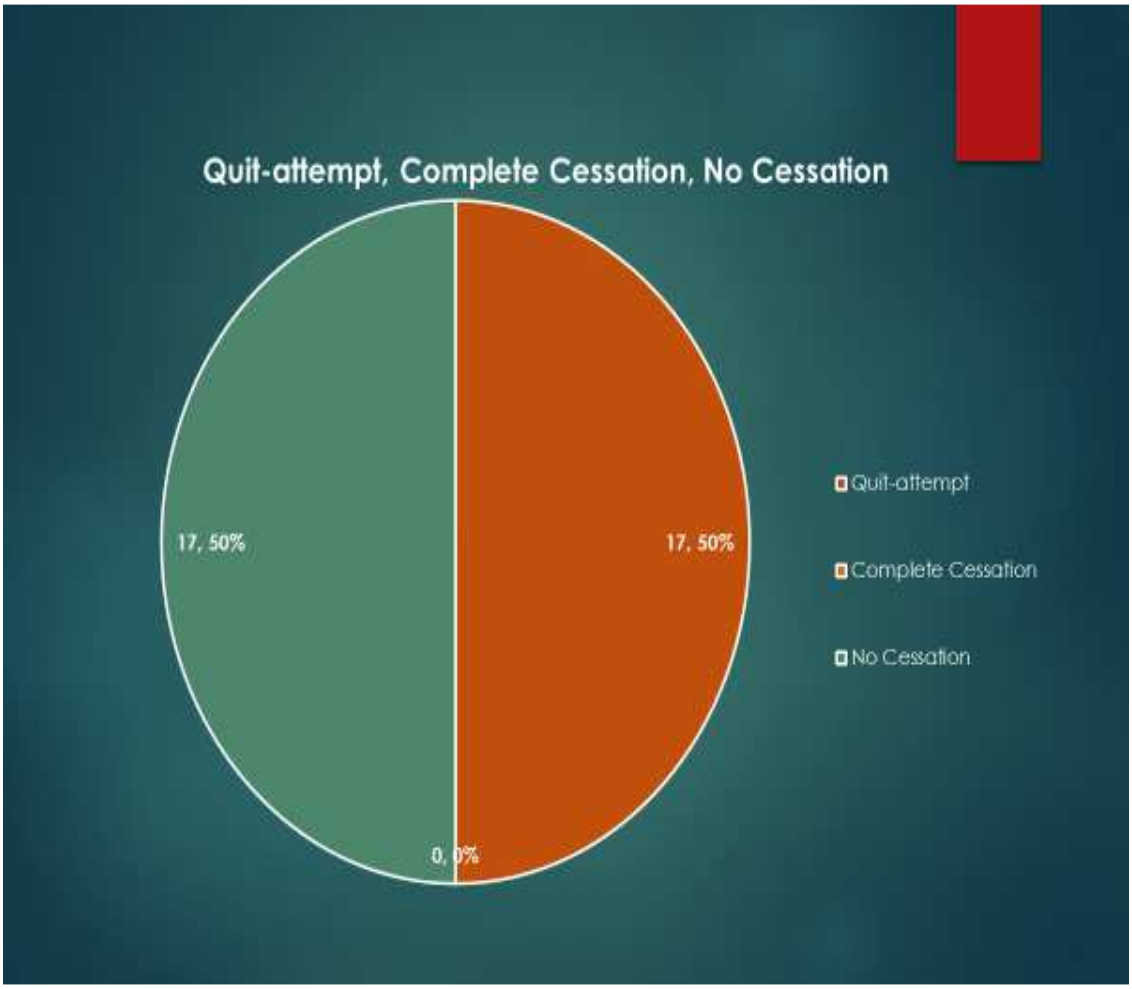

Figure B5. Percentage of veterans who made quit attempt, stopped smoking, or refused treatment.