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The Effect of a Provider Education Program on Tobacco Use in an Adult Population in the Primary Care Setting

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DNP Final Project Report

The Effect of a Provider Education Program on Tobacco Use in an Adult Population in the Primary Care
Setting

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Fall, 2018

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Dedication

I dedicate this manuscript to my family, friends, advisors, and mentor who have encouraged and guided me throughout this journey. A special thank you to my husband, Rijan Manandhar for his continuous support throughout this program. You always believed in me, encouraged me and made me realize that I can do better every day. You have taught me that I can achieve any goal through commitment, diligence and perseverance. I know you are very proud of my accomplishment.

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Abstract

PURPOSE: The purpose of this study was to evaluate the effectiveness of an education session to promote adherence to the United States Preventive Services Task Force (USPSTF) recommendation and Clinical Practice Guidelines for Treating Tobacco Use and Dependence by providers.

METHODS: A retrospective and prospective record review was used to evaluate an education session for providers in tobacco use screening, providing cessation counseling, prescribing medication for tobacco cessation and sending out referrals for tobacco cessation at one primary care clinic in Louisville, KY. Education sessions were held from August 1, 2018 to August 14, 2018. The sample consisted of 200 randomly selected patient medical records from among current tobacco users. The retrospective study included 100 chart reviews from January 1, 2018 to March 31, 2018 and the prospective chart review included 100 chart reviews from August 15, 2018 to September 15, 2018.

RESULTS: The group demographics did not differ significantly, demonstrating similarities among variables. There was no change in the rate of documentation of tobacco use screened by the providers during the pre- and post-intervention phases (31.3% vs. 31.3%). There were no statistically significant differences in documentation of tobacco use screening rates when comparing provider types. Both the pre- and post-intervention groups did not statistically differ with regard to the percentage of smoking cessation medications being prescribed.

CONCLUSION: This project demonstrated a need for improvement in provider documentation in adherence with USPSTF recommendation and Treating Tobacco Use and Dependence Guidelines. In addition, there is a need for more thorough documentation of tobacco screening among known tobacco users in the primary care clinic. Further research is needed, using a larger study sample, to identify a continuous trend on screening rates.

Keywords: Tobacco cessation, primary care, providers, education, recommendation, guidelines

The Effect of a Provider Education Program on Tobacco Use in an Adult Population in the Primary Care

Setting

Introduction

Tobacco use is one of the most preventable causes of morbidity and mortality in the United States, yet it continues to be a serious primary health care issue (U.S Department of Health and Human Services [DHHS], 2014). According to the World Health Organization (WHO), more than 1.1 billion people smoked tobacco in 2015 (WHO, 2017). The consequences of tobacco use affect everyone in the community, not only the people who smoke. Consequences of not routinely screening for tobacco use and counseling tobacco users in cessation, include an increased risk of lung, heart, and vascular diseases (DHHS, 2014). In the United States, twenty percent of all deaths are caused by cigarette smoking (American Cancer Society [ACS], 2017). Tobacco users have a decreased life expectancy compared to non-tobacco users. There are approximately 480,000 premature deaths annually and more than 300 billion dollars are spent in healthcare expenditures each year in the United States from disease related to tobacco use (Jamal et al., 2015). Hence, tobacco use could be considered the deadliest and costliest public health threat to our nation.

The fight for tobacco cessation is crucial considering its severe health consequences. Tobacco use in any form, i.e. smoking, chewing or secondhand exposure, causes serious health issues. Smoking tobacco causes cardiovascular disease, lung cancer, and other lung diseases, such as chronic obstructive pulmonary disease (COPD) and asthma (DHHS, 2014). Secondhand smoke exposure can also cause asthma, birth defects, sudden infant death syndrome, chronic ear infections in kids, and frequent lung infections (Centers for Disease Control and Prevention [CDC], 2017). Because of the high risk of disease from tobacco use and exposure, reducing cigarette smoking by adults, 18 years and older, to 12 % is one of the objectives for *Healthy People 2020* (Office of Disease Prevention and Health Promotion [ODPHP], 2014).

In 2016, the rate of cigarette smoking in the U.S was 15.5% (Odani et al., 2018); with a higher smoking prevalence among males compared to females, 17.5% and 13.5 %, respectively (Jamal et al.,

2018). Unfortunately, Kentucky has one of the highest rates of cigarette smoking in the U.S., with 21.1% of adult Kentuckians currently smoking cigarettes, and 26.2% using any form of tobacco (Odani et al., 2018). Based on these statistics it is of critical importance to address tobacco use. The purpose of this study was to evaluate the effectiveness of an education session to promote provider adherence to the United States Preventive Services Task Force (USPSTF, 2015) recommendation and Clinical Practice Guidelines for Treating Tobacco Use and Dependence (Fiore, Jaen, Baker, et al., 2008).

Background

Nicotine from smoking is a very addictive substance, both physically and mentally, causing tobacco cessation to be increasingly difficult (Chaney & Sheriff, 2012). Tobacco use and its dependence is a chronic disease that often leads to several attempts to quit (Fiore et al., 2008). Patients who stop smoking may require multiple treatment approaches from their primary care provider (PCP) because of the risk of withdrawal symptoms and relapse (CDC, 2017). “Although, 68% of the adult population who smoke indicate a desire to quit, only 55% make an attempt in the past year, and only 7.4% have recent success (Babb, 2017). This finding suggests that there is a high proportion of individuals who want to quit tobacco and it is crucial for the PCP to assess and help these patients quit successfully. Thus, PCPs are in a key position to screen for tobacco use and engage their patient population in tobacco cessation treatments.

By screening for tobacco use, the PCP can work with patients to help them to understand the chronicity of the disease process and provide evidence-based interventions to assist them in cessation. The United States Preventive Services Task Force (USPSTF) recommends asking the patient about tobacco use and subsequently providing tobacco cessation interventions by counseling, pharmacotherapy and implementing strategies for tobacco cessation (USPSTF, 2015). The PCP can influence significant outcomes in tobacco cessation programs by encouraging patients through motivational interviewing strategies and evidenced-based treatment interventions to successfully quit tobacco use (DHHS, 2014).

The Clinical Practice Guidelines for Treating Tobacco Use and Dependence: 2008 were generated from systematic reviews of the best available scientific literature and is recommended by the USPSTF to be used to identify the most appropriate pharmacotherapy and counseling options for the screened patient (Fiore et al., 2008). Evidence suggests that combining both counseling (motivational interviewing strategies, telephone quit-line) and medication for tobacco cessation are most effective to assist smokers in cessation (Fiore et al., 2008). Nicotine replacement therapy (NRT) for tobacco cessation has been shown to be more successful than a placebo or no treatment at all (Fiore et al., 2008). The non-nicotinic based medications, like varenicline and bupropion, are also suggested by the clinical practice guidelines for successful quitting. Along with medication, behavioral counseling is very important for successful quitting. When behavioral counseling therapy is initiated, tobacco users are four times more likely to quit (Chaney & Sheriff, 2012).

The “Five-A” model of brief intervention is an evidence-based tobacco cessation strategy that includes asking if the patient uses tobacco, advising the patient to quit, assessing for willingness to quit, assisting to quit and arranging for follow-up and support (Fiore et al., 2008). When PCPs are consistent in providing tobacco cessation interventions and discussing the harmful effects of continuous tobacco use at each visit, there is often a decrease in tobacco use as compared with no education provided (Laniado-Laborin, 2010). One study found that one out of four patients will get the opportunity for tobacco cessation interventions in an outpatient visit (Jamal, Dube, & King 2015). By the combination of the 5-A model of brief intervention, education and evidence-based recommendation, the primary care provider can make a positive impact on tobacco cessation.

Purpose

The purpose of this study was to evaluate the effectiveness of an education program for providers to promote adherence to the USPSTF recommendation and Clinical Practice Guidelines for Treating Tobacco Use and Dependence at a primary care clinic in Louisville, Kentucky. The study objectives were to identify the percentage rate of documentation for tobacco use at a primary care clinic between January

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1, 2018 and March 31, 2018 and to use this pre-intervention data to compare with the post-intervention period of August 15, 2018 through September 15, 2018. The specific objectives that were focused on prior to and after implementation of the education session were:

1. Identify the percentage rate of documentation of screening for tobacco use by the PCP.
2. Identify the percentage rate of documentation of counseling, prescribing of tobacco cessation medications.
3. Identify the referral rates of smoking cessation.

Methods

This was a single center, quasi-experimental, pre and post-intervention study. This study included both retrospective and prospective features. The study consisted of three phases: Pre-intervention phase, intervention phase, and post-intervention phase. The pre-intervention phase consisted of a retrospective review of data performed on 100 randomly selected patient charts who were current smokers and were seen from January 1, 2018, through March 31, 2018. The intervention phase took place between August 1, 2018 through August 14, 2018 and consisted of educating all providers at the chosen clinic about the USPSTF recommendation and Treating Tobacco Use Dependence Guidelines and how to document this in the electronic medical record (EMR). The post-intervention phase consisted of a prospective review of data from 100 randomly selected patient charts who were current smokers and were seen from August 15, 2018 through September 15, 2018.

Setting

The primary care clinic chosen for this study is located in Louisville, Kentucky. Approximately 2,200 patients are seen every month. The clinic is open five days a week and provides care by appointment only to adult patients, ages 18 and older. There are five physicians and five nurse practitioners who practice in this office and focus on management of acute and chronic diseases and preventive care. Two providers were excluded from the study because they either did not practice at this location during the pre-intervention phase so there would not be comparative data available or they did not attend the education session provided.

Sample

The sample consisted of medical records of 100 randomly selected patients for the pre-intervention phase and 100 randomly selected patients for the post-intervention phase. Both pre-intervention and post-intervention data were compared. Inclusion criteria consisted of adult patients who were 18 years and older at the time of the visit, active cigarette smokers, patients who were seen by the eight providers who consented to the study, and patients who were charged based on the following Current Procedural Terminology (CPT) codes for new, established and preventive visits (99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99385, 99386, 99387, 99395, 99396, 99397). The exclusion criteria consisted of any patients who admitted to using smokeless tobacco (chewing tobacco and vaping) and any patients who were seen by the other two providers in the office. The following variables were collected in both the pre and post intervention chart reviews: Age, gender, race, type of visit (annual, episodic, or follow-up), type of health insurance, type of provider (physician or nurse practitioner), and CPT codes used. Documentation of tobacco screening, patient education, medication prescription and referral were also reviewed.

The Intervention

All providers from the primary care clinic were asked to attend one of ten face-to-face educational sessions that were available from August 1, 2018 through August 14, 2018. During the session the project was explained to providers and those who consented were asked at that time to voluntarily sign an informed consent. Providers included in the study were four physicians and four nurse practitioners. Education consisted of detailed information on tobacco cessation based on materials from the USPSTF recommendation and Treating Tobacco Use and Dependence Guidelines. A printed educational handout for tobacco cessation and correct EMR documentation was created (Refer to Appendix A). A tip sheet for how to add the referral for smoking cessation in the EMR was provided, along with CPT codes to use for reimbursement by commercial insurance and Medicare for tobacco use/abuse (Refer to Appendix A).

Data collection

Approvals from the University of Kentucky Institutional Review Board (IRB) and the Norton Healthcare Office of Research and Administration (NHORA) were obtained prior to the collection of data. After the intervention period, a random sample of patient charts were obtained from NHORA through the Norton Healthcare electronic patient database. During data collection, patient records were accessed using the patient medical record number (MRN), data were abstracted based on the list below, and then transferred to an electronic spreadsheet. The demographic variables obtained from the charts included age, gender, race, type of visit (annual, episodic, or follow-up), type of health insurance, type of provider (physician or nurse practitioner), and CPT codes used. Each patient's chart was assessed for tobacco use screening by looking at the provider's documentation in the "History of Present Illness" (HPI) section of the chart. If screening was performed it was coded as '1' for Yes and if screening was not performed it was coded as '2' for No. Education on smoking cessation by providers was also assessed. Data for this measure were obtained from the "Tobacco Screening and Education Section" of the EMR. Charts with a documentation of education provided were coded as '1' and those without were coded as '2'. Another measure that was evaluated was whether a Federal Drug Administration (FDA) approved medication for smoking cessation was prescribed. The data for this measure were obtained from the "Plan" section of the EMR. FDA approved medications for smoking cessation include the nicotine patch, gum, lozenge, inhaler, or nasal spray, varenicline, and bupropion. Charts with a documentation of any of these medications prescribed were coded as '1' and those without were coded as '2'. A list of specific medications prescribed was also obtained. The last measure assessed for documentation in the EMR was if a referral to smoking cessation resources was initiated. Data for this measure were obtained from the "Referral" section of the chart. This measure was based on the documentation of referral to any tobacco treatment program, such as the USPSTF's telephone quit line or the American Lung Association's Freedom from Smoking classes. Charts with a documentation of any referrals initiated were coded as '1' and those without were coded as '2'.

Data Analysis

Data were analyzed using SPSS statistics software (Version 23.0). Descriptive statistics, including frequency distributions and percentages were used to summarize the demographic variables data for the pre and post intervention of the patient demographics. The Chi-Square Test of Association was used to evaluate for significance of association between variables. All data analysis was conducted using Microsoft Excel.

Results

Sample Characteristics

A total of 200 patient charts were reviewed. The pre-intervention sample consisted of charts from 100 randomly selected patients and 100 randomly selected patients for the post-intervention sample. Only 96 charts met the inclusion criteria in the pre-intervention phase. The four charts excluded from the study were due to patients having a status as a former smoker, smokeless tobacco user, and deceased. Similarly, in the post-intervention phase 99 charts met the inclusion criteria. The excluded chart was due to status as a smokeless tobacco user. Almost half of the samples in each phase were between the ages of 41-60 and about a quarter were in the other age groups. The majority of patients were female (57.3%) and Caucasian (80.2%), followed by African American and Hispanic (11.5%, 5.2% respectively). The pre-intervention and post-intervention demographic characteristics as to age group, gender, race/ethnicity, type of health insurance, type of visit, and type of provider are presented in Table 1. The group demographics did not differ significantly, demonstrating similarities. There were not statistically significant differences in group demographics between the pre-intervention and post-intervention groups.

Documentation of Screening

There was no change in the rate of documentation of tobacco use screening by the providers during the pre-intervention (31.3%) and post-intervention phases (31.3%) $p=0.992$. There were no statistically significant differences in documentation of tobacco use screening rates when comparing provider types. The pre-intervention sample demonstrated a higher number of patients who were screened

by nurse practitioners (59.4%) as opposed to the post-intervention sample who was screened more frequently by physicians (52.5%). Episodic visits were shown to be the most frequent type of visit during both phases, but documentation of tobacco screening was the lowest during these encounters. Annual visits were actually the least frequent type of visit encountered but had the highest adherence rate in documentation of tobacco screening.

Counseling, Medications, and Referrals

Documentation of counseling by the providers did not differ between the pre-interventions and post-intervention samples (26.0% vs. 31.3%, $p=0.416$). As a whole, both the pre-intervention (10.4%) and post-intervention (12.1%) groups did not statistically differ with regard to the percentage of smoking cessation medications being prescribed ($p=0.707$) Figure 2 illustrates the comparison between both groups and medications prescribed. There was no difference between the pre-intervention ($n=1$) and post-intervention ($n=0$) groups with regard to referrals being sent to tobacco cessation programs (See Table 2).

Discussion

This study aimed to increase documentation of tobacco use screening in the primary care clinic after an education session on the USPSTF recommendation and Treating Tobacco Use and Dependence guideline was provided to all consented providers. Other aims of this study included increasing the provider's documentation of counseling, prescribing of tobacco cessation medications, and initiating referrals to tobacco cessation programs. After comparing the pre-intervention data to the post-intervention data there were no statistically significant differences among any of the study's variables.

Overall, the adherence rate for documentation of tobacco use screening was 31.3% at both phases of the study. This suggests that only a third of the known smokers during these visits had documentation of being screened for tobacco use by the providers. The highest adherence rate in both phases of the study for tobacco screening documentation was found to be during annual visits. Annual visits were actually the least frequent type of visit encountered but had the highest adherence rate in documentation of tobacco

screening. According to the Center for Medicare and Medicaid Services (CMS), the annual “wellness” visit should include a personalized prevention plan to help prevent disease and disability based on the patient’s health and risk factors (CMS, 2016). There are many modifiable and non-modifiable risk factor screenings that are covered during this visit, including tobacco use cessation counseling. If these visits are focused mainly on prevention then it is conceivable that 100% of all annual visits seen should include the documentation of tobacco use screening and counseling.

From 2005-2010 the CDC conducted a national survey that found that on average adults were screened for tobacco use during 65.6% of all ambulatory care visits. Of those who were identified as tobacco users, 20.7% received tobacco cessation counseling (CDC, 2014). The counseling rate of this study sample in both phases was higher than the national average. Although this clinic ranked higher than the national average on counseling, all known smokers, regardless of their readiness to quit, should be receiving counseling on the effects and consequences of continued tobacco use. When providers are consistent in providing tobacco cessation counseling and interventions at each visit, there is often a decrease in tobacco use as compared with no education provided (Laniado-Laborin, 2010).

The Healthy People 2020 nationwide initiative goal for cigarette smoking is 12%, the most current data show that Kentucky is at 21.1% for cigarette smoking (ODPHP, 2014; Odani et al., 2018). This demonstrates that there is an opportunity for growth in primary care clinics within the state of Kentucky to improve tobacco use screenings and to provide evidenced-based counseling and interventions for successful tobacco cessation.

Limitations and Implications for Future Research

There were several limitations identified in the design of this study. Although data were collected from a large primary care clinic, the study was limited to the specific Louisville, Kentucky region. A larger, multi-clinic, multi-regional comparison would help increase generalizability.

The intervention phase was limited to only two weeks for the providers and could have impacted how adequately they understood the material. Since the intervention consisted of a one-time education session and was initiated within a short period of time, implementation of the study objectives within the provider's practice could have been difficult for them during their normal routine hours. As shown by the evidence in this study there was no single referral made for tobacco cessation in the post-intervention phase.

Another limitation was the length and reach of this study. The education session and chart review were performed solely by the primary investigator. To see an impact and further comparison of the study objectives, this study could be replicated for at least one year and at multiple clinics.

Further research should include identification of provider barriers to documentation of tobacco use screening, counseling, pharmacotherapy, and referrals. According to McBride et al., some perceived barriers to provider documentation include limited time allotted for each patient visit, lack of priority for and knowledge of the provider, and lack of teamwork within the office (1997).

Conclusion

The continuous use of tobacco has serious consequences to our nation's health. Tobacco use is the single most preventable cause of disease, disability and death in the United States. Primary care practices should place more emphasis on adopting a system-wide practice change on screening, counseling, medication and referral for all tobacco users and appropriately documenting those interventions. Tobacco use screening and cessation counseling is recognized as one of three most effective and efficacious preventive health actions that can be undertaken in a clinical setting (Agency for Healthcare Research and Quality [AHRQ], 2018). Meeting the recommended requirements for tobacco screening rates is a difficult task and should be confronted with a multidisciplinary approach within the practice.

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Table 1. Demographic characteristics of the study sample

	<i>Pre-implementation (N=96) n (%)</i>	<i>Post-implementation (N=99) n (%)</i>	<i>P</i>
Age			
18-40	26 (27.1)	37 (37.4)	0.307
41-60	46 (47.9)	41 (41.4)	
61 and above	24 (25.0)	21 (21.2)	
Gender			
Male	41 (42.7)	36 (36.4)	0.365
Female	55 (57.3)	63 (63.6)	
Race/Ethnicity			
Caucasian	77 (80.2)	73 (74.5)	0.138
African American	11 (11.5)	20 (20.4)	
Hispanic	5 (5.2)	1 (1.0)	
Other	3 (3.1)	4 (4.1)	
Health Insurance			
Commercial	33 (34.4)	38 (38.4)	0.375
Medicaid	33 (34.4)	35 (35.4)	
Medicare	30 (31.2)	24 (24.2)	
No Insurance	0 (0)	2 (2)	
Type of Visit			
Annual	14 (14.6)	20 (20.2)	0.492
Episodic	45 (46.9)	47 (47.5)	
Follow-up	37 (38.5)	32 (32.3)	
Type of Provider			
Nurse Practitioner	57 (59.4)	47 (47.5)	0.096
Physician	39 (40.6)	52 (52.5)	

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Table 2. Comparison of documentation, counseling, medication and referral for smoking cessation before and after an education intervention.

	Pre-Education (n=96) n (%)	Post-Education (n=99) n (%)	<i>P</i>
Documentatation of tobacco use:			
Yes	30 (31.3)	31 (31.3)	0.992
No	66 (68.8)	68 (68.7)	
Counseling			
Yes	25 (26.0)	31 (31.3)	0.416
No	71 (74.0)	68 (68.7)	
Medication			
Yes	10 (10.4)	12 (12.1)	0.707
No	86 (89.6)	87 (87.9)	
Referral			
Yes	1 (1.0)	0 (0)	0.309
No	95 (99.0)	99 (100)	

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Figure 1. Adherence to tobacco screening based on type of visit

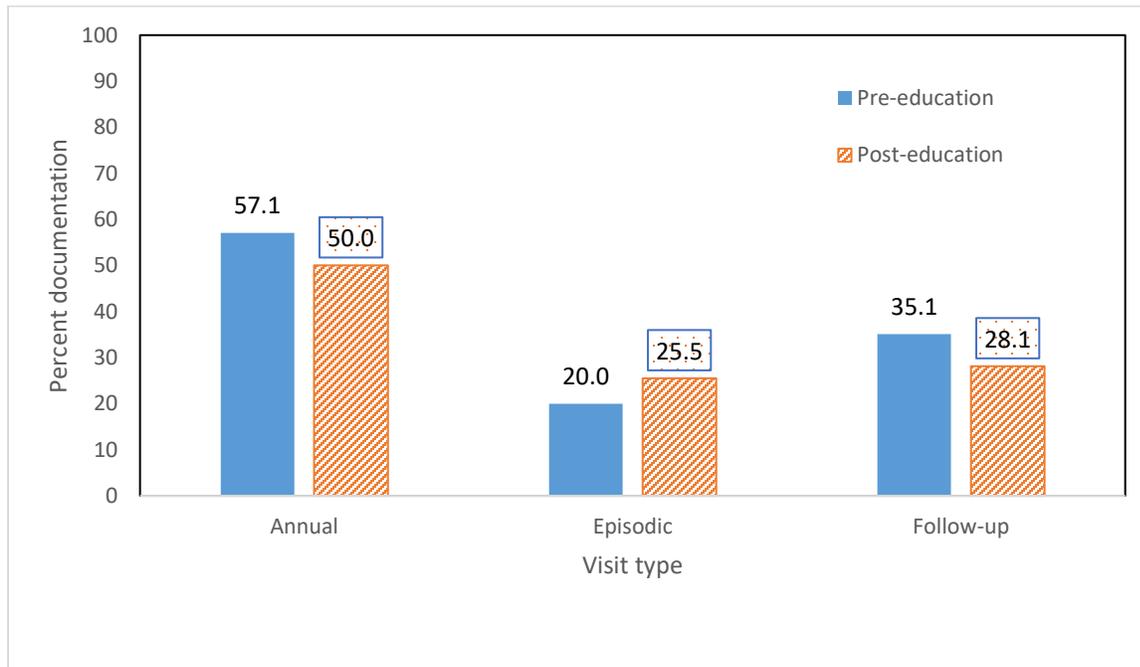
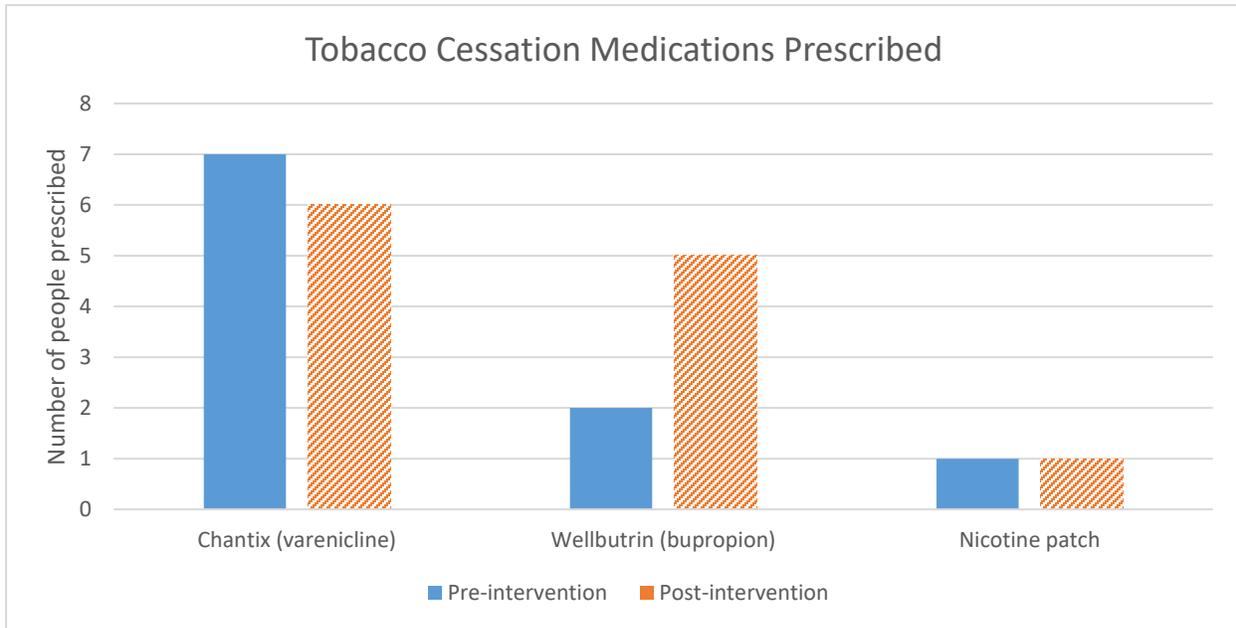


Figure 2. *Number of FDA-approved tobacco cessation medications prescribed*



Appendix A

Educational Handout and Tip Sheets for EMR Documentation

**Education to Primary Care Clinic, Louisville, Kentucky.
Sunita Gurung, DNP-student 2018, University of Kentucky**



Project Aim:

Decrease the rate of smoking in the NCMA patient group

Goal

- Increase provider knowledge on current smoking guidelines.
- Screen patient for smoking status
- Discuss smoking status and readiness to quit
- Increase patient knowledge on the effects of smoking and different ways to quit.
- Provide patient the tobacco cessation resources.

Background

- One of the most preventable reason for morbidity and mortality in the United States.
- 1.1 billion people smoked tobacco in 2015 and killing over seven million people around the world.
- Twenty percent death are caused by cigarette smoking.
- More than 300 billion dollars cost in healthcare expenditure
- 480,000 premature deaths in the United States
- Tobacco use in Kentucky 29.6%
- An estimated 70% of smokers have expressed desired to quit.

Health risk related to smoking:

- COPD
- Stroke
- Lung Cancer
- Peripheral Vascular Disease
- Diabetes
- Cancer of Bladder, Cervix, Colon, Rectum, Esophagus, Liver, Pancreas, Stomach.
- Fertility, pregnancy, fetal complication.
- Infection
- Dental, vision hearing problems.

Tobacco Cessation Strategies

The United States Preventative Task Force (USPSTF) had issued a Grade A recommendation that healthcare provider should screen patients on tobacco use and provide tobacco cessation interventions to those who use tobacco products (USPSTF, 2015). Healthcare provider can utilize the “5-A” framework

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for the counseling strategy because this strategy gives the healthcare provider to assess the patient smoking history, number of packs of cigarette smoking and readiness to quit (USPSTF, 2014):

- 1) Ask about the tobacco use.
- 2) Advice to quit through clear personalized messages.
- 3) Assess willingness to quit.
- 4) Assist to quit.
- 5) Arrange follow- up and support.

The USPSTF, 2015 also recommend counseling directly with patients for longer or multiple sessions. Telephone counseling (1-800-QUIT-NOW) “quit lines” also improve the cessation rates. Quit are free service and is available 24/7. Patient can speak with trained person. Patient can contact at any point during the process of quit time or after quitting.

Pharmacotherapy: Combination of counseling and medication are more effective than either alone. FDA approved nicotine replacement therapy includes, sustained release bupropion and Varenicline.

The seven first line medication (5 nicotine and 2 non-nicotine) reliably increase long-term smoking abstinence rates. Bupropion SR, Nicotine gum, Nicotine inhaler, Nicotine lozenge. Nicotine nasal spray, Nicotine patch, Varenicline.

Implementation/Strategies: Set a quit date. Inform family, friends, coworkers about quit date. Inform patient in Nicotine withdrawal for couple week. Remove all the tobacco from the environment.

U.S Preventative Services Task Forces:

Tobacco Smoking Cessation in Adults, Including Pregnant Women: Behavioral and Pharmacotherapy Interventions

Population	Nonpregnant adults age ≥18 y	Pregnant women age ≥18 y	Pregnant women age ≥18 y	All adults age ≥18 y
Recommendation	Provide pharmacotherapy and behavioral interventions for cessation. Grade: A	Provide behavioral interventions for cessation. Grade: A	Pharmacotherapy interventions: No recommendation. Grade: I statement	ENDS: No recommendation. Grade: I statement
Assessment	The 5 A's framework is a useful strategy for engaging patients in smoking cessation discussions. The “5 A's” include: 1) Asking every patient about tobacco use, 2) Advising them to quit, 3) Assessing their willingness to quit, 4) Assisting them with quitting, and 5) Arranging follow-up.			

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Behavioral Counseling Interventions	Behavioral interventions alone (in-person behavioral support and counseling, telephone counseling, and self-help materials) or combined with pharmacotherapy substantially improve achievement of tobacco cessation.	Behavioral interventions substantially improve achievement of tobacco smoking abstinence, increase infant birthweight, and reduce risk for preterm birth.		
Pharmacotherapy Interventions	Pharmacotherapy interventions, including NRT, bupropion SR, and varenicline—with or without behavioral counseling interventions—substantially improve achievement of tobacco cessation.		There is inadequate or no evidence on the benefits of NRT, bupropion SR, or varenicline to achieve tobacco cessation in pregnant women or improve perinatal outcomes in infants.	There is inadequate evidence on the benefit of ENDS to achieve tobacco cessation in adults or improve perinatal outcomes in infants.
Balance of Benefits and Harms	The USPSTF concludes with high certainty that the net benefit of behavioral interventions and FDA-approved pharmacotherapy for tobacco cessation, alone or in combination, is substantial.	The USPSTF concludes with high certainty that the net benefit of behavioral interventions for tobacco cessation on perinatal outcomes and smoking abstinence is substantial.	The USPSTF concludes that the evidence on pharmacotherapy interventions for tobacco cessation is insufficient because of a lack of studies, and the balance of benefits and harms cannot be determined.	The USPSTF concludes that the evidence on the use of ENDS for tobacco cessation is insufficient, and the balance of benefits and harms cannot be determined
Other Relevant USPSTF Recommendations	The USPSTF recommends that primary care clinicians provide interventions, including education or brief counseling, to prevent the initiation of tobacco use in school-aged children and adolescents. This recommendation is available at http://www.uspreventiveservicestaskforce.org .			

For a summary of the evidence systematically reviewed in making these recommendations, the full recommendation statement, and supporting documents, please go to <http://www.uspreventiveservicestaskforce.org>.

Disclaimer: Recommendations made by the USPSTF are independent of the U.S. government. They should not be construed as an official position of the Agency for Healthcare Research and Quality or the U.S. Department of Health and Human Services.

Current as of: September 2015

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<https://www.uspreventiveservicestaskforce.org/Page/Document/ClinicalSummaryFinal/tobacco-use-in-adults-and-pregnant-women-counseling-and-interventions1>

Fiore MC, Jaén CR, Baker TB, et al. (2008). US Department of Health and Human Services, “Treating Tobacco Use and Dependence: 2008 Update”. Ten Key Guideline Recommendations:

The overarching goal of these recommendations is that clinicians strongly recommend the use of effective tobacco dependence counseling and medication treatments to their patients who use tobacco, and that health systems, insurers, and purchasers assist clinicians in making such effective treatments available.

1. Tobacco dependence is a chronic disease that often requires repeated intervention and multiple attempts to quit. Effective treatments exist, however, that can significantly increase rates of long-term abstinence.
2. It is essential that clinicians and health care delivery systems consistently identify and document tobacco use status and treat every tobacco user seen in a health care setting.
3. Tobacco dependence treatments are effective across a broad range of populations. Clinicians should encourage every patient willing to make a quit attempt to use the counseling treatments and medications recommended in this Guideline.
4. Brief tobacco dependence treatment is effective. Clinicians should offer every patient who uses tobacco at least the brief treatments shown to be effective in this Guideline.
5. Individual, group, and telephone counseling are effective, and their effectiveness increases with treatment intensity. Two components of counseling are especially effective, and clinicians should use these when counseling patients making a quit attempt: Practical counseling (problemsolving/skills training) Social support delivered as part of treatment.
6. Numerous effective medications are available for tobacco dependence, and clinicians should encourage their use by all patients attempting to quit smoking—except when medically contraindicated or with specific populations for which there is insufficient evidence of effectiveness (i.e., pregnant women, smokeless tobacco users, light smokers, and adolescents). Seven first-line medications (5 nicotine and 2 non-nicotine) reliably increase long-term smoking abstinence rates:
 - Bupropion SR
 - Nicotine gum
 - Nicotine inhaler
 - Nicotine lozenge
 - Nicotine nasal spray
 - Nicotine patch
 - VareniclineClinicians also should consider the use of certain combinations of medications identified as effective in this Guideline.
7. Counseling and medication are effective when used by themselves for treating tobacco dependence. The combination of counseling and medication, however, is more effective than

either alone. Thus, clinicians should encourage all individuals making a quit attempt to use both counseling and medication.

8. Telephone quitline counseling is effective with diverse populations and has broad reach. Therefore, both clinicians and health care delivery systems should ensure patient access to quitlines and promote quitline use.

9. If a tobacco user currently is unwilling to make a quit attempt, clinicians should use the motivational treatments shown in this Guideline to be effective in increasing future quit attempts.

10. Tobacco dependence treatments are both clinically effective and highly cost-effective relative to interventions for other clinical disorders. Providing coverage for these treatments increases quit rates. Insurers and purchasers should ensure that all insurance plans include the counseling and medication identified as effective in this Guideline as covered benefits.

A comparison of the findings of the updated Guideline with the 2000 Guideline reveals the considerable progress made in tobacco research over the brief period separating these two publications. Tobacco dependence increasingly is recognized as a chronic disease, one that typically requires ongoing assessment and repeated intervention. In addition, the updated Guideline offers the clinician many more effective treatments strategies than were identified in the original Guideline. There now are seven different first-line effective agents in the smoking cessation pharmacopoeia, allowing the clinician and patient many different medication options. In addition, recent evidence provides even stronger support for counseling (both when used alone and with other treatments) as an effective tobacco cessation strategy; counseling adds to the effectiveness of tobacco cessation medications, quitline counseling is an effective intervention with a broad reach, and counseling increases tobacco cessation among adolescent smokers. Finally, there is increasing evidence that the success of any tobacco dependence treatment strategy cannot be divorced from the health care system in which it is embedded. The updated Guideline contains new evidence that health care policies significantly affect the likelihood that smokers will receive effective tobacco dependence treatment and successfully stop tobacco use. For instance, making tobacco dependence treatment a covered benefit of insurance plans increases the likelihood that a tobacco user will receive treatment and quit successfully. Data strongly indicate that effective tobacco interventions require coordinated interventions. Just as the clinician must intervene with his or her patient, so must the health care administrator, insurer, and purchaser foster and support tobacco intervention as an integral element of health care delivery. Health care administrators and insurers should ensure that clinicians have the training and support to deliver consistent, effective intervention to tobacco users.

One important conclusion of this Guideline update is that the most effective way to move clinicians to intervene is to provide them with information regarding multiple effective treatment options and to ensure that they have ample institutional support to use these options. Joint actions by clinicians, administrators, insurers, and purchasers can encourage a culture of health care in which failure to intervene with a tobacco user is inconsistent with standards of care.

Smoking and Tobacco Use Cessation Counseling Visit Documentation for Billing.

Excludes for group

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- **99406**- Intermediate, minimum of 3 min, up to 10 minutes
- **99407**- Intensive, (**greater than**) 10 minutes
- **G0436- For Medicare**; minimum of 3 min, up to 10 min (this will occur on the backend)
- **G0437- For Medicare**; (**greater than**) 10 min (this will occur on the backend)

Qualifications of charge for patients:

- 1.) Who use tobacco, regardless of whether they have signs/symptoms of tobacco-related disease;
- 2.) Who are competent and alert at the time that counseling is provided; and,
- 3.) Whose counseling is furnished by a qualified physician or other Medicare-recognized practitioner

Documentation should include:

- A diagnosis to support billing of the code (**Ex. Tobacco use/Abuse - Z72.0**)
- The amount of the patients tobacco use
- The History of use (**current/dependent/past**)
- The amount of time spent on tobacco cessation counseling
- The context in which it was provided; suggested actions and motivational counseling
- Specific validated interventions of assessing readiness for change and barriers to change
- Advise a change in behavior
- Arranging for services and follow-up
- Up to 4 cessation counseling sessions (1 attempt =up to 4 sessions)
- Two cessation counseling attempts (or up to 8 cessation counseling sessions) are allowed every 12 months (for Medicare, commercial payers vary)

Referral to Smoking Cessation Program

This tip sheet describes the process of submitting a referral order to the **Smoking Cessation Program**.

Provider Workflow

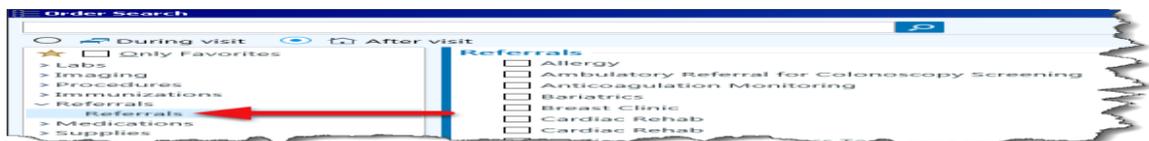
1. Within an **Office Visit, Orders Only** or **Telephone** encounter, select the **Meds & Orders** section.
2. Select the **+ New Order** button to open the office-level preference list.



3. If you have an established **user preference list**, de-select the **"Only Favorites"** checkbox.

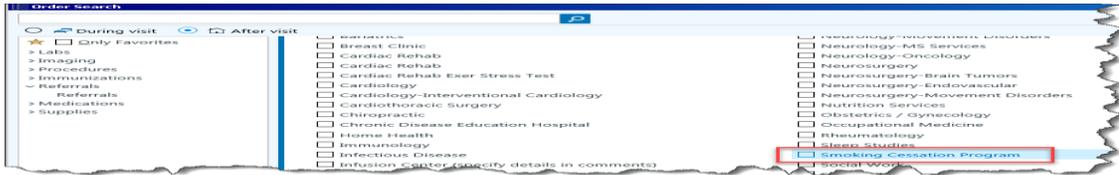


4. Expand the **Referrals** preference list on the left, and select **Referrals**.



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5. Select the **Smoking Cessation Program** order.



6. Click **Accept**.
7. The Smoking Cessation Program is now listed under the **Unsigned Orders** section of **Medications & Orders**. Select the **summary sentence** to open the **Order Composer**.

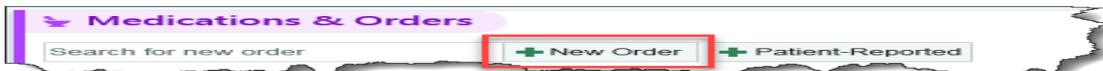


8. The Smoking Cessation Program order's **"To dept spec"** field defaults to **'Prevent and Wellness'**.

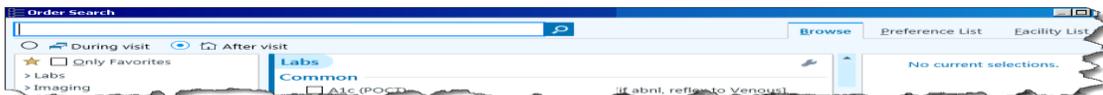


You Can Also...

- Search for the **Smoking Cessation Program** order.
1. In the **Medications & Orders** section, click the **New Order** button.



2. The Preference List Browser opens on the **Browse** tab.



3. Search for the **Smoking Cessation Program** in the search box.



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Resources

Fiore MC, Jaén CR, Baker TB, et al. (2008). *Treating Tobacco Use and Dependence: 2008 Update*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service. Retrieved from:

<https://www.ncbi.nlm.nih.gov/books/NBK63952/>

Tobacco Smoking Cessation in Adults, Including Pregnant Women: Behavioral and

Pharmacotherapy Interventions. U.S. Preventive Services Task Force. September 2015.

<https://www.uspreventiveservicestaskforce.org/Page/Document/ClinicalSummaryFinal/tobacco-use-in-adults-and-pregnant-women-counseling-and-interventions1>