



## 2015 PRACTICE GUIDELINES IN PRIMARY CARE TREATING TOBACCO USE AND DEPENDENCE

### **PURPOSE:**

Smoking cessation interventions offer health care providers their greatest opportunity to improve the current and future health of all Americans. In the United States, smoking is responsible for about one in five deaths annually (i.e., about 443,000 deaths per year, and an estimated 49,000 of these smoking-related deaths are the result of secondhand smoke exposure). Tobacco use is the chief avoidable cause of illness and death in our society and is a known cause of cancer, heart disease, stroke, peripheral vascular disease, and chronic obstructive pulmonary disease. It also contributes to the incidence of peptic ulcer disease, osteoporosis, infertility, low birth weight, and other complications of pregnancy.

In 2010, the Centers for Disease Control and Prevention (CDC) estimated that 43.8 million people or 19% of all adults in the United States currently smoke. Smoking prevalence has slightly declined in the last several years, but each day more than 3,800 persons younger than 18 years of age smoke their first cigarette and about 1,000 younger than 18 begin smoking on a daily basis.

In 2013, states will collect \$25.7 billion from tobacco taxes and legal settlements, but states are spending less than 2% of the \$25.7 billion on tobacco control programs. Recent studies estimate that lifetime savings in tobacco-related health expenditures for every former smoker total more than \$20,000. Furthermore, employers and insurance plans could save up to \$210 per year for every covered smoker who quits. For each pregnant woman who quits smoking, there is a potential cost savings to the U.S. health care system of \$881 with each premature birth prevented.

### **KEY RECOMMENDATIONS:**

*Treating Tobacco Use and Dependence: 2008 Update*, is a Public Health Service-sponsored Clinical Practice Guideline. The guideline is a product of the Tobacco Use and Dependence Guideline Panel (“the Panel”), a consortium of 37 individual expert representatives, consultants, and staff. The guideline recommends tobacco use of every patient, treated in a healthcare setting, be assessed and documented at every visit.

#### **A. Assessment of Use and Exposure**

The five major steps (the “5 A’s”) to intervention in the primary care setting are listed in **Table I**. It is important for the clinician to *Ask* the patient if he or she uses tobacco, *Advise* him or her to quit, *Assess* willingness to make a quit attempt, *Assist* him or her in making a quit attempt, and *Arrange* for follow-up contacts to prevent relapse.

The strategies are designed to be brief, requiring 3 minutes or less of direct clinician time.

**Table 1. 5A’s Tobacco Use Intervention - A Minimal Intervention Protocol**

<ol style="list-style-type: none"> <li>1. <b>Ask:</b> Systematically identify all tobacco users at every visit</li> <li>2. <b>Advise:</b> Strongly urge all smokers to quit</li> <li>3. <b>Assess:</b> Determine which smokers are willing to make an attempt to quit <ol style="list-style-type: none"> <li>a. Provide a motivational message for those not motivated</li> <li>b. Move on to step 3 - <i>Assist</i>, if willing to commit to quit</li> </ol> </li> <li>4. <b>Assist:</b> Aid the patient in quitting <ol style="list-style-type: none"> <li>a. Set a quit date</li> <li>b. Offer brief office based intervention or referral to formal treatment</li> <li>c. Offer nicotine replacement bupropion SR® or varenicline®</li> <li>d. Provide supplementary self-help materials</li> <li>e. Provide supportive/problem-solving counseling if resources and time are available</li> </ol> </li> <li>5. <b>Arrange:</b> Schedule follow-up contact</li> </ol>
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**B. Treatment**

In addition to counseling, all smokers making a quit attempt should receive pharmacotherapy, except in the presence of special circumstances. First-line drug therapy for smokers includes nicotine replacement therapy, bupropion, or varenicline.

**Clinical Guidelines for Prescribing Pharmacotherapy**

<b>Who should receive pharmacotherapy for smoking cessation?</b>	All smokers trying to quit, except in the presence of special circumstances. Special consideration should be given before using pharmacotherapy with selected populations: those with medical contraindications, those smoking fewer than 10 cigarettes/day, pregnant/breastfeeding women, and adolescent smokers.
<b>What are the first-line pharmacotherapies recommended in this guideline?</b>	All seven of the FDA-approved pharmacotherapies for smoking cessation are recommended, including bupropion SR, varenicline, nicotine gum, nicotine inhaler, nicotine nasal spray, nicotine lozenge, and the nicotine patch.
<b>What factors should a clinician consider when choosing among the seven first-line pharmacotherapies?</b>	Because of the lack of sufficient data to rank-order these seven medications, choice of a specific first-line pharmacotherapy must be guided by factors such as clinician familiarity with the medications, contraindications for selected patients, patient preference, previous patient experience with a specific pharmacotherapy (positive or negative), and patient characteristics (e.g., history of depression, concerns about weight gain).
<b>Are pharmacotherapeutic treatments appropriate for lighter smokers (e.g., 10-15 cigarettes/day)?</b>	If pharmacotherapy is used with lighter smokers, clinicians should consider reducing the dose of first-line NRT pharmacotherapies and varenicline. No adjustments are necessary when using bupropion SR.
<b>What second-line pharmacotherapies are recommended in this guideline?</b>	Clonidine and nortriptyline.

<b>When should second-line agents be used for treating tobacco dependence?</b>	Consider prescribing second-line agents for patients unable to use first-line medications because of contraindications or for patients for whom first-line medications are not helpful. Monitor patients for the known side effects of second-line agents.
<b>Which pharmacotherapies should be considered with patients particularly concerned about weight gain?</b>	Bupropion SR and nicotine replacement therapies, in particular nicotine gum, have been shown to delay, but not prevent, weight gain.
<b>Are there pharmacotherapies that should be especially considered in patients with a history of depression?</b>	Bupropion SR and nortriptyline appear to be effective with this population. Varenicline may be contraindicated.
<b>Should nicotine replacement therapies be avoided in patients with a history of cardiovascular disease?</b>	No. The nicotine patch in particular is safe and has been shown not to cause adverse cardiovascular effects.
<b>May tobacco dependence pharmacotherapies be used long-term (e.g., 6 months or more)?</b>	Yes. This approach may be helpful with smokers who report persistent withdrawal symptoms during the course of pharmacotherapy or who desire long-term therapy. A minority of individuals who successfully quit smoking use ad libitum NRT medications (gum, nasal spray, inhaler) long-term. The use of these medications long-term does not present a known health risk. Additionally, the FDA has approved the use of bupropion SR for a long-term maintenance indication. Varenicline has been approved for 12 weeks of use.
<b>May pharmacotherapies ever be combined?</b>	Yes. There is evidence that combining the nicotine patch with either nicotine gum or nicotine nasal spray increases long-term abstinence rates over those produced by a single form of NRT.

**C. For the Patient Unwilling To Quit / Promoting the Motivation to Quit**

All patients entering a health care setting should have their tobacco use status assessed routinely. Clinicians should advise all tobacco users to quit and then assess a patient’s willingness to make a quit attempt. For patients not ready to make a quit attempt at this time, clinicians should use a brief intervention designed to promote the motivation to quit.

Patients unwilling to make a quit attempt during a visit may lack information about the harmful effects of tobacco, may lack the required financial resources, may have fears or concerns about quitting, or may be demoralized because of previous relapse. Such patients may respond to a motivational intervention that provides the clinician an opportunity to educate, reassure, and motivate such as the motivational intervention built around the “5 Rs”: *relevance, risks, rewards, roadblocks, and repetition.*

<b>Relevance</b>	Encourage the patient to indicate why quitting is personally relevant, being as specific as possible. Motivational information has the greatest impact if it is relevant to a patient’s disease status or risk, family or social situation (e.g., having children in the home), health concerns, age, gender, and other important patient characteristics (e.g., prior quitting experience, personal barriers to cessation).
<b>Risks</b>	<p>The clinician should ask the patient to identify potential negative consequences of tobacco use. The clinician may suggest and highlight those that seem most relevant to the patient. The clinician should emphasize that smoking low-tar/low-nicotine cigarettes or use of other forms of tobacco (e.g., smokeless tobacco, cigars, and pipes) will not eliminate these risks. Examples of risks are:</p> <p><i>Acute risks:</i> Shortness of breath, exacerbation of asthma, harm to pregnancy, impotence, infertility, increased serum carbon monoxide.</p> <p><i>Long-term risks:</i> Heart attacks and strokes, lung and other cancers (larynx, oral cavity, pharynx, esophagus, pancreas, bladder, cervix), chronic obstructive pulmonary diseases (chronic bronchitis and emphysema), long-term disability and need for extended care.</p> <p><i>Environmental risks:</i> Increased risk of lung cancer and heart disease in spouses; higher rates of smoking by children of tobacco users; increased risk for low birth weight, SIDS, asthma, middle ear disease, and respiratory infections in children of smokers.</p>
<b>Rewards</b>	<p>The clinician should ask the patient to identify potential benefits of stopping tobacco use. The clinician may suggest and highlight those that seem most relevant to the patient. Examples of rewards follow:</p> <ul style="list-style-type: none"> <li>Improved health.</li> <li>Food will taste better.</li> <li>Improved sense of smell.</li> <li>Save money.</li> <li>Feel better about yourself.</li> <li>Home, car, clothing, breath will smell better.</li> <li>Can stop worrying about quitting.</li> <li>Set a good example for children.</li> <li>Have healthier babies and children.</li> <li>Not worry about exposing others to smoke.</li> <li>Feel better physically.</li> <li>Perform better in physical activities.</li> <li>Reduced wrinkling/aging of skin.</li> </ul>
<b>Roadblocks</b>	<p>The clinician should ask the patient to identify barriers or impediments to quitting and note elements of treatment (problem solving, pharmacotherapy) that could address barriers. Typical barriers might include:</p> <ul style="list-style-type: none"> <li>Withdrawal symptoms</li> <li>Fear of failure</li> <li>Weight gain</li> <li>Lack of support</li> <li>Depression</li> <li>Enjoyment of tobacco</li> </ul>
<b>Repetition</b>	The motivational intervention should be repeated every time an unmotivated patient visits the clinic setting. Tobacco users who have failed in previous quit attempts should be told that most people make repeated quit attempts before they are successful.

**RESOURCES:**

Agency for Healthcare Research and Quality: <http://www.ahrq.gov/path/tobacco.htm#systems>  
American Cancer Society: [www.cancer.org](http://www.cancer.org)  
American Lung Association: [www.lungsusa.org](http://www.lungsusa.org)  
American Academy of Family Physicians: [www.aafp.org](http://www.aafp.org)  
American Psychological Association: [www.apa.org](http://www.apa.org)  
National Cancer Institute: [www.nci.nih.gov](http://www.nci.nih.gov)  
National Heart, Lung, and Blood Institute: [www.nhlbi.nih.gov/index.htm](http://www.nhlbi.nih.gov/index.htm)  
Office on Smoking and Health at the Centers for Disease Control and Prevention: [www.cdc.gov/tobacco](http://www.cdc.gov/tobacco)  
Society for Research on Nicotine and Tobacco: [www.srnt.org](http://www.srnt.org)  
U.S. Surgeon General <http://www.surgeongeneral.gov/initiatives/tobacco/index.html>

**MONITORING:**

The annual Consumer Assessment of Healthcare Providers and Systems (CAHPS) surveys members if they have been advised to quit, as well as, if a medication or alternative suggestion was recommended to help them quit.

**REFERENCES:**

Treating Tobacco Use and Dependence, April 2013. Agency for Healthcare Research and Quality, Rockville, MD. <http://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/tobacco/clinicians/update/index.html>

**REVIEWS AND APPROVALS:**

*Medical Peer Review Committee:* 4/02/97, 07/07/99, 05/04/01, 04/02/03, 03/02/05, 3/7/07, 1/7/09, 1/19/11, 1/16/2013  
*Professional Advisory Committee:* 1/21/2015