Treating Tobacco Use and Dependence

A How-To Packet for Implementing the U.S. Public Health Service Clinical Practice Guideline
WHAT IS THE GUIDELINE

Treating Tobacco Use and Dependence, a Public Health Service Clinical Practice Guideline, is the result of an extraordinary partnership among Federal Government and nonprofit organizations. It is the product of a two year effort by tobacco dependence experts, representatives from the sponsoring organizations, and professional staff. The panel employed an explicit, methodology and expert clinical judgment to develop scientific recommendations on the successful treatment of tobacco use and dependence.

The purpose of the guideline is to provide clinicians, public health professionals, tobacco dependence specialists, health care administrators, insurers, and purchasers, and even tobacco users, with evidence-based recommendations regarding clinical and systems interventions that will increase the likelihood of successful quitting.

“Not since the polio vaccine has this nation had a better opportunity to make a significant impact in public health.”

David Satcher, MD, PhD, U.S. Surgeon General

“As an addictive substance, nicotine, on a milligram for milligram basis, is 10 times more potent than heroin...”
DEVELOPING A SUCCESSFUL SYSTEM-WIDE TOBACCO CESSATION PROGRAM - CLINICIANS

CLINICIANS

Physicians, Pharmacists, Nurses, Physician’s Assistants, and other professions working with patients who use tobacco

Clinicians should identify tobacco users at each visit and intervene with those individuals who are willing to quit (see Patients Willing to Make a Quit Attempt Now). Tobacco users willing to make a quit attempt should receive both counseling and pharmacotherapy, except in the presence of special circumstances.

For patients not willing to make a quit attempt now, clinicians should motivate the patient to consider quitting (see Patients Willing to Make a Quit Attempt Now).

Because of the chronic nature of tobacco dependence, the guideline also offers clinicians information on how to prevent relapse, especially in the first three months after cessation.

All tobacco users have the potential to successfully quit, and every clinician should commit to delivering treatment that can help.

“In my view, a doctor isn’t providing an appropriate standard of care for his or her patients if he or she doesn’t ask two key questions—‘Do you smoke?’ and ‘Do you want to quit?’—and then work with that individual to make it happen.”

Michael Fiore, MD, MPH
Health care administrators, insurers, and purchasers can promote the treatment of tobacco dependence through a systems approach. Specific strategies that achieve this goal include implementing a tobacco-user identification system, and providing education, resources, and feedback.

Other important strategies include dedicating staff to provide tobacco dependence treatments and assessing the delivery of treatment in staff performance evaluations.

Insurers and managed care organizations play an essential role by including tobacco dependence treatment as a paid or covered service in health insurance packages and reimbursing clinicians for providing tobacco dependence services.

Success is enhanced by providing cessation interventions by multiple clinicians and in multiple treatment formats. Systems should commit to providing treatments that take advantage of multiple approaches.

Nationwide, medical care costs attributable to smoking (or smoking related disease) have been estimated by the Centers for Disease Control and Prevention to be more than $50 billion annually. In addition, the value of lost earnings and loss of productivity is estimated to be at least another $47 billion a year.
Recent surveys show that 25% of all adult Americans smoke.
Once tobacco use has been documented and the clinician determines that the patient is willing to make a quit attempt, the clinician should begin intervention by continuing with the 5 A’s: Assist and Arrange (See the Cessation Tear Sheet in this packet).

- **ASSIST**  
  For the patient willing to make a quit attempt, use counseling and pharmacotherapy to help him or her to quit (see Counseling Patients to Quit and Pharmacotherapy information in this packet).

- **ARRANGE**  
  Schedule follow-up contact, in person or by telephone, preferably within the first week after the quit date.

“There has never been a better time for health professionals to help their patients break free from the deadly chronic disease we know as tobacco addiction.”

David Satcher, MD, PhD, U.S. Surgeons General

Data suggests that more than 70% of the 50 million smokers in the United States today have made at least one prior quit attempt.
FIVE MAJOR STEPS TO INTERVENTION

Successful intervention begins with identifying users and identifying appropriate interventions based upon patients willingness to quit. The five major steps to intervention are the “5 A’s”: Ask, Advise, Assess, Assist, and Arrange.

**Ask**
Identify and document tobacco use status for every patient at every visit. (See vital sign stickers included in this packet).

**ADVISE**
In a clear, strong and personalized manner urge every tobacco user to quit.

**ASSESS**
Is the tobacco user willing to make a quit attempt at this time?

For patients willing to make a quit attempt, see the next page”patients willing to make a quit attempt.” For those not ready see “patients not ready to make a quit attempt at this time”-- the 5 R's.

Tobacco is the single greatest preventable cause of disease and premature death in America today.

Approximately 46% try to quit each year.
Most try to quit “cold turkey”. Of those, only about 5% succeed.
Most smokers make several quit attempts before they successfully kick the habit.
Once tobacco use has been documented a plan of cessation strategies should be outlined. The tear sheet provides a framework for clinicians to personalize a short 3-5 minute interaction tailored to the clinicians own style. This personalized plan can then be given to the patient as a take-away.

The front of the Cessation Tear Sheet offers motivational messages and specific advice on how to quit successfully.

The back of the Cessation Tear Sheet offers five key steps which embody the key recommendations from the Public Health Service Report, “Treating Tobacco Use and Dependence”. Using these steps, the clinician can easily design a personalized quit plan for the patient.

The tear sheet provides space for a clinician and patient to interactively discuss quitting and to establish a plan. It can be used to discuss pharmacotherapy, and identify strategies for avoiding and dealing with cessation barriers as well as learning new skills and behaviors. It works best when the clinician fills in the 5 steps on the back of the sheet, personalized for the patient.

The Cessation Tear Sheet also includes space for a follow-up plan which may include a follow-up visit and/or referral information as well as additional resources.

Tobacco causes 30% of all deaths among persons 35-69 years of age, making it the largest cause of premature death in the developed world.
Effective smoking cessation counseling can be divided into practical and supportive counseling advice

<table>
<thead>
<tr>
<th>Practical counseling advice (problem-solving/skills training)</th>
<th>Examples</th>
</tr>
</thead>
</table>
| **Recognize danger situations** – Identify events, internal states, or activities that increase the risk of smoking or relapse. | • Negative affect  
• Being around other smokers  
• Drinking alcohol  
• Experiencing urges  
• Being under time pressure |
| **Develop coping skills** – Identify and practice coping or problem-solving skills. Typically, these skills are intended to cope with danger situations. | • Learning to anticipate and avoid temptation  
• Learning cognitive strategies that will reduce negative moods  
• Accomplishing lifestyle changes that reduce stress, improve quality of life, or produce pleasure  
• Learning cognitive and behavioral activities to cope with smoking urges (e.g., distracting attention) |
| **Provide basic information**—Provide basic information about smoking and successful quitting. | • The fact that any smoking (even a single puff) increases the likelihood of full relapse  
• Withdrawal typically peaks within 1-3 weeks after quitting  
• Withdrawal symptoms include negative mood, urges to smoke, and difficulty concentrating  
• The addictive nature of smoking |

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<tr>
<th>Supportive counseling advice</th>
<th>Examples</th>
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</table>
| **Encourage the patient in the quit attempt.** | • Note that effective tobacco dependence treatments are now available  
• Note that half of all people who have ever smoked have now quit  
• Communicate belief in the patient’s ability to quit |
| **Communicate caring and concern.** | • Ask how the patient feels about quitting  
• Directly express concern and willingness to help  
• Be open to the patient’s expression of fears of quitting, difficulties experienced, and ambivalent feelings |
| **Encourage the patient to talk about the quitting process.** | Ask about:  
• Reasons the patient wants to quit  
• Concerns or worries about quitting  
• Success the patient has achieved  
• Difficulties encountered while quitting |
Generic brands of the patch recently became available and may be less expensive.

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Strength (mg/cm²)</th>
<th>Duration</th>
<th>Cost/Day</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicorette CQ</td>
<td>15</td>
<td>8 weeks</td>
<td>15 mg/16 hours</td>
<td>Prescription only</td>
</tr>
<tr>
<td>Nicorette (OTC)</td>
<td>7.5</td>
<td>4 weeks</td>
<td>7.5 mg/24 hours</td>
<td>Nonprescription and OTC</td>
</tr>
<tr>
<td>Nicorette (OTC), Store Brand S2.11</td>
<td>2</td>
<td>2 weeks</td>
<td>1 mg/day</td>
<td>Prescription only</td>
</tr>
<tr>
<td>Nicorette (OTC), Store Brand 3.50</td>
<td>2.5</td>
<td>2 weeks</td>
<td>2.5 mg/day</td>
<td>Prescription only</td>
</tr>
</tbody>
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*Note: BR stands for Brand Not Approved for use by the FDA.*
<table>
<thead>
<tr>
<th>Questions</th>
<th>Answers</th>
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<tbody>
<tr>
<td>Who should receive pharmacotherapy for smoking cessation?</td>
<td>All smokers trying to quit except in the presence of special circumstances. Special consideration should be given before using pharmacotherapy with select populations: those with medical contraindications, those smoking less than 10 cigarettes/day, pregnant and adolescent smokers.</td>
</tr>
<tr>
<td>What are the first-line pharmacotherapies recommended in this Guideline?</td>
<td>All five of the FDA-approved pharmacotherapies for smoking cessation are recommended including bupropion SR, nicotine gum, nicotine inhaler, nicotine nasal spray, and the nicotine patch.</td>
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<tr>
<td>What factors should a clinician consider when choosing among the five first-line pharmacotherapies?</td>
<td>Because of the lack of sufficient data to rank-order these five 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).</td>
</tr>
<tr>
<td>Are pharmacotherapeutic treatments appropriate for lighter smokers (e.g., 10-15 cigarettes/day)?</td>
<td>If pharmacotherapy is used with lighter smokers, clinicians should consider reducing the dose of first-line pharmacotherapies.</td>
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<tr>
<td>What second-line pharmacotherapies are recommended in this Guideline?</td>
<td>Clonidine and nortriptyline.</td>
</tr>
<tr>
<td>When should second-line agents be used for treating tobacco dependence?</td>
<td>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.</td>
</tr>
<tr>
<td>Which pharmacotherapies should be considered with patients particularly concerned about weight gain?</td>
<td>Bupropion SR and nicotine replacement therapies, in particular nicotine gum, have been shown to delay, but not prevent, weight gain.</td>
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<tr>
<td>Which pharmacotherapies should be considered with patients with a history of depression?</td>
<td>Bupropion SR and nortriptyline appear to be effective with this population.</td>
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<td>Should nicotine replacement therapies be avoided in patients with a history of cardiovascular disease?</td>
<td>No. Nicotine replacement therapies are safe and have not been shown to cause adverse cardiovascular effects. However, the safety of these products has not been established for the immediate post-MI period or in patients with severe or unstable angina.</td>
</tr>
<tr>
<td>May tobacco dependence pharmacotherapies be used long-term (e.g., 6 months or more)?</td>
<td>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.</td>
</tr>
<tr>
<td>May nicotine replacement pharmacotherapies ever be combined?</td>
<td>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.</td>
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</table>
Patients not ready to make a quit attempt may respond to a motivational intervention. The clinician can motivate patients to consider a quit attempt with the 5 R’s: Relevance, Risks, Rewards, Roadblocks, and Repetition.

- **Relevance**
  Encourage the patient to indicate why quitting is personally relevant.

- **Risks**
  Ask the patient to identify potential negative consequences of tobacco use.

- **Rewards**
  Ask the patient to identify potential benefits of stopping tobacco use.

- **Roadblocks**
  Ask the patient to identify barriers or impediments to quitting.

- **Repetition**
  The motivational intervention should be repeated every time an unmotivated patient has an interaction with a clinician. Tobacco users who have failed in previous quit attempts should be told that most people make repeated quit attempts before they are successful.
Patients who have recently quit tobacco use should be offered reinforcement in their decision to quit, a review of the benefits of quitting, and assistance in resolving problems arising from quitting.

Although most relapse occurs early in the quitting process, some relapse occurs months or even years after the quit date.

Delivery of prevention interventions can be delivered by clinic visits and telephone calls.

“Smoking cessation represents the single most important step that smokers can take to enhance the length and quality of their lives.”

Antonia C. Novella, MD, MPH
Former Surgeon General
It is vital that hospitalized patients attempt to quit smoking. Smoking may interfere with their recovery as it negatively affects bone and wound healing.

Second heart attacks are more common in those who continue to smoke.

Lung, head, and neck cancer patients who are successfully treated, but who continue to smoke, are at elevated risk for a second cancer.

Providing hospitalized smokers with an augmented intervention significantly increases abstinence rates over the patients who receive usual care. Therefore, hospitalized smokers should be given augmented interventions.

Patients in long-term care facilities should receive tobacco dependence interventions.

“The association of hospitalization with increased success at stopping smoking suggests the period of hospitalization represents a ‘teachable moment’.”
WOMEN

- Smoking cessation clinical trials reveal that the same treatments benefit both men and women. Therefore, the same interventions can be used with both men and women.

- Some treatments, however, are less efficacious in women than in men (e.g., nicotine replacement therapies).

- Additionally, although research suggests that women benefit from the same interventions as do men, women may face different stresses and barriers to quitting that may be addressed in treatment. These include greater likelihood of depression, greater weight control concerns, hormonal cycles, and others. This suggests that women may benefit from tobacco dependence treatments that address these topics.

- Women who are considering becoming pregnant may be especially receptive to tobacco dependence treatment.

- Tobacco use has been associated with fertility problems and miscarriage.

Lung cancer has surpassed breast cancer to become the number one cancer killer among women.

Trends in women’s lung cancer can be clearly linked to smoking behavior; currently observed increases in lung cancer rates mirror trends in women’s uptake of smoking 30-40 years ago.
Many women are motivated to quit during pregnancy because of the risks to the woman and the fetus.

Clinicians can reinforce the understanding that cessation will reduce health risks.

Quitting tobacco use prior to conception or early in pregnancy is most beneficial, but health benefits result from abstinence at any time.

A pregnant tobacco user should receive encouragement and assistance throughout the pregnancy.

Pregnant tobacco users should be offered extended or augmented psychosocial interventions that exceed minimal advice to quit.

Thirty percent of pregnant smokers who quit start again after the baby is born.
Tobacco dependence and desire to quit appear to exist in all racial and ethnic groups.

Ethnic and racial minority groups in the United States—African Americans, American Indians/Native Americans, Alaskan Natives, Asian and Pacific Islanders, Hispanics—experience high mortality in a number of smoking-related disease categories. A number of studies have provided information on the effectiveness of a variety of interventions on different racial and ethnic minorities. For example, nicotine patch, physician advice, counseling, tailored self-help manuals, materials and telephone counseling have been shown to be effective with African-Americans. Nicotine patch and self-help materials including a mood management component have been shown to be effective with Hispanic smokers, while screening for tobacco use, physician advice, clinic staff reinforcement and follow-up materials have been shown to be effective for Native American populations.

Few studies have examined interventions specifically designed for particular ethnic or racial groups, and there is no consistent evidence that targeted cessation programs result in higher quit rates in these groups than do generic interventions of comparable intensity. Therefore, physicians should offer treatments identified as effective to all of their patients.

It is essential that cessation counseling or self-help materials be conveyed in a language understood by the smoker. Culturally-appropriate models or examples may increase the smoker's acceptance of treatment. Physicians should remain sensitive to individual differences and health beliefs that may affect treatment acceptance and success in all populations.
Smokers with psychiatric co-morbidity and/or chemical dependency

- Smokers with comorbid psychiatric conditions should be provided smoking cessation treatments found to be effective in the general population of smokers.

- While psychiatric co-morbidity places smokers at increased risk for relapse, such smokers can be helped by smoking cessation treatments.

- Currently there is insufficient evidence to determine whether smokers with psychiatric co-morbidity benefit more from specialized or tailored cessation treatments than from standard treatments.

- Because bupropion SR and nortriptyline are effective at treating depression and are efficacious smoking cessation medications, they should especially be considered for use in depressed patients.

- Some smokers may experience exacerbation of a comorbid condition upon quitting smoking, however, most evidence suggests that abstinence entails little adverse impact (e.g., little increase in aggression in inpatient treatment facilities).

- It is important to note that stopping smoking may affect the pharmacokinetics of certain psychiatric medications. Therefore, physicians may wish to monitor closely the actions or side effects of psychiatric medications in smokers making a quit attempt.

- The treatment of tobacco dependence can be provided concurrent to treating patients for other chemical dependencies (alcohol and other drugs).

- With regard to patients in treatment for chemical dependency, there is little evidence that patients with other chemical dependencies relapse to other drug use when they stop smoking. However, such patients should be followed closely after they stop smoking.
It is important that clinicians screen pediatric and adolescent patients and their parents for tobacco use and provide a strong message about totally abstaining from tobacco use.

Clinicians both need to assess adolescent tobacco use and offer developmentally appropriate cessation counseling and behavioral interventions shown to be effective with adult.

Children and adolescents may benefit from community- and school-based intervention activities. The messages delivered by these programs should be reinforced by the clinician.

Clinicians in a pediatric setting should offer stop-smoking advice to parents to limit children's exposure to second-hand smoke.

The most significant predictor of youth smoking is their parents’ tobacco use. Parents should be urged to stop to prevent serious health implication for their children.

28.5% of high school students currently smoke
9.2% of middle school students currently smoke
54.4% of high school students who smoke want to stop smoking
It is estimated that 13 million Americans aged 50 and older and 4.5 million adults over 65 smoke cigarettes. Smokers over the age of 65 can both quit smoking and benefit from abstinence.

Smoking cessation in older smokers can reduce the risk of myocardial infarction, death from coronary heart disease, and lung cancer.

Abstinence can promote more rapid recovery from illnesses that are exacerbated by smoking and can improve cerebral circulation. Age does not appear to diminish the benefits of quitting smoking.

The smoking cessation interventions that have been shown to be effective in the general population have also been shown to be effective with older smokers. Research has demonstrated the efficacy of counseling interventions, physician advice, buddy support programs, age-tailored self-help materials, telephone counseling, and the nicotine replacement therapies in treating tobacco use and dependence in adults aged 50 years and older.

The homebound elderly may benefit especially from proactive telephone counseling.
PATIENTS CONCERNED ABOUT WEIGHT GAIN

It is important that the clinicians neither deny the likelihood of weight gain nor minimize its significance to the patient. The patient should be informed about the likelihood of weight gain and be prepared for its occurrence. The clinician can counter any exaggerated fears about weight gain given the relatively moderate weight gain that typically occurs.

Clinicians should stress that quitting smoking is the patients’ primary, immediate priority, and that the patient will be most successful in the long run if he or she does not take strong measures (i.e. strict dieting) to counteract weight gain during a quit attempt.

The clinician should offer to help the patient address weight gain once the patient has successfully quit smoking. The clinician should recommend that intensive weight control strategies be avoided until the patient is no longer experiencing withdrawal symptoms and is confident that he or she will not return to smoking. The patient should be encouraged to maintain or adopt a healthy lifestyle, including engaging in moderate exercise, eating plenty of fruits and vegetables, and limiting alcohol consumption.

Many studies demonstrate that women are less successful in quitting smoking than men. Further research is needed to explain this phenomenon, but depression, fear of weight gain and menstrual cycle influences may contribute to the discrepancy.
Tobacco dependence treatments (both pharmacotherapy and counseling) should be included as a paid or covered benefit by health benefit plans because doing so improves utilization and overall abstinence rates.

 Clinicians, clinic administrators, and healthcare delivery systems require appropriate diagnostic and billing codes for the documentation of reimbursement for tobacco-dependent patients.

 The Clinical Practice Guideline Treating Tobacco Use and Dependence offers diagnostic codes (ICD-9-CM) and billing codes for the treatment of tobacco dependence (See the back of this page for ICD-9-CM codes).

 A systems-based approach will facilitate the understanding and use of such codes by clinicians. For example, various clinic or hospital meetings (e.g., business sessions, grand rounds, seminars, and coding in-service sessions) can explain and highlight the use of tobacco dependence codes for diagnosis and treatment.

 These diagnostic codes can be preprinted on the billing and diagnostic coding sheets and checked off rather than expecting clinicians to recall and manually document the treatment.

 Clinicians can be reminded that counseling by itself is a reimbursable activity and can be billed, based on time spent.
When clinicians provide treatment to patients dependent upon tobacco, the following diagnostic codes can be used. They can be found in the ICD-9-CM (International Classification of Diseases, 9th Revision, Clinical Modification) coding manual under the section on Mental Disorders (290-319).

305.1 Tobacco Use Disorder

Cases in which tobacco is used to the detriment of a person’s health or social functioning or in which there is tobacco dependence. Dependent is included here rather than under drug dependence because tobacco differs from other drugs of dependence in its psychotropic effect.

Tobacco Dependence – See Tobacco Use Disorder above

Excludes: History of tobacco use (V15.82)

V15.82 History of Tobacco Use

Excludes: Tobacco dependence (305.1)

Billing Codes

A number of billing codes are available in the Guideline and may be used for reimbursement of the provision of tobacco dependence treatment. The examples provided fall under the general categories of preventive medicine treatments and psychiatric therapeutic procedures.
This how-to packet on the Clinical Practice Guideline Treating Tobacco Use and Dependence was developed by the University of Wisconsin Medical School Center for Tobacco Research and Intervention, in collaboration with Blue Cross and Blue Shield of Minnesota's Center for Tobacco Reduction and Health Improvement.

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