

LEARNING OBJECTIVES

- Understand the clinical practice guidelines for treating tobacco use and dependence
- Discuss the 5As behavior counseling framework and the brief clinical intervention strategy
- Describe the role of pharmacotherapy in treating tobacco dependence
- List appropriate billing codes for the treatment of tobacco dependence

Tobacco dependence: How should a busy physician assistant intervene?

Tobacco dependence is the leading preventable cause of death in the United States. Brief counseling along with appropriate pharmacotherapy has shown the most promising results.

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Tobacco dependence is now considered a chronic disease; therefore, its treatment should be managed as such.¹ As with many other chronic diseases, proper management includes education and counseling along with pharmacotherapy. Morbidity from tobacco dependence is the leading preventable cause of death in the United States. Reports show that 70% of smokers want to quit, and 40% said they have tried to do so in the past year.^{2,3}

Long-term tobacco abstinence appears to be an unattainable goal for many patients. Some authors have postulated that the reason is that most tobacco users do not use available treatments.⁴ Unfortunately, another reason is that counseling patients is very time consuming; and, in a managed care environment, the number of patients seen may count as much as the quality of care that is provided. Therefore, knowing how to counsel patients—briefly, repetitively, and effectively—is a tool all clinicians should master. This article focuses on how to provide clinical intervention for those patients willing to quit.

The **first step** to treating tobacco dependence is to identify the users. The obvious first question is “Do you smoke?” An even more important question should follow: “Do you want to quit?” A “Yes” can provoke mixed emotions for a clinician. On the one hand, you are happy your patient is willing to take the first step to a healthier lifestyle; but on the other hand, you must adhere to your patient schedule. Severe time restraints can make brief clinical intervention techniques more palatable for clinicians. In fact, interventions as brief as 3 minutes have been shown to significantly increase cessation rates.⁵ These brief interventions can

be used with all patient populations, including pregnant women, adolescents, smokers with comorbidities or mental illness, and ethnic and racial minorities.

CLINICAL PRACTICE GUIDELINE

The Public Health Service (PHS) clinical practice guideline for treating tobacco use suggests that clinicians should consistently identify and document the tobacco-use status of each patient.¹ Every tobacco user who receives care in



Available forms of smoking cessation aids

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a health care setting should receive some clinical intervention for tobacco use. The PHS guideline was the result of a collaboration of eight government and nonprofit organizations and provides an evidence-based blueprint for effective treatment of tobacco addiction. Meta-analyses in the 2008 update of the PHS guideline definitively showed that counseling and medications work best when used together; each is effective alone, but data are improved when the two are used collaboratively. Outcomes improved when counseling was added to medications, and outcomes improved when medications were added to counseling. Brief tobacco-dependence counseling was also shown to be effective.¹ Clinicians should become adept at using brief clinical interventions with appropriate pharmacotherapy when treating patients who are identified as tobacco users.

BEHAVIOR COUNSELING FRAMEWORK

The PHS guideline recommends a model referred to as the *5As*, a five-step clinical intervention for all tobacco users in a primary care setting. This strategy, when delivered succinctly, requires only 3 to 5 minutes of direct clinician time.¹

Ask Implement an office-wide system that will **systematically identify all tobacco users at every visit**. Clinicians should query *every* patient about his or her tobacco use at *every* clinic visit. Tobacco use could be added to the vital signs documented in the patient's chart. Tobacco-use status can be identified simply as current, former, or never, or an alternative identification system can be established.

Advise Use clear, strong, and personalized statements to **urge every tobacco user to quit**. The importance of quitting (include chewing or smokeless tobacco) should be clearly stated (eg, "Occasional or light tobacco use is still dangerous."). Statements should be strong (eg, "Cutting down when you are feeling ill is not enough."). Your statement should be personalized via tying tobacco use to the patient's current symptoms (eg, "Continuing to smoke makes your asthma worse and quitting may dramatically improve your health.>").

Assess At every patient visit, **determine the patient's willingness to make a quit attempt** by asking, "Are you willing to give quitting a try?" If the patient answers "Yes," provide assistance. Some patients may be willing to participate in an intensive intervention, which should be initiated at that visit or the patient should be given a referral.

Adolescents, pregnant women, and members of racial/ethnic minorities may need additional information. If the patient

says he or she is unwilling to make a quit attempt at this time, motivational interviewing is an effective tool that may help the patient consider making a quit attempt in the future.

Assist **Aid the patient's efforts to quit** by providing counseling and pharmacotherapy. Clinicians should guide the patient's preparations for quitting, such as have the patient set a quit date; have the patient tell family, friends, and coworkers about the quit attempt and request support; tell the patient to anticipate challenges, including nicotine with-

"Clinicians must explain to the patient that multiple quit attempts may ultimately be necessary before permanent success is achieved."

drawal symptoms; and have the patient remove tobacco products from the environment. The use of effective medications should be recommended to those patients who may need them. Appropriate medications can reduce withdrawal symptoms and increase chances of quitting success.

Practical counseling should include recommendations that help the patient achieve total abstinence. Patients should review what helped in previous quit attempts, identify what hurt, anticipate the challenges, and develop a plan to overcome possible triggers. Clinicians should also provide **intratreatment social support** and **supplementary materials**, including information about telephone quitlines.

Arrange **Ensure follow-up contact** is made in person or via telephone. Timing of follow-up is important. First contact should be during the first week after the quit date; second contact is recommended for within the first month. Additional contacts can be scheduled as necessary.

At each follow-up contact, discuss any problems the patient may have encountered and anticipate any challenges for the near future. **Remind** the patient of available support, such as telephone quitlines. If abstinence was achieved, **congratulate** the patient; if tobacco use had occurred, review the circumstances with the patient and **elicit a recommitment** to total abstinence. More intensive treatment should be considered for patients who having difficulty with total abstinence.¹

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KEY POINTS

- Tobacco dependence is now considered a chronic disease. Morbidity from tobacco dependence is now the leading preventable cause of death in the United States. Reports show that 70% of smokers want to quit, and 40% said they have tried to do so in the past year.
- The 5As behavior counseling framework includes **ask** patients if they smoke, **advise** them to quit, **assess** their willingness to quit, **assist** in the quit attempt, and **arrange** for follow-up.
- A more concise strategy is to **ask** the patient if they use tobacco, **advise** the patient to stop smoking and offer treatment options, and **refer** the patient to telephone quitlines and/or community programs.

BRIEF CLINICAL INTERVENTION STRATEGY

Although the 5As model is effective, many clinicians either do not remember or fail to use the paradigm; therefore, a more concise shortcut may work better for busier clinicians.⁶ This method is referred to as the *brief clinical intervention*.

Ask the patient if he or she uses tobacco at every visit.

If the answer is Yes, that patient is identified as a tobacco user. The patient who is ready to quit using tobacco should be congratulated for making one of the most important decisions on the path to a healthier lifestyle. Then **have the patient set a quit date** for 2 to 6 weeks later. The patient who is willing to stop smoking should not leave your office without setting a predetermined quit date.⁶

Advise each patient with a simple statement about how important stopping tobacco use is to his or her health. **Using a direct, nonconfrontational manner**, you can say to the patient, "As your health care provider, I must tell you that the most important thing you can do right now to improve your health is to stop smoking." A combination of counseling and pharmacotherapy is proven to be more

effective than either method alone; therefore, pharmacotherapy options should be offered to the patient.

Refer the patient to telephone quitlines (eg, 1-800-QUIT-NOW), as well as any local programs in the community. Write any referral names or numbers on a prescription and hand it to the patient. Clinicians should avail themselves to any community resources.

PHARMACOTHERAPY FOR TOBACCO DEPENDENCE

The updated PHS guideline discusses numerous medications for treating tobacco dependence. Clinicians should encourage patients to consider using medication when attempting to quit, except when the use of these drugs is medically contraindicated or there is insufficient evidence of their effectiveness (for example, patients who are pregnant, smokeless tobacco users, light smokers, or adolescent). Tobacco-dependence medications have been shown to significantly improve abstinence rates. Choice of specific pharmacotherapy should be guided by factors such as clinician familiarity with the drug, contraindications, patient preference, the patient's previous experience with pharmacotherapy, and the patient's characteristics (eg, history of depression or concerns about weight gain). **Table: First-line pharmacotherapy for smoking cessation** (in the online version of this article) lists the therapies that are FDA-approved for treating tobacco dependence.

Combination medications The updated guideline also identifies which first-line therapies are effective as combination therapy. Combination therapies are especially helpful for highly dependent smokers and patients who have a history of experiencing severe withdrawal symptoms. Effective nicotine replacement therapy combinations include the patch (for more than 14 weeks) plus gum or spray; the patch plus an inhaler; and the patch plus bupropion, sustained release (Zyban, generics), which is the only combination therapy that has received FDA approval for smoking cessation.

LIFE-LONG ADDICTION

Clinicians should remain aware that **relapses are common** and expected because of the chronic nature of this addiction. For this reason, repetitive brief counseling is so important. Relapses can occur early in the cessation process or years later. Most smokers who ultimately quit have experienced relapses along the way. It is imperative for clinicians to explain to the patient that multiple quit attempts may be necessary before permanent success is achieved, and patients should be encouraged to use a lapse as a learning experience. Minimal relapse prevention consists of congratulating success, encouraging continued abstinence, and discussing the benefits of quitting as well as the challenges of achieving success.

REIMBURSEMENT CODES

The ICD-9-CM (International Classification of Diseases, 9th Revision, Clinical Modification) diagnostic billing code for treatment of tobacco dependence is 305.1 (tobacco use disorder [tobacco dependence]). The CPT (current procedural terminology) codes are 99406 (smoking cessation counseling for 3-10 min-



From the AAPA Professional Education and Development Council

Communication competency is highlighted when treating tobacco dependence

Although many of the competencies are demonstrated when helping patients quit smoking, the interpersonal communication competency is especially relevant. Components of this particular competency include the use of effective questioning and listening to elicit information, accurate documentation of status and progress, adaption of communication style to the context of the individual patient interaction, and application of an understanding of human behavior. The 5As model described in the accompanying article requires use of the first two communication components. The third component is self evident. Each patient, to be treated effectively, must be approached as an individual; and they will respond according to the manner in which they are treated.

The last component of this competency may in fact be most important when dealing with patients who resist smoking cessation. As the author suggests "one of [our] most important duties involves counseling patients.... As clinicians, we should never underestimate the power of our words." This article is geared toward helping those patients who are ready to quit. However, what can we, as PAs, do to help those patients who are resistant to quitting despite our best efforts? How can a PA use interpersonal communication skills to guide a patient to the point of wanting to quit? Gentle persistence coupled with genuine concern can help pave the way. Partner with your patient to create a desire to quit.

utes) and 99407 (smoking cessation counseling for more than 30 minutes). Clinicians should note that reimbursement for smoking cessation therapy varies by payor and/or benefits package. In the interest of time, these diagnostic codes can be preprinted on the billing and diagnostic coding sheets and checked off as appropriate. Counseling by itself is a reimbursable activity and can be billed based on the number of minutes of counseling. A complete list of counseling codes can be found in the *ICD-9-CM* manual in the sections that correspond with the patient's diagnosis. Health care providers should be familiar with the codes that are not included with a related condition.

CONCLUSION

Whether to use the 5As model or the brief clinical intervention strategy is the clinician's choice. A more important note is to remember that one of the PAs' most important duties involves counseling patients. This role becomes even more vital when treating patients with chronic diseases. As clinicians, we should never underestimate the power of our words. Now that tobacco dependence is accurately defined as a chronic disease, it is imperative that we, as clinicians, become familiar with and accurately apply evidence-based treatment guidelines for treating our patients who are tobacco users. Being vigilant about identifying tobacco users is a necessary first step. A brief 3-minute clinical intervention session,



ON THE WEB

• Table: First-line pharmacotherapy for smoking cessation

Please see the online version of this article at www.jaapa.com for this enhancement.

including ask, assist, and refer those patients who use tobacco, in conjunction with evidence-based pharmacotherapy should be part of every clinician's armamentarium. **JAAPA**

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REFERENCES

1. Fiore MC, Jaén CR, Baker TB, et al; Public Health Service Clinical Practice Guideline Panel. *Treating Tobacco Use and Dependence: 2008 Update*. Bethesda, MD: US Dept of Health and Human Services, Public Health Service; 2008.
2. Centers for Disease Control and Prevention (CDC). Cigarette smoking among adults—United States, 2007. *MMWR Morb Mortal Wkly Rep*. 2008;57(45):1221-1226.
3. Centers for Disease Control and Prevention (CDC). Cigarette smoking among adults—United States, 2000. *MMWR Morb Mortal Wkly Rep*. 2002;51(29):642-645.
4. Shiffman S, Brockwell SE, Pillitteri JL, Gitchell JG. Use of smoking-cessation treatments in the United States. *Am J Prev Med*. 2008;34(2):102-111.
5. Fiore MC. Treating tobacco use and dependence: an introduction to the US Public Health Service Clinical Practice Guidelines. *Respir Care*. 2000;45(10):1196-1199.
6. Schroeder SA. What to do with a patient who smokes. *JAMA*. 2005;294(4):482-487.

TABLE. First-line pharmacotherapy for smoking cessation¹

Pharmacotherapy	Precautions and contraindications	Adverse effects	Dosage and duration
OTC ONLY			
• Nicotine gum	<ul style="list-style-type: none"> • Not shown to be effective in pregnant smokers • Use with caution during immediate post-MI period • Use with caution in patients with serious arrhythmias and unstable angina pectoris 	<ul style="list-style-type: none"> • Dyspepsia • Hiccups • Jaw ache • Mouth soreness 	<ul style="list-style-type: none"> • 1-24 cigarettes/d: One 2-mg piece (every 1-2 h for first 6 w), ≤24 pieces/d for 12 w • ≥25 cigarettes/d: One 4-mg piece (every 1-2 h for first 6 w), ≤24 pieces/d for 12 w
• Nicotine lozenge	<ul style="list-style-type: none"> • Not shown to be effective in pregnant smokers • Use with caution during immediate post-MI period • Use with caution in patients with serious arrhythmias and unstable angina pectoris 	<ul style="list-style-type: none"> • Heartburn • Hiccups • Increased coughing (4-mg piece) • Increased headache (4-mg piece) • Nausea 	<ul style="list-style-type: none"> • Time to 1st cigarette >30 min: One 2-mg lozenge/1-2 h for 6 w (minimum of 9 lozenges/d); taper to 1 lozenge/2-4 h for 3 w, then 1 lozenge/4-8 h for 3 w (≤20 lozenges/d) • Time to 1st cigarette ≤30 min: One 4-mg lozenge/1-2 h for 6 w (minimum of 9 lozenges/d); taper to 1 lozenge/2-4 h for 3 w, then 1 lozenge/4-8 h for 3 w (≤20 lozenges/d)
PRESCRIPTION ONLY			
• Bupropion hydrochloride SR (Zyban, generics)	<ul style="list-style-type: none"> • Contraindicated in patients with a history of seizures or eating disorders, patients who are taking another form of bupropion, and patients who have used a MAOI in past 14 d • Not shown to be effective in pregnant smokers 	<ul style="list-style-type: none"> • Dry mouth • Insomnia 	<ul style="list-style-type: none"> • 150 mg/d in AM for 3 d; followed by 150 mg twice a day for 7-12 w (maximum dosage, 300 mg/d) • Begin treatment 1-2 w before quit date • Long-term therapy: up to 6 mo postquit
• Nicotine inhaler	<ul style="list-style-type: none"> • Not shown to be effective in pregnant smokers • Use with caution during immediate post-MI period • Use with caution in patients with serious arrhythmias and unstable angina pectoris 	<ul style="list-style-type: none"> • Coughing • Local irritation of mouth and throat • Rhinitis 	<ul style="list-style-type: none"> • 6-16 cartridges/d for 6 mo (each cartridge delivers 4 mg nicotine over 80 inhalations) • Gradually taper frequency of inhalations during final 3 mo
• Nicotine nasal spray	<ul style="list-style-type: none"> • Not shown to be effective in pregnant smokers • Produces higher peak nicotine levels than other NRTs and has highest dependence potential • Use with caution during immediate post-MI period • Use with caution in patients with serious arrhythmias and unstable angina pectoris 	<ul style="list-style-type: none"> • Nasal irritation 	<ul style="list-style-type: none"> • 1-2 doses/h (1 dose = 0.5 mg delivered to each nostril, 1 mg total), increasing as needed for symptom relief, for 3-6 mo • Minimum: 8 doses/d • Maximum: 40 doses/d (5 doses/h)
• Varenicline (Chantix)	<ul style="list-style-type: none"> • Not shown to be effective in pregnant smokers • Use with caution during immediate post-MI period • Use with caution in patients with significant kidney disease (CrCl <30 mL/min) or who are on dialysis • Use with caution in patients with serious arrhythmias and unstable angina pectoris 	<ul style="list-style-type: none"> • Abnormal or vivid/strange dreams • Depressed mood and other psychiatric symptoms • Nausea • Trouble sleeping 	<ul style="list-style-type: none"> • 0.5 mg/d for 3 d; followed by 0.5 mg twice a day for 4 d; then 1 mg twice a day for 3-6 mo • Begin treatment 7 d before quit date; quit on day 8
PRESCRIPTION AND OTC			
• Nicotine patch	<ul style="list-style-type: none"> • Not shown to be effective in pregnant smokers • Use with caution during immediate post-MI period • Use with caution in patients with serious arrhythmias and unstable angina pectoris 	<ul style="list-style-type: none"> • Local skin reaction • Insomnia and/or vivid dreams 	<ul style="list-style-type: none"> • Single dosage: 22 mg/24 h or 11 mg/24 h (for lighter smokers) • Step-down dosage: 21 mg/24h for 4 w; then 14 mg/24 h for 2 w; then 7 mg/24 h for 2 w

Key: CrCl, creatinine clearance; MAOI, monoamine oxidase inhibitor; NRTs, nicotine replacement therapies.