

2020

Use of the Smoking Cessation Power Plan in an Observation Unit

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Walden University

College of Health Sciences

This is to certify that the doctoral study by

Joycelyn Kennedy Land

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

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Walden University
2020

Abstract

Use of the Smoking Cessation Power Plan in an Observation Unit

by

Joycelyn Kennedy Land

MSN, Walden University, 2015

BS, College of Charleston, 2001

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

Walden University

February 2020

Abstract

Of 34.2 million adults who use tobacco, nearly 50% of the population living in the United States, or 16.5 million people, have a smoking-related disease. The purpose of this DNP project, conducted on an observational unit located in an acute care hospital, was to address the evidenced-based practice gap of the limited use of assessing tobacco use and the initiation of a readily available smoking cessation power plan (SCPP) intervention by nurses and healthcare providers. The practice-focused questions were whether an educational intervention for nursing staff would increase use of the 3As assessment (Ask and record smoking status; Advise patient of personal health benefits; and Act on patient's response) and provider prescribing of the SCPP intervention. Roger's diffusion of innovation theory was used as the framework for the development and implementation of this DNP project. A pre/post intervention design method was utilized for data collection. The preintervention data showed that only 3.8% of 233 patients were identified as smokers and ordered an SCPP. Following the educational intervention, 100% of patient smokers were identified and had an SCPP ordered. Based on the McNemar test the analysis results indicated a significant difference ($p < 0.001$). The findings of this project demonstrate the importance of an educational program to improve nurse and healthcare provider evidence-based assessment, identification, and treatment among patients who smoke. Implications for positive social change are based on improving upon the initiation of tobacco cessation plans that can lead to improvement in the patient's quality of life, the environment, work productivity, and the economic burden of smoking.

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Dedication

The completion of this project marks a milestone in my career from an advanced practice nurse to a doctoral-educated scholar. Without the unconditional love and support of my family, I would not have succeeded. I dedicate this project to my husband David, our daughter Kacie, and my parents. Thank you for giving me the space I needed and believing in me.

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Section 1: Nature of the Project

Introduction

Tobacco use in the United States is the leading and ongoing cause of preventable disease, death, and disability in the United States (American Lung Association, 2018). According to the Centers for Disease Prevention and Control (CDC, 2018), over 40 million people currently use tobacco in the United States and another half million die of tobacco-related illnesses. The World Health Organization (WHO, 2015) reported that 6 million people world-wide lose their lives to tobacco use. Moreover, Steliga (2018) posited that many patients referred to cardiac, thoracic, and vascular surgical clinics are seen for diseases and illnesses secondary to tobacco use. As a result, tobacco use from cigarette smoking is a major risk factor for cardiovascular morbidity and mortality (American College of Cardiology, 2018). The American Lung Association (ALA, 2018) posited tobacco use is the leading cause of lung cancer and chronic obstructive pulmonary disease (COPD). Necessary precautions need to be taken to reduce tobacco use because the number of tobacco-related deaths will reach 8 million annually by 2030 (WHO, 2010).

In South Carolina, 20% of adults smoked cigarettes in 2016 (truth initiative.org, 2019) as compared to the national rate of 17.1%. Moreover, in 2017, 10% of high school students reported smoking at least one day in the past 30 days (truth initiative.org, 2019). The CDC statistics showed 38% of tobacco users had less than a high school degree in 2012 (CDC, 2014). Socially, tobacco dependence is a crippling factor on the economy as well as quality of life for patients and families. The economic burden of tobacco use in

South Carolina is \$1.90 billion per year and losses in productivity are \$2.35 billion per year (truth initiative.org, 2019). Promoting all efforts to prevent tobacco use and to improve tobacco cessation is imperative to help eradicate the negative impact of tobacco use in communities.

The World Health Organization (Burki, 2014; WHO FCTC, 2010) established the Framework Convention on Tobacco Control to set standards for health-promoting hospitals to ensure a comprehensive approach to tobacco cessation. The standards are patient assessment, patient information and intervention, promoting a healthy workplace, and continuity and cooperation (Burki, 2014; WHO FCTC, 2010;). As part of these standards, Afshari et al. (2016) concluded that it is the responsibility of healthcare organizations to ensure appropriate and efficient assessments including health promotion, disease prevention, and rehabilitation. The patient information and intervention standards set by the WHO discusses the organization's duty to provide patients with information on factors about their health condition and establish health promotion interventions (Afshari et al., 2016).

In order to meet these standards, the development of smoking cessation interventions within the electronic medical record (EMR) has been a useful tool as it encourages health care providers to initiate evidence-based tobacco treatment and referrals. Acute health care settings, such as hospitals, provide an optimal opportunity to identify and discuss tobacco dependence with patients and families. The Health Information Technology for Economic and Clinical Health Act (HITECH) in 2009 promoted and expanded the use of the EMR for improvement of the health care delivery

system. The U.S. Department of Health and Human Services mandates hospitals and health professionals to electronically screen for tobacco use and provide pharmacotherapy treatment with outpatient treatment referrals (Karn et al., 2016). Sarna et al. (2012) postulated that the National Commission of Preventable Priorities identifies tobacco screening and cessation interventions as a high priority in clinical preventive service for adults in the population.

Despite a high adherence for screening for tobacco dependence, assessment of assistance to cease smoking has remained low nationally (Bailey et al., 2017). In a comparison report, Bailey et al. (2017) revealed a significant increase in patient referrals and tobacco cessation interventions occurring after the Stage 1 meaningful use (MU) implementation in the EMR. Boyle, Solberg, and Fiore (2014) commented that use of the EMR for tobacco cessation can result in improved outcomes of patient referral and increased rates of cessation. Researchers have also supported the use of technology with digital tools may improve provider adherence to evidence-based practices without adversely affecting clinical workflow or patient care (Boyles et al., 2010; Kalkhoran et al., 2016; Satterfield et al., 2018).

A tobacco-cessation intervention plan, known as the smoking cessation power plan (SCPP), was developed by the host organization and embedded in the EMR in order to provide options for the initiation of pharmacotherapy and an outpatient referral service by providers. The SCPP guideline offers Federal Drug Association (FDA) approved medications that can be started during admission in the acute care setting.

Problem Statement

The identified problem in the organization is the lack of implementation of the SCPP in the Clinical Decision Unit (CDU) by staff nurses and providers. The CDU is a 15-bed observation unit providing care to patients requiring evaluation and treatment for a period of less than 2 midnights. The patient mix is variable however, the majority of the patients are evaluated for stroke, transient ischemic attack (TIA), chest pain, and COPD/asthma exacerbations. Many of the illnesses involve a component of tobacco-related illnesses requiring further patient assessment, treatment, and education. Within the CDU, there has been suboptimal health promotion of tobacco cessation. To adhere to national recommendations and promote tobacco cessation, the quality improvement committee of the host organization developed the SCPP. The purpose of the SCPP was to offer a guideline based on evidence-based smoking cessation interventions. The structure of the power plan allows providers a simple and inclusive way to initiate appropriate interventions that are aligned with the recommendations set forth by the World Health Organization and US Taskforce for Preventive Services to reduce and prevent tobacco use (USTFPS, 2019; WHO, 2019).

Researchers suggested that a significant barrier to hindering the use of interventions is the lack of knowledge and training to use them (Andres et al., 2018). Nurses are an integral part of this advocacy because much of nursing care and time is spent in direct patient care. Fiore, Goplerud, and Schroeder (2012) observed that inpatient hospitalization provides an optimal opportunity for health care providers to confront patients about tobacco use and the adverse outcomes for them and their families.

Moreover, the Joint Commission Tobacco Cessation Performance Measure took effect in 2012 requiring health care organizations to be accountable for patient education and interventions regarding tobacco use (Fiore, Goplerud & Schroder, 2012). The rule mandates that tobacco-dependent patients are provided tobacco treatment during admission and at discharge, document tobacco use and the interventions given, and refer the patient to an outpatient tobacco cessation program.

Grau, Weiss, O’Leary, Camenga, and Berstein (2019) demonstrated that perceptions, beliefs, and awareness of an electronic record embedded tobacco treatment plan varied among providers, however with the appropriate education and influence from leaders, providers were more likely to utilize the system. Svane et al. (2018) commented that clinical health promotion efforts aim to achieve better health gains for patients, medical health staff, and communities. As new evidence develops in medicine and health, changing clinical practice to align with the best evidence through guidelines is critical to promoting quality health outcomes. Gaps in practice exist when clinical practices do not integrate new, effective evidence which improves patient health outcomes and progress the population toward U.S. initiatives to decrease tobacco use.

Purpose Statement

The purpose of this DNP project was to bridge the gap in current nursing practice by developing a staff education program for nurses about the SCPP embedded in the EMR and how to promote its use to providers. The DNP project answered the following questions:

1. Will the implementation of a nursing education intervention geared towards the utilization of the SCPP increase use of the SCPP by providers in an acute care setting observation unit?

2. Will the provider activation of the SCPP increase as a result of the 3 As assessment?

Tobacco use and exposure is a national health issue affecting millions of children, adolescents, and adults annually. Illnesses that develop as a result of tobacco use can be avoided or improved with appropriate and timely education to patients who are at risk. Many tobacco users lack the education and resources to quit smoking. Whitehead, Zucker, and Stone (2014) stated that annually, 40-60% of smokers attempt to quit, however, without health provider assistance only 3-5% are successful. Andres et al. (2018) stated that between 60-70% of hospitalized patients attempt to quit but the lack of implementing tobacco cessation interventions leads to relapsing in the outpatient setting.

Healthy behaviors decrease patient mortality and improve the overall state of health for the patient and the economy. Tobacco cessation education aligns with the organization's strategic plan to improve quality measures related to cancer screening established by Centers of Medicaid and Medicare Services (CMS) for reimbursement. Boosting utilization of the SCPP to begin treatment and make outpatient referrals enhances the organization's goal to develop positive impacts to patient health outcomes and increase revenue through reimbursement.

Nature of Doctoral Project

The staff education development manual (Walden University, 2017) will provide the guidance for the development and implementation of a sound program for the CDU. The sources of evidence will be obtained from patient medical records. Information regarding the prevalence of tobacco use will be obtained from statistics and data retrieved from the Centers for Disease Prevention and Control and the South Carolina Department of Health and Environmental Control.

Significance

The significance of the DNP project was multifactorial. On the individual level, at risk patients need to engage in ongoing education and access to treatment opportunities facilitating the reduction and abstinence from the use of tobacco. By educating nurses of readily-available resources that can easily be shared with patients and their families, the hope is that patients will adhere to the guidelines and reduce and possibly cease their cigarette use. It is estimated that for every 100,000 smokers who use proven treatment aid cessation, between 7,500 and 30,000 life-years will be saved in the future (Barnett, Wong, & Hall, 2008).

On a systems level, organizations have an obligation to enforce the use of available systems that serve to improve patient care. Moreover, quitting smoking affords significant health benefits for secondary organizations such as fewer complications and shorter hospital stays (Chang, et al., 2016; Cataldo et al., 2010). A SCPP is embedded in the electronic medical record providing a guide to initiate smoking cessation intervention recommendations. Furthermore, health promotion is an obligation for all health care

organizations. Quality measures set forth by the CMS force health care organizations to comply with specific guidelines to receive reimbursement. Furthermore, the Centers of Medicare and Medicaid Electronic Health Record Incentive Program provides incentives to healthcare organizations that demonstrate meaningful use of the EMR reporting of quality measures (Greenwood et al., 2012). The CDU is considered an extension of the emergency room and provides services that are covered under insurance. Therefore, the SPPP satisfies the quality measure requirement and serves to improve reimbursement for services.

Summary

Health promotion is a duty of all health professionals. Tobacco cessation and prevention initiatives are in place to help combat tobacco abuse in adults, adolescents, and pregnant women. Every encounter with an at-risk patient is an opportunity to provide evidence-based assessment and initiate appropriate treatment and education strategies. An embedded tobacco cessation treatment intervention in the EMR can equip providers and nurses with the appropriate evidence-based tools to address the practice problem and the need to improve tobacco use assessment through nursing staff education requires further evaluation. Discussion of the problem by integrating nursing theory, the relevance of the problem in nursing practice, local background information, and the role of the DNP student are key components of this DNP project.

Section 2: Background and Context

Introduction

Missed opportunities exist when hospitals are not aligning practices with national initiatives and recommendations proposed by the WHO and the U.S. Preventive Services Taskforce (USPSTF). One missed opportunity is the underutilization of the SCPP in the observation unit. To promote the increased use of the power plan in the observation unit, an introduction of change in practice needs to occur. The following section discusses Roger's diffusion of theory and how it aligns with this DNP project.

Roger's Diffusion of Innovations Theory

The framework for this DNP project is Roger's diffusion of innovations. Diffusion is a social process occurring in response to learning a new innovation developed from evidence-based practice to extend or improve health care (Dearing & Cox, 2018). Adoption of new clinical behaviors or activities can pose a challenge to successful change or adoption of ideas. The current project requires a change in staff behavior regarding utilization of the smoking cessation power plan. The SCPP is not a new concept or innovation in the organization. Rogers (1983) commented newness of an idea is not as important as the newness of the idea to the individual. Innovations were developed many years ago but may not have been implemented into practice for various reasons.

The introduction of an unfamiliar innovation to nursing staff may pose a challenge. Applying the principles of the diffusion of innovations theory to develop a staff intervention focused on the smoking cessation power plan offers an opportunity for

the successful adoption and use of the power plan among the nurses. The diffusion of innovations theory by Rogers posited certain characteristics of an innovation can facilitate change (Sanson-Fischer, 2004). The characteristics are relative advantage, compatibility, complexity, trialability, and observability. These characteristics of innovation, as perceived by individuals, help explain the rate of adoption.

Relative advantage. Relative advantage refers to the degree that an innovation is more efficient than what is already in place (Rogers, 1983). Currently, there is a smoking cessation power plan and nursing tobacco assessment documentation available. However, the lack of awareness and knowledge of the smoking cessation power plan has resulted in low rates of tobacco dependence cessation education, initiation of appropriate pharmacotherapy treatment, and referral to cessation programs at discharge. The relative advantage for the education intervention will allow nurses to become more aware of its availability with the hope of increasing its use in patient care.

Compatibility. Compatibility refers to how an idea is consistent with the values, experiences, and needs of the adopter (Rogers, 1983). Basically, the adoption of an educational innovation is less likely if the user does not perceive positive alignment with nursing or organizational values, or does not perceive the change is needed. Tobacco cessation is a priority initiative for most health promoting hospitals. Uncertainty of the outcome of a change can determine whether a change is adopted. Health education and promotion is compatible with the role of the nurse. Tobacco prevention, cessation, treatment, and education are priority focus areas within the host organization for patient outcomes improvement.

Complexity. Complexity represents the degree to which an innovation is easy to use and understand (Rogers, 1983). A learning curve may exist for nurses who are not familiar with navigating the electronic medical record system used by the host organization. The educational intervention will inform the staff of the importance the power plan as well as demonstrate the steps to using the power plan.

Trialability. Trialability refers to available options to try the innovation on a trial basis (Rogers, 1983). Allowing users to experiment with an innovation or try it out may increase the chances of successful adoption. Delivering interventions in small amounts and allowing the staff to test it out for a limited time may result in a period of positive adjustment before moving forward with full implementation. Nurses will be able to adapt to the change and make modifications or tailor it to their daily routine in patient care delivery.

Observability. Observability signifies the degree to which access to the results of the innovation is available (Rogers, 1983). If individuals can see an intervention is working, they may be more agreeable to adoption of the change. The smoking cessation power plan is readily accessible to nursing staff as a part of the electronic health record. To promote ease and familiarity, nurses will participate in return demonstrations of tobacco use assessment and identification of an active SCPP.

Relevance to Nursing Practice

The SCPP education is relevant in nursing practice because it enhances nursing knowledge utilized for improvements in patient care and health outcomes. Health promotion and patient education are imperative aspects of a health care professional's

role to exert positive social change and advocacy. As the largest health professional group, nurses have direct access to patients providing various opportunities to engage in education and assessment of patient health problems and needs (American Nurses Association, 2018). Assessment and evaluation are elements of the nursing process, therefore identifying and executing appropriate interventions is a skill all nurses should possess in the management of smoking cessation. Collaboration is a necessary component of patient care in the healthcare setting. Nurses communicate and interact with several members of the medical team including physicians, advanced practice providers, pharmacists, and ancillary services. Nurses are at the forefront of health care reform along-side advance practice nurses and physicians. Integrating evidence-based interventions into clinical care advances nursing practice for better outcomes for patients, their families, the community, and the economy.

Local Background and Context

The host organization is a 641-bed regional community teaching medical center serving more than 225,000 patients from across the state of South Carolina and beyond per year. The Clinical Decision Unit is staffed with 10-15 registered nurses. This staff mix includes travel nurses and nurses that float from other units during short staffing. The unit is a 15-bed observational unit providing acute care to patients who will require less than two midnights of treatment or monitoring. The staff of the unit is comprised of 3 nurses, 3 assistive personnel, 1 case manager or social worker, 1 pharmacist, 1 physician, and 1 advance practice provider. The average census of the unit is 10-12 patients. The patient mix is variable with illnesses including COPD/asthma exacerbations, TIA, chest

pain, strokes, and hypertension. Many of these illnesses coexist with tobacco dependence in several patients admitted to the observation unit. It is the goal of the organization to identify and address tobacco dependence on every patient admitted to the hospital. Even though the length of stay in the CDU is a less than two midnights, addressing tobacco use and dependence still needs attention.

Role of the DNP Student.

My role as a DNP student was to develop the staff education program and supervise its implementation. I applied the skills and knowledge I have obtained during my doctoral education by integrating the nursing process with the DNP essentials. These skills assisted me with implementing an evidence-based clinical intervention to further reflect my commitment to health care improvement and quality enhancements. The American Association of Nurse Practitioners (AANP, 2015) state the nurse practitioner's practicing in ambulatory, acute, and long-term care are the experts in health promotion and disease management. It is incumbent for nurse practitioner and doctoral graduate programs to provide students with the curricula that aligns with core competencies needed to be effective leaders in health care.

Professionally, I practice in the acute care setting. Therefore, my primary role as a nurse practitioner leader is to ensure that safe, effective and quality care in the acute care setting is optimal. Tobacco use is a featured quality measure for the organization. Missed opportunities for smoking cessation teaching and treatment hinder the progression of meeting quality goals. As a nurse leader, I can help drive the initiatives to improve patient outcomes through clinical practice and innovation.

The motivation for this doctoral project is to improve health outcomes. During my experiences as a nurse practitioner in acute care, I have come across patients of various ages suffering from preventable illnesses. If I can provide a way, no matter how small or large, to make a positive impact on patient quality of life through new and effective evidence, I am up for the challenge. Education, appropriate treatment, and accessibility to care can improve patient outcomes.

Summary

In summary, developing an effective and efficient project plan requires choosing a framework based on theory applicable to the basis of the DNP project. Theoretical underpinnings of a project present the foundation of understanding how ideas are related and their relationship to each other (Ivey, 2015). The diffusion of innovations explained how the change process can be applied to the nature of the DNP project. The DNP project was relevant to nursing practice because it provides new knowledge that can improve nursing care and patient outcomes in health care. Addressing the gap in practice with this DNP project enhanced clinical practice for health improvements and reduce negative outcomes for patients, families, and the economy.

Section 3: Collection and Analysis of Evidence

Introduction

As a teaching hospital and acute care level organization, patient education regarding diseases, prevention, treatment, and referral are a part of the primary health goals of the host organization. As previously stated, tobacco dependence is an ongoing problem in the nation. National recommendations and requirements are available to help reduce the prevalence of tobacco use in hopes of reducing preventable diseases associated with tobacco use as well. The host organization has a SCPP available to providers that offer options and interventions congruent with national smoking cessation guidelines. However, its use in the observation unit is suboptimal. The lack of use results in missed opportunities for tobacco use reduction through education, interventions and referrals to outpatient programs.

Practice-Focused Questions

Locally, South Carolina rates of tobacco use among adults and high school teens are higher than the national average of 20%, versus 17% nationally for adults and 10% versus 8% for high school teens (truth initiative.org, 2019). The gap in practice exists when health care organizations fail to utilize tools developed from evidence-based practice to create national guidelines to assist in reducing disease and promoting prevention and treatments. Thus, the practice-focused questions for this DNP project were:

1. Will the implementation of a nursing education intervention geared towards the utilization of the SCPP increase use of the SCPP by providers in an acute care setting observation unit?
2. Will the provider activation of the SCPP increase as a result of the 3As assessment?

Operational Definitions for the Curriculum

Smoking intervention protocol(s). A guideline recommended intervention approach for brief assessment and treatment initiation for smoking cessation. There are two formats that can be used as effective screening intervention tools, the 3 or 5 A's. The format for the 5A's is ask, advise, assess, assist, and arrange. (smokingcessationtraining.org, 2018). The format for the 3As is ask, advise, and act. For the purposes of this project, the brief 3As format will be used to assess patients. Appendix A illustrates a sample flowchart outlining a conversation using the 3 As format.

Smoking Cessation Power Plan (SCPP). A compilation of evidence-based interventions developed by the host's organization's quality improvement committee. The SCPP allows the provider to select appropriate options for patient-centered care and treatment. The plan includes pharmacotherapy options for nicotine replacement therapies (NRT) to include nicotine patches or gum, Wellbutrin, or Chantix. Referral to outpatient tobacco cessation resources such as the 800 QUIT NOW line or a 6-week smoking cessation program provided by the host organization.

Tobacco use and dependence. In this project, tobacco use and dependence is defined as the habitual consumption of tobacco containing products such as nicotine, cigars, or pipes (Tobacco Use, 2017).

Provider: Defined as a physician (MD/DO) or advanced practice provider (NP or PA).

Sources of Evidence

I conducted a literature review using several nursing research databases including CINAHL MEDLINE combined search, CINAHL Plus with full text, Google scholar, ProQuest Nursing & Allied Health Source, MEDLINE with Full test, and Embase. The keywords for the search included smoking cessation, tobacco cessation, smoking cessation intervention, nursing education in tobacco cessation, electronic medical record, advanced practice nurse education in tobacco cessation education and training, nursing training, and tobacco use. An extensive review of the literature obtained from the various databases provides sources of evidence identifying the need to address the problem of tobacco use in the population on the local and national levels. For many years, local and national agencies have collected data to reflect the negative impact of tobacco dependence.

Tobacco use is responsible for a variety of preventable medical conditions causing increased mortality and morbidity. According to the CDC (2019), South Carolina tobacco use was higher than the national rate of 23% versus 21%, respectively. The highest rate of use is among the age group 25 to 44 years old. In 2017, South Carolina documented 7,200 deaths annually from tobacco related illnesses (CDC, 2019).

While tobacco use rates have decreased over the years, the CDC still reports high rates of tobacco use in South Carolina indicating a need for ongoing tobacco cessation education and prevention measures. The Agency for Healthcare Research and Quality (AHRQ) calls for system changes congruent with the latest evidence-based clinical practice guidelines for tobacco use and dependence. According to United States Preventive Services Taskforce (USPSTF, 2019) recommendations, clinicians should ask all patients about their tobacco use, advise cessation, provide education and FDA approved pharmacotherapy as appropriate. This USPSTF recommendation receives a Grade A. The Grade A rating notates that there is high level of certainty that the net benefit of the recommendation is substantial and strongly recommended. The suggestion is to provide this service to patients for the most positive outcomes. A high level of certainty explains that available evidence is consistent from well-designed and well-conducted research studies and the conclusion would not be affected by future research (USPSTF, 2019).

The latest update of the Treating Tobacco Use and Dependence guideline demonstrates the best practices for tobacco cessation based on research evidence. Treating Tobacco Use and Dependence is a U.S. Public Health sponsored clinical practice guideline developed by the Tobacco Use and Dependence guideline panel and public health consortium representatives, staff, and consultants (Department of Health and Human Services, 2014). Briefly, the key guideline findings and recommendations are noted as follows:

1. Effective treatments exist to significantly increase long-term abstinence,

2. Clinicians and health care delivery systems need to consistently identify and document use and treat every tobacco user
3. Brief tobacco dependence treatment is effective and clinicians should offer treatment to every tobacco user. The 5As tobacco cessation intervention is recommended to assess and treat all identified tobacco users.
4. Telephone quit lines are effective and clinicians should promote use and provide access.

The SPCP addresses each of the above recommendations. Routine brief intervention less than 3 minutes with the 5 or 3 As model by a nurse practitioners and other clinicians at every encounter can help improve efforts to reduce tobacco use (Malucky, 2010).

The host organization utilizes a quality measure tool called the Summer Data Validation Report. This is a public report displaying a summary of scores of significant performance measures within the host organization to assist quality specialists with improvement efforts in workflow, documentation, and guide education. There are nine performance measures included but for the purposes of this project, the tobacco cessation measure will be reviewed. The scores are collected every 6 months and compared for evaluation of improvement efforts. In 2018, the tobacco cessation validation score was 34.84%. This year, the 6-month validation measure score for tobacco cessation is 38.64%. There has been slight improvement but far from the goal of 100%. The Joint Commission has mandated succinct measures for hospitals to make a serious effort to address tobacco use and dependence. Researchers have shown that tobacco counselling

and pharmacotherapy can help decrease tobacco use and improve outcomes for patients and the population.

Smoking cessation education is part of the nursing role. Heath et al. (2017) suggested that the integration of evidence-based guidelines is within the scope of practice for all nurses. Educating nurses on cessation interventions is imperative to decrease tobacco-related deaths, diseases, and disparities (Sarna, Bialous, Chan, Hollen, & O'Connell, 2013). Nurse-led tobacco intervention strategies can be effective in promoting and providing tobacco cessation because nurses are uniquely placed to understand and meet patient needs for comfort and support (Zarling, Burke, Gaines, & Gauvin, 2008; Sarna et al., 2009).

However, many nurses do not receive formal smoking cessation and intervention education through their employer or in nursing programs (Carson et al., 2012; Matten et al., 2011) and report suboptimal education on tobacco cessation and treatment modalities. In undergraduate and graduate nursing programs, students reported that they did not receive sufficient training about tobacco use and treatment (Nichter et al., 2018; VanDevanter et al., 2017). The lack of education on the topic of tobacco cessation and interventions causes nurses practicing in many areas of care to be uncomfortable providing tobacco cessation to patients.

Evidence Generated for the Doctoral Project

Frequency of SSCP use information was obtained by collaborating with an information data specialist employed at the facility to ensure proper procedures to protect patients are used to protect patient information consistent with Health Insurance

Portability and Accountability Act (HIPAA). An initial review of the EMR identified active tobacco users and SCPP initiation for approximately 300 to 400 patients to obtain a base line verification of the problem. Inclusion criteria are patients who were admitted to CDU and identified as active tobacco users. Exclusion criteria include inpatients, emergency room patients, and non- or reformed tobacco users. Patient data regarding active tobacco use and use of the SCPP were collected from the electronic medical record (EMR) in order to establish the baseline data.

A brief education intervention consisting of the 3As approach was provided in a 60-minute session (Figure 1). The staff education session was presented as a power point presentation and focused on using the 3As approach in assessing the patients' needs to initiate the SCPP by a provider. The session included a brief introduction of the 3As assessment, the SCPP, current data regarding the frequency of use of the SCPP, a review of the SCPP format and its contents, a hands-on presentation reviewing the use of the EMR to access the SCPP, and a review of the steps the nurse utilized to communicate with the provider to initiate the SCPP. A reference guide sheet with tips and suggestions was also provided to all participants at the end of the education intervention. At the end of the educational intervention, nurses had the opportunity to perform a return demonstration for accessing the power plan. Figure 2 displays the SCPP in the EMR.

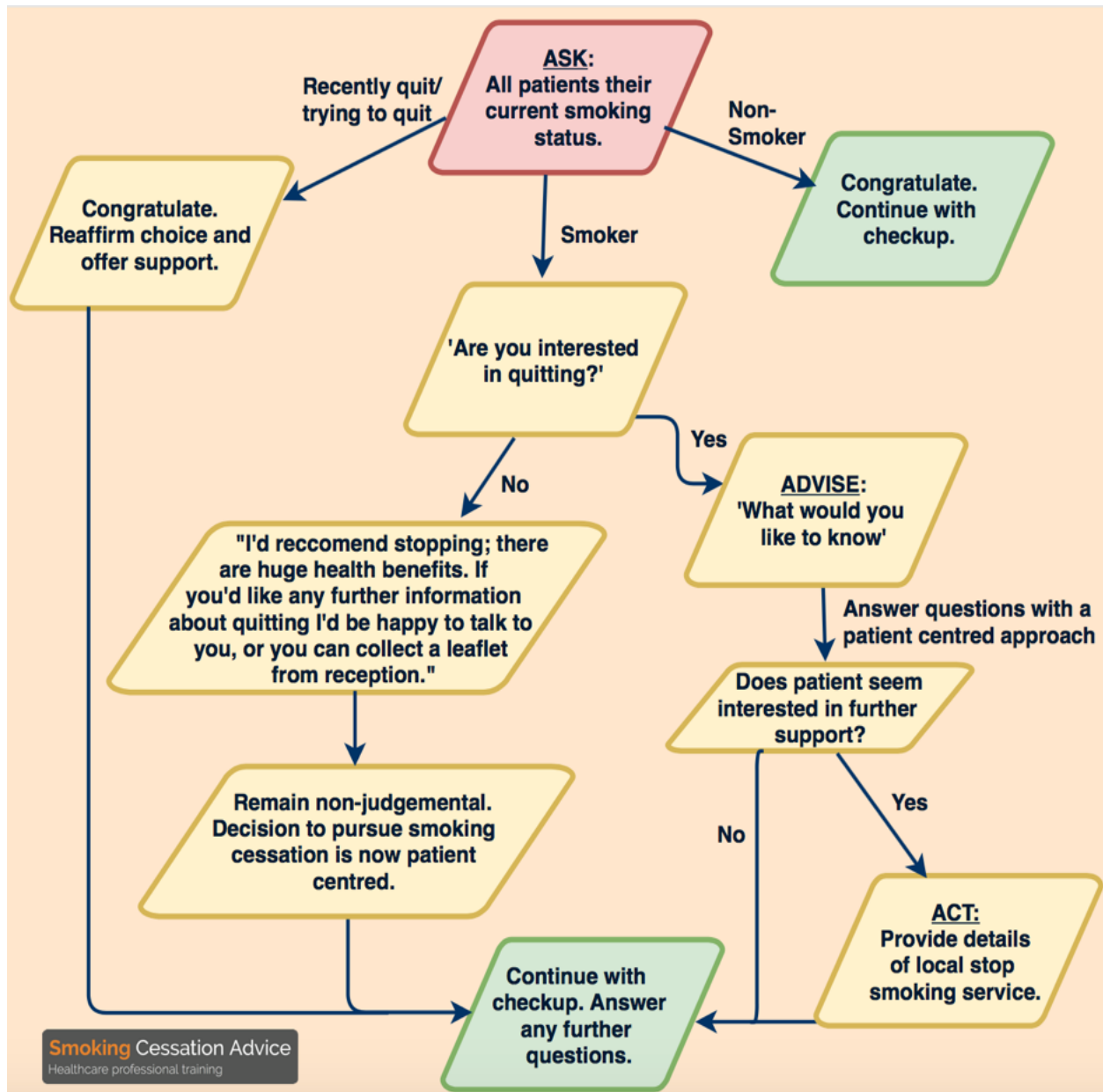


Figure 1. Outline of a conversation using the 3As protocol.

The screenshot displays an EMR interface for a 'Consult Smoking Cessation Program'. The left-hand navigation pane shows a tree view with 'Smoking Cessation, 6161 Subphase (Planned Pending)' selected. The main window shows a table of medications and components:

Component	Status	Details
Consult Smoking Cessation Program		Nurse to call: 296-CARE [2273]
Medications		
Nicotine Polacrilex Gum		
nicotine (nicotine gum)		2 mg, Gum, PO, q1hr(s), Other (see Instructions), as needed for smoking ...
nicotine (nicotine gum)		4 mg, Gum, PO, q1hr(s), Other (see Instructions), as needed for smoking ...
Nicotine Transdermal Patch		
nicotine (nicotine patch)		14 mg, Patch, TOP, daily, Other (see Instructions), for smoking history of... Remove old patch.
nicotine (nicotine patch)		21 mg, Patch, TOP, daily, Other (see Instructions), for smoking history of... Remove old patch.
Oral Medications		
buPROPion (buPROPion SR)		150 mg, SR Tablet, PO, qAM, ORALLY every morning for three days. THE... Do not crush.
+3 day buPROPion (buPROPion SR)		150 mg, SR Tablet, PO, 2xdaily, To begin after completion of bupropion ... DO NOT CRUSH
varenicline		0.5 mg, Tab, PO, daily, Days 1-3 of 0.5 mg PO daily x 3 days, then 0.5 mg ... Take after eating, with a full glass of water.
+3 day varenicline		0.5 mg, Tab, PO, 2xdaily, Days 4-7 of 0.5 mg PO daily x 3 days, then 0.5 m... Take after eating, with a full glass of water.
+7 day varenicline		1 mg, Tab, PO, 2xdaily, For maintenance. Please refer patient to "GETQUIT"... Take after eating, with a full glass of water.
Home Therapy Only		
varenicline		1 mg, Tab, PO, 2xdaily, Please refer patient to "GETQUIT" Program: www....

Figure 2. Smoking cessation power plan in the EMR.

The participants in the project included licensed nursing staff in the CDU. The nursing staff's role was to assess the patient for tobacco use using the 3As approach and to alert the provider to initiate the SCPP based on the outcome of the assessment. The provider's role includes reviewing the patient's chart and initiating the SCPP, if applicable. The charge nurse kept a record of the frequency of 3As assessment and SCPP for analysis by the project leader. In order to facilitate data collection, the 3As protocol and SCPP was added to the WORQ rounding sheet and the nurse selected "yes" or "no" if the 3As and/or SCPP was initiated.

The number of participants was approximately 30 nursing staff. The nursing staff included registered nurses (RN) and licensed practical nurses (LPN). The nursing staff was selected based off proximity and affiliation with the CDU. The providers were hospitalists within the organization that rotated throughout the CDU. The providers were not included in the educational session however, they were informed of the project and their role to assess and initiate the SCPP when prompted by the nursing staff.

The data collection tool that was used by the nurses to record the frequency use of the 3As assessment and SCPP was the daily patient rounding sheet. The daily patient rounding sheet was derived from the WORQ (Who/What, Obstacles, Readiness, Questions) format. The WORQ rounding sheet serves as a discharge planning tool for nurses, providers, and case management to identify any barriers and prepare patients for discharge. In the CDU, a WORQ rounding sheet is created for each patient and is the primary communication tool among the staff to provide a comprehensive overview of patient care. For the purposes of this project, a component was added to the WORQ rounding tool to monitor the 3As assessment and initiation of the SCPP. This section was completed by nursing staff.

During patient rounds, the staff discussed patient care as outlined by the WORQ rounding tool. The rounds included the nursing staff, assistive personnel, a pharmacist, a case manager or social worker, and the providers. During each round, the nurse addressed the patient's condition and specifically for this project, the need for initiation of the SCPP with the providers if applicable. The charge nurse collected the completed WORQ rounding sheets each day and stored them in a locked box provided by the project leader.

Only the charge nurse and project leader had access to the lockbox. The sheets were then reviewed by the project leader and totals were calculated. The WORQ rounding sheet is shown in Appendix A.

The ethical protection of the participants was an important part of this DNP project. Participants included those nurses working in the CDU. No personal identifying characteristics such as name, gender, ethnicity, rank, or licensure were collected or recorded during this project. Participants were informed of their right to discontinue or withdraw from the project at any time. Participants were provided with direction of how to contact the project leader to request withdrawal from the project if desired. Only patients who were active tobacco users were included in this project. No identifying patient information such as name, date of birth, gender, ethnicity, or medical record number was collected or recorded. There were no incentives for participation in the project. Informed consent discussing the purpose of the DNP project and participant role was obtained from the participants prior to implementation of the project. After the project is complete, only the outcomes and results will be discussed with the participants in aggregate. Appendix B illustrates the proposed participant informed consent.

Familiarity with staff and providers may present a potential bias because the host site is affiliated with my current employer. However, the organization has various campuses. To address this bias, this project was implemented at a campus that I do not frequently work in order to reduce familiarity or favoritism among the staff and providers. This project was approved by the Walden University IRB to ensure the project

complies with the university's ethical standards and U.S. federal regulations (Walden University, 2019).

Analysis and Synthesis

The outcome measures for this project was the number of times the 3As assessment was utilized to initiate the SCPP as well as the frequency in which the SCPP was initiated. The number of SCPP used was assessed pre-intervention, and the number of times the 3As assessment was used and the number of times the SCPP was ordered was assessed post-intervention to determine if there was an increase in frequency of use. Demographic and inferential statistics were used to analyze and estimate the data. The *a priori alpha* was set at 0.01 for all inferential statistics.

Summary

Section Three discussed all aspects of the DNP project development phase. Each category outlined the DNP project plan by clearly stating the practice problem question, defining pertinent operational terms, describing and explaining sources of evidence, and presenting the statistical analysis method to analyze the collected data. Clarification of participant protections and the role of the Walden University IRB was discussed as well.

Section 4: Findings and Recommendations

Introduction

The identified problem for this DNP project was the lack of utilization of the SCPP in the CDU by staff nurses and providers. Within the CDU, there has been suboptimal health promotion of tobacco cessation related to lack of knowledge and training of tobacco cessation interventions and SCPP use. The purpose of this DNP project was to bridge the gap in current nursing practice by developing a staff education program for nurses about the SCPP embedded in the EMR and how to promote its use to providers. Specifically, the DNP project answered the following questions:

1. Will the implementation of a nursing education intervention geared towards the utilization of the SCPP increase use of the SCPP by providers in an acute care setting observation unit?
2. Will the provider activation of the SCPP increase as a result of the 3As assessment?

The sources of evidence were obtained from several nursing databases summarizing best practices for tobacco cessation interventions and successful outcomes. An extensive review of the literature provided sources of evidence identifying the need to address the problem of tobacco use in the population on the local and national levels. Tobacco use is responsible to a variety of preventable medical conditions causing increased mortality and morbidity. Data were collected on the number of times the SCPP was utilized pre-intervention; and was compared to the use of the 3 As assessment and use of the SCPP post-intervention. Pre-intervention data collection occurred for 3 weeks,

followed by the staff education intervention focused on the 3 As assessment and the SCPP. Following the intervention, data were collected for 2 weeks. The post-data collection period was shortened due to an unexpected, organizational time constraint.

Results

Prior to the educational intervention, 388 charts were reviewed. Of the 388 charts, 233 charts were identified as smokers. Of the 233 smokers, only 9 patients (3.8%) had a SCPP in place. Two weeks following the educational intervention, of total patient charts, 137 smokers were identified. All 137 patient charts had the SCPP in place. Upon further review, all 137 SCPP were in place using the 3 As approach. Results were reviewed and assessed for translation and evaluation of the educational intervention. A statistically significant change ($p < 0.001$) was found using McNemar's test to evaluate for statistical differences in proportions for dependent groups in a 2x2 with-in subjects design as evidenced by 100% (137 out of 137) increase in use following the intervention as compared to 3.8 percent (9 out of 233) rate of use prior to the intervention (Table 1 and 2).

Table 1

Pre- and Postintervention Significance of SCPP Use

Presence of SCPP	Before Educational In-service	After Educational In-service	<i>p</i> value
Yes	9 (3.8%)	137 (100%)	$p < 0.001$
No	224	0 (0%)	$p < 0.001$

Table 2

Post Intervention Significance of 3As Assessment Use

Use of 3As to Facilitate SCPP Use	After Educational In-service	<i>p</i> value
Yes	137	$p < 0.001$
No	0	$p < 0.001$

Limitations and Strengths

There were a number of limitations that need to be considered in interpreting the results of this project. First, data collected postintervention was completed only two weeks after the educational intervention due to an organizational time constraint. This shortened the length of time the intervention resonated with the participants and thus, should be interpreted with caution as the true impact of the intervention was not assessed

for long-term sustainability. Second, a manual medical review was completed to determine pretest rates while a data collection tool was used to collect posttest data. A manual review is time intensive, less efficient than automated data collection, and has the potential for error and bias. Last, findings from this project may not be generalizable across populations to other patients who smoke in inpatient settings. Strengths of the project include unbiased data collection by the researcher and staff. Deidentified patient information was used.

Implications

The implications of the project's findings on the individual, the organization, and the community at large are positive. From the individual, this project demonstrated that educating nursing and providers about the availability of smoking cessation information can promote the implementation of appropriate smoking cessation interventions. On the organizational level, nurses and providers will be able to align effective evidence-based practice guidelines with positive patient outcomes. Additionally, by actively engaging in preventive measures, many organizations have benefitted by improving quality measures. Social change implications from the results of this project suggest that nursing education can address the gap in practice that can inform providers to implement evidence-based interventions that will improve life expectancy, quality of life, economic burden of tobacco illness, and work force productivity.

Recommendations

The proposed recommended solutions addressing the gap in practice as informed by the findings of this study include ongoing brief counseling assessment and

communication between nursing and providers. The use of the SCPP prior to the intervention was essentially nonexistent. After the intervention, the SCPP became utilized more frequently as a result of the nursing assessment and the nurses' interaction with the providers to identify the need to initiate the SCPP. Continuous interaction and assessment enhance nurse to provider communication that will improve the quality of life for all patients through evidence-based practice guidelines.

Section 5: Dissemination Plan

The results of this DNP project and its findings will be provided to the stakeholders of the host institution by PowerPoint presentation. The targeted stakeholders will include unit nurses, clinical manager, medical director, and the host site's research committee. A summary of the project findings will also be available to all staff of the host institution from the host institution's research website.

Based on the nature of this project and the overall goal to promote social change, the target audience is nursing at all levels including acute care and outpatient care. Further dissemination of the project to the broader nursing profession can be achieved through focused avenues such as nursing journals and conferences. This DNP project paper will be submitted to the nursing journal ProQuest for publication after final approval.

Analysis of Self

While completing this doctoral journey, I have reflected on my reasons for becoming a nurse in the first place. Initially, as many others would say, I wanted to help people. This fact still holds true but as I continue to develop professionally, the reasons have expanded far beyond my expectations. As a scholar, I will hone the strength, experience, and knowledge to progress the field of nursing into a profession that will provide holistic care and integrate all aspects of health care to improve health on individual, community, systems, and organizational levels. Over the spectrum of my nursing career as a student, advocate, listener, innovator, leader, and clinical specialist, my hope as a doctoral-educated professional is to contribute to the advancement of

healthcare by incorporating all the skills and attributes attained to continue to help those in need.

Summary

In summary, tobacco dependence and use are ongoing health issues in the U.S. The ANA (2018) stated that nurses are positioned to undeniably serve as role models, educators, and advocates for smoking cessation. Nurses are in a position to contribute to the ongoing efforts to eradicate tobacco dependence to increase life-expectancy and improve the quality of life for patients and their families. Continuing education with tobacco cessation interventions contributes to the improvement of evidence-based resources for providers to use to improve health outcomes for at risk patients. Nurse and provider collaborative efforts can help reduce the incidence of tobacco related illness through ongoing assessment and interventions.

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Appendix A: WORQ Rounding Sheet

CDU WORQ Rounds
(Daily @ 1000, 1500, & 2200)

ADDRESSED BY: ROOM	PROVIDER WHO/WHAT? Room #	PROVIDER & NURSE OBSTACLES TO DISCHARGE? (Including patient, provider, nursing, or other barriers)	NURSE TECH & ACC READINESS FOR DISCHARGE? (What will you need?)	PHARMACIST RX NEEDS? (List with name, dose, quantity, or discharge goal)	ALL QUESTIONS OR CONCERNS?
Chest Pain <input type="checkbox"/> Cardiology <input type="checkbox"/>	<input type="checkbox"/> T1ACVA	<input type="checkbox"/> T1ACVA <input type="checkbox"/> I1AD <input type="checkbox"/> I1AD <input type="checkbox"/> S1C <input type="checkbox"/> S1C	Pain Ambulation Voiding Elimination Diet Discharge needs SCP Stroke Education	<input type="checkbox"/> ASA <input type="checkbox"/> S1C <input type="checkbox"/> S1C	<input type="checkbox"/> I1AD <input type="checkbox"/> Bed request <input type="checkbox"/> Bed request <input type="checkbox"/> Bed request
Chest Pain <input type="checkbox"/> Cardiology <input type="checkbox"/>	<input type="checkbox"/> T1ACVA	<input type="checkbox"/> T1ACVA <input type="checkbox"/> I1AD <input type="checkbox"/> I1AD <input type="checkbox"/> S1C <input type="checkbox"/> S1C	Pain Ambulation Voiding Elimination Diet Discharge needs SCP Stroke Education	<input type="checkbox"/> ASA <input type="checkbox"/> S1C <input type="checkbox"/> S1C	<input type="checkbox"/> I1AD <input type="checkbox"/> Bed request <input type="checkbox"/> Bed request
Chest Pain <input type="checkbox"/> Cardiology <input type="checkbox"/>	<input type="checkbox"/> T1ACVA	<input type="checkbox"/> T1ACVA <input type="checkbox"/> I1AD <input type="checkbox"/> I1AD <input type="checkbox"/> S1C <input type="checkbox"/> S1C	Pain Ambulation Voiding Elimination Diet Discharge needs SCP Stroke Education	<input type="checkbox"/> ASA <input type="checkbox"/> S1C <input type="checkbox"/> S1C	<input type="checkbox"/> I1AD <input type="checkbox"/> Bed request <input type="checkbox"/> Bed request

...Nurses should include about care opportunities, insurance/transport, equipment availability, etc. discuss education topics, provide patient education, etc. All methods of QI...

Date: _____ Time: _____

Appendix B: Smoking Cessation in CDU Clinical Project Protocol

1) Protocol Title Page

Smoking Cessation in CDU Clinical Project Protocol

Principal investigator: Joycelyn Land, AGACNP-BC, MSN, CMSRN

PHUSC Medical Group Internal Medicine

14 Richland Medical Park Drive, Ste 320

Columbia, SC 29203

2) Background / Justification for Study*

Problem Statement

The identified problem is the lack of implementation of the SCPP in the Clinical Decision Unit (CDU) by staff nurses. The CDU is a 15-bed observation unit providing care to patients requiring evaluation and treatment for a period of less than 2 midnights. The patient mix is variable however, the majority of the patients are evaluated for stroke, transient ischemic attack (TIA), chest pain, and COPD/asthma exacerbations. Many of the illnesses involve a component of tobacco-related illnesses requiring further patient assessment, treatment, and education. Within the CDU, there has been suboptimal health promotion of tobacco cessation. To adhere to national recommendations and promote tobacco cessation, the quality improvement committee of the host organization developed the SCPP. The purpose of the SCPP was to offer a guideline based on evidence-based smoking cessation interventions. The structure of the power plan allows providers a simple and inclusive way to initiate appropriate interventions that are aligned with the recommendations set forth by the World Health Organization and US Taskforce for Preventive Services to reduce and prevent tobacco use (WHO, 2019; USTFPS, 2019).

Many studies suggested that a significant barrier to hindering the use of interventions is the lack of knowledge and training to use them (Andres et al., 2018). Nurses are an integral part of this advocacy since much of nursing care and time is spent in direct patient care. Fiore, Goplerud, and Schroeder (2012) observed that hospitalization provides an optimal opportunity for health care providers to confront patients about tobacco use and the adverse outcomes for them and their families. Moreover, the Joint Commission Tobacco Cessation Performance Measure took effect in 2012 requiring health care organizations to be accountable for patient education and interventions regarding tobacco use (Fiore, Goplerud & Schroeder, 2012). The rule mandates that tobacco-dependent patients are provided tobacco treatment during admission and at

discharge, document tobacco use and the interventions given, and refer the patient to an outpatient tobacco cessation program.

Moreover, Grau, Weiss, O’Leary, Camenga, and Berstein (2019) showed that perceptions, beliefs, and awareness of an electronic record embedded tobacco treatment for inpatients identified as active tobacco users varied, however with the appropriate education and influence from leaders, providers were open to utilizing the system. Svane et al. (2018) comments that clinical health promotion efforts aim to achieve better health gains for patients, medical health staff, and communities. As new evidence develops in medicine and health, changing clinical practice to align with the best evidence through guidelines is critical to promoting quality health outcomes. Gaps in practice exist when clinical practices do not integrate new, effective evidence which improves patient health outcomes and progress the population toward U.S. initiatives to decrease tobacco use.

Purpose Statement

Tobacco use and exposure is a national health issue affecting millions of children, adolescents, and adults annually. Illnesses that develop as a result of tobacco use can be avoided or improved with appropriate and timely education to patients who are at risk. Many tobacco users lack the education and resources to quit smoking. Whitehead, Zucker, and Stone (2014) stated that annually, 40-60 percent of smokers attempt to quit, however, without health provider assistance only 3-5 percent are successful. Andres et al. (2018) states that between 60 percent and 70 percent of hospitalized patients attempt to quit but the lack of implementing tobacco cessation interventions leads to relapsing in the outpatient setting.

Healthy behaviors decrease patient mortality and improve the overall state of health for the patient and the economy. Tobacco cessation education aligns with the organization’s strategic plan to improve quality measures related to cancer screening established by Centers of Medicaid and Medicare Services (CMS) for reimbursement. Boosting utilization of the SCPP to begin treatment and make outpatient referrals enhances the organization’s goal to develop positive impacts to patient health outcomes and increase revenue through reimbursement.

Tobacco dependence is a continuing health issue that is preventable. According to the World Health Organization (WHO) reports that deaths caused by tobacco use is approximately 6 million annually (WHO, 2015). The Centers for Disease Control and Prevention (CDC) notated that over 40 million people currently use tobacco and another half million die of tobacco related illnesses (CDC, 2018).

The local problem for this project is the lack of tobacco assessment by nursing staff and use of the SCPP in the observation unit at the host site.

Significance to nursing practice

The project is significant to nursing practice because it will help enhance knowledge and provide nurses with evidence-based practices to improve patient outcomes.

Significance to social change

Tobacco cessation can improve patient's quality of life and the lives around them. Furthermore, tobacco cessation provides an opportunity for the enhancement of environmental integrity and decreasing economic burden.

3) Objectives / Research Aims*

The DNP project aims to answer the following questions:

- 1 *Will the development and implementation of a nursing education intervention geared towards the utilization of the SCPP increase its use by nurses in an acute care setting observation unit?*
2. *Will the provider activation of the SCPP increase as a result of the nursing assessment?*

4) Setting

The Clinical Decision Unit is staffed with 10-15 registered nurses. This staff mix includes travel nurses and nurses that float from other units during short staffing. The unit is a 15-bed observational unit providing acute care to patients who will require less than two midnights of treatment or monitoring. The staff of the unit is comprised of 3 nurses, 3 assistive personnel, 1 case manager or social worker, 1 pharmacist, 1 physician, and 1 advance practice provider. The average census of the unit is 10-12 patients. The patient mix is variable with illnesses including COPD/asthma exacerbations, TIA, Chest Pain, strokes, and hypertension. Many of these illnesses co-

exist with tobacco dependence in several patients admitted to the observation unit. It is the goal of the organization to identify and address tobacco dependence on every patient admitted to the hospital. Even though the length of stay in the CDU is a less than 2 midnights, addressing tobacco use and dependence still needs attention.

5) Resources Available

The subjects are already employed in the CDU for daily work functions. The potential number of subjects will be 10-20 nurses in the CDU. Recruitment will be voluntary. The duration for the project will be 6 weeks. Pre-intervention data will be collected for 2 weeks. Post intervention data will be collected for 4 weeks. The charge nurse will be responsible for collecting the WORQ rounding sheet and lock in a lock box.

No necessity for staff qualifications

No facilities.

No anticipated consequences of the human research to necessitate psychological or medical assistance.

6) Prior Approvals

Approval from the host site IRB and Walden IRB will be obtained prior to initiation of study.

7) Study Design

a) Recruitment Methods

The subjects are nurses working in the Clinical Decision Unit. This is the only recruitment method necessary.

Subjects will not be paid.

b) Inclusion and Exclusion Criteria

There is no screening process.

Inclusion criteria are registered or licensed practical nurses actively working in the CDU. Actively working is defined as scheduled to work in the unit as permanent, rotating, or contract nurse.

Exclusion criteria is all other ancillary or assistive personal in the CDU and all other nurses working outside of the CDU.

c) Local Number of Subjects

The total number of subjects is 20 nurses

d) Study-Wide Number of Subjects

N/A

e) Study Timelines

- *The duration of subject participation is 4 weeks.*
- *The duration anticipated to enroll all study subjects is 24 hours after the education intervention.*
- *The estimated date for the investigators to complete this study is December 2019.*

f) Study Endpoints

The primary and secondary study endpoints.

The primary endpoint will be completion of the study in December 2019.

Secondary endpoint: Pre-intervention data collection. The collection of pre-intervention data involves documentation of tobacco assessment and documentation of the SCPP on all patients identified as tobacco-dependent.

Secondary endpoint: Education Intervention: Education given to introduce the 3As brief tobacco assessment and the SCPP. This intervention will discuss the steps of the assessment and the role of the nurse to communicate with the provider to initiate the SCPP if applicable.

Secondary endpoint: Post-intervention data collection: The collection of post-intervention data will involve documentation of the use completion of the brief assessment intervention and use of the SCPP.

g) Procedures Involved

The design study is a pre/post design. A brief education intervention consisting of the 3 As approach will be provided in a 60-minute session (Figure 1). The staff education session will be presented as a power point presentation and will focus on introducing the SCPP and assessing patients for a need to initiate the power plan by a provider. The session will include a brief introduction of the SCPP, current data regarding the frequency of use of the SCPP, a review of the SCPP format and its contents, a hands-on presentation reviewing the use of the EMR to access the SCPP, and a review of the steps the nurse will utilize to communicate with the provider to initiate the SCPP. A reference guide sheet with tips and suggestions will be provided to all participants at the end of the education intervention. As part of the educational intervention, nurses will have an opportunity to perform return demonstration for accessing the power plan. Duration of data collection for post education evaluation is estimated at 4-6 weeks.

Nursing assessment of tobacco use will be completed according to frequency of documentation of the completed 3As protocol. The 3As protocol will be added to the WORQ rounding sheet and the nurse will select “yes” or “no” for data collection. The frequency of use of the SCPP will be recorded on the daily patient rounding sheet. The rounding sheet was derived from the WORQ (Who/What, Obstacles, Readiness, Questions) format. The WORQ rounding sheet serves as a discharge planning tool for nurses, providers, and case management to identify any barriers and prepare patients for discharge.

h) Data and Specimen Banking

N/A

i) Statistical Analysis*

The significance between the pre and post data results analyzing the frequency of use of the SCPP and nursing assessment with the 3As protocol will be calculated using demographic and inferential statistics. The latest version of SPSS Grad Pak software will be used to analyze and calculate the data. The significance interval is set to 0.05. A significance interval < 0.05 indicates a significant change has occurred as a result of the intervention.

Assistance from a professional biostatistician will be sought to ensure appropriate data analysis procedures congruent with the institution requirements.

j) Data Management

The independent variable for the study is the educational intervention with the 3As brief assessment. The dependent variables are nursing assessment and SCPP use.

The WORQ rounding tool will be used for pre/post education intervention data collection. The charge nurse will be responsible for gathering the data to report to the project leader. The charge nurse will store the data sheet in a locked box provided by the project leader. Only the charge nurse and project leader will have access to the lockbox.

k) Confidentiality

N/A

l) Provisions to Monitor the Data to Ensure the Safety of Subjects

There is less than Minimal Risk to subjects.

m) Withdrawal of Subjects

There are no anticipated circumstances where a subject may wish to withdraw from the study. The subject will be informed during consent of appropriate withdrawal procedures should they wish to withdraw from the project for any reason.

8) Risks to Subjects

There are no foreseeable risks, discomforts, hazards, or inconveniences to the subjects related the subjects' participation in the research.

9) Potential Benefits to Subjects

Potential benefits include increased knowledge of tobacco assessment and communication with providers about the smoking cessation power plan.

10) Provisions to Protect the Privacy Interests of Subjects

Personal information will not be sought from the subjects for this project.

- 11) Compensation for Research-Related Injury**
The research involves no more than Minimal Risk to subjects
- 12) *Economic Burden to Subjects***
N/A.
- 13) Consent Process***
Waiver to Informed Consent approved host site IRB
- 14) Process to Document Consent in Writing**
The research presents no more than minimal risk of harm to subjects and involves no procedures for which written documentation of consent is normally required outside of the research context. The host site IRB has approved exemption for consent requirement.
- 15) Vulnerable Populations**
N/A
- 16) *Drugs or Devices***
N/A
- 17) Multi-Site Research**
N/A
- 18) Sharing of Results with Subjects**
The results of the project will be shared with the subjects after the data has been analyzed and prepared for dissemination. The staff will receive the final data report by the investigator.

Appendix C: Host Organization IRB Approval Notice

Approval

November 5, 2019

Joycelyn Land
joycelyn.land@prismahealth.org

Dear Mrs. Land:

On November 5, 2019, the following was reviewed by exempt IRB review:

IRB of Record:	Prisma Health–Midlands IRB
Type of Review:	Initial
Title:	Staff Education to Implement the Use of the Smoking Cessation Power Plan in an Observation Unit
IRB ID:	Pro00093868
Sponsor(s):	None
IND, IDE, HDE:	None
Documents Reviewed:	3As Brief Tobacco Assessment last modified 10/7/2019 WORQ rounding tool last modified 10/7/2019 Clinical Project Protocol.doc last modified 10/9/2019 Waiver of Informed Consent Statement last modified 10/7/2019 ImpactedService.pdf last modified 10/31/2019 PHARR.pdf last modified 10/22/2019

The IRB approved the protocol from November 5, 2019.

The activity is Exempt Human Subject Research as defined by DHHS regulations (**Category 2**). No further Institutional Review Board (IRB) oversight is required, as long as the project remains unchanged. This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether the activities are exempt human subject research, please submit a new request to the IRB for a determination.

Palmetto Health Administrative Research Review (PHARR) approval is required prior to study initiation.

As the Principal Investigator, you are responsible for conducting this protocol as approved and for reporting study-related activities to the IRB.

In conducting this protocol, you are required to follow the requirements listed in the INVESTIGATOR MANUAL available at www.PalmettoHealth.org/IRB.

If you have questions or need additional information, please contact IRB Administration at 803-434-2884.

Sincerely,

Thomasena Williams
Manager, IRB Administration[†]

cc: Rebecca Marigliano, Ph.D., Director, Research
Melanie Griswold, RN, CCRC Research Compliance

[†]**Electronic Signature:** This document has been electronically signed through the HSSC eIRB Submission System.

Appendix D: Walden University IRB Approval Notice

Dear Ms. Land,

This email is to notify you that the Institutional Review Board (IRB) confirms that your study entitled, "Staff Education to Implement Use of the Smoking Cessation Power Plan in an Observation Unit," meets Walden University's ethical standards. Our records indicate that the site's IRB agreed to serve as the IRB of record for this data collection. Since this study will serve as a Walden doctoral capstone, the Walden IRB will oversee your capstone data analysis and results reporting. The IRB approval number for this study is 11-20-19-0382673.

This confirmation is contingent upon your adherence to the exact procedures described in the final version of the documents that have been submitted to IRB@mail.waldenu.edu as of this date. This includes maintaining your current status with the university and the oversight relationship is only valid while you are an actively enrolled student at Walden University. If you need to take a leave of absence or are otherwise unable to remain actively enrolled, this is suspended.

If you need to make any changes to your research staff or procedures, you must obtain IRB approval by submitting the IRB Request for Change in Procedures Form. You will receive confirmation with a status update of the request within 1 week of submitting the change request form and are not permitted to implement changes prior to receiving approval. Please note that Walden University does not accept responsibility or liability for research activities conducted without the IRB's approval, and the University will not accept or grant credit for student work that fails to comply with the policies and procedures related to ethical standards in research.

When you submitted your IRB materials, you made a commitment to communicate both discrete adverse events and general problems to the IRB within 1 week of their occurrence/realization. Failure to do so may result in invalidation of data, loss of academic credit, and/or loss of legal protections otherwise available to the researcher.

Both the Adverse Event Reporting form and Request for Change in Procedures form can be obtained at the Documents & FAQs section of the Walden web site: <http://academicguides.waldenu.edu/researchcenter/orec>

Researchers are expected to keep detailed records of their research activities (i.e., participant log sheets, completed consent forms, etc.) for the same period of time they retain the original data. If, in the future, you require copies of the originally submitted IRB materials, you may request them from Institutional Review Board.

Both students and faculty are invited to provide feedback on this IRB experience at the link below:

http://www.surveymonkey.com/s.aspx?sm=qHBJzkJMUx43pZegKlmdiQ_3d_3d

Sincerely,
Libby Munson
Research Ethics Support Specialist
Office of Research Ethics and Compliance
Walden University
100 Washington Avenue South, Suite 900
Minneapolis, MN 55401
Email: irb@mail.waldenu.edu
Phone: (612) 312-1283
Fax: (626) 605-0472

Information about the Walden University Institutional Review Board, including instructions for application, may be found at this link: <http://academicguides.waldenu.edu/researchcenter/orec>