

Tobacco Use

Stephen F. Rothemich

Tobacco use remains the leading cause of preventable death in the United States, a rank that it has held ever since deaths were first quantified by risk factors in the early 1990s (1,2). In the United States, cigarette smoking and exposure to tobacco smoke account for approximately one in five deaths (438,000 people) each year, as well as 5.5 million years of potential life lost (3). Although overweight (the product of a combination of poor diet and physical inactivity) runs a close second as a leading cause, tobacco use causes more than twice as many deaths as alcohol consumption, motor vehicle accidents, firearm use, unsafe sexual behavior, and illicit drug use combined. In addition to this staggering loss of life, as of 2001 tobacco use cost society more than \$167 billion per year through smoking-attributable health care expenditures (\$76 billion) and adult productivity losses (\$92 billion). Helping smokers quit is ranked by the National Commission on Prevention Priorities as among the top three most effective and cost effective clinical preventive services that clinicians can offer patients (4).

Smoking harms nearly every organ of the body, has been causally linked to dozens of adverse health effects (see Table 9.1), and reduces overall health status (5). Cigarette smoking alone is responsible for more than 30% of U.S. cancer deaths (6). Smokeless tobacco use causes oral cancer and other oral lesions. Environmental tobacco smoke, a known human carcinogen, causes premature death and disease in children and in adults who do not smoke; scientific evidence indicates no risk-free level of exposure to secondhand smoke exists (7). Quitting smoking has both immediate and long-term benefits, reducing the risk of diseases caused by tobacco and improving health in general.

In 2004, 44.5 million Americans, or 20.9% of the adult population, smoked cigarettes; 23.4% of men smoked compared with 18.5% of women. Among whites, 22.2% smoked compared with 20.2% of blacks. The highest levels of smoking were among people aged 25–44 years (23.8%); American Indians and Alaskan Natives (33.4%); people who had earned a General Educational Development (GED) but not a standard high-school diploma (39.6%); and people living below the poverty threshold (29.1%) (8). Although

TABLE 9.1 Adverse Health Effects of Smoking Supported by Strong Evidence**Cancer**

Bladder
 Cervical
 Esophageal
 Kidney
 Laryngeal
 Leukemia
 Lung
 Oral
 Pancreatic
 Stomach

Respiratory Effects

Asthma (poor control)
 Asthma-related symptoms
 Chronic obstructive pulmonary disease
 Impaired lung growth
 Lung function decline
 Pneumonia
 Respiratory symptoms (coughing, phlegm, wheezing, dyspnea)

Cardiovascular Effects

Abdominal aortic aneurysm
 Atherosclerosis
 Cerebrovascular disease
 Coronary heart disease

Reproductive Effects

Low birth weight
 Placental abruption
 Placenta previa
 Preterm birth
 Reduced fertility
 Sudden infant death syndrome

TABLE 9.1 (Continued)

Other Effects
Cataract
Hip fractures
Increased absenteeism
Increased health services usage
Low bone density
Peptic ulcer disease (<i>Helicobacter pylori</i> positive)
Poor surgical outcomes
Poor wound healing

Adapted from U.S. Centers for Disease Control and Prevention. *The health consequences of smoking: a report of the surgeon general*. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2004:2–6.

the national smoking rate is slowly declining, it is still well above the national goals set in *Healthy People 2010*: less than 12% for adults and 16% for adolescents (9).

This chapter provides clinicians and their associates with the necessary information to institute effective smoking cessation techniques in their practices. Although this chapter emphasizes smoking cessation, these interventions may be used to help smokeless tobacco users quit as well. The interventions described are based on the U.S. Public Health Service (PHS) guidelines, with additional emphasis on the role of telephone “quit lines,” now available in every state in the United States. Although one option for clinicians is to deliver intensive counseling as the primary focus of a series of clinic visits, an alternative is to offer simple advice to quit coupled with referral to a quit line, a 30-second option that many clinicians may find easier to incorporate into their daily practice.

BACKGROUND

Many clinicians recognize smoking as a major threat to a patient’s health but do not feel confident in their ability to intervene effectively. Most clinicians have not experienced success in helping patients to stop smoking. Most have treated patients with significant tobacco-related diseases who have been unable to stop despite multiple attempts, even as they became sicker. Repeated failures to help patients stop smoking frequently cause clinicians to become discouraged and reinforce the belief that nothing can be done

about smoking. Another barrier preventing clinicians from trying to help patients quit smoking includes a lack of formal training in tested cessation techniques. Perhaps most important, many office practices are not organized to support the delivery of smoking cessation interventions.

However, the evidence is clear: advice from clinicians helps smokers quit. Even providing brief, simple advice increases the likelihood that a smoker will successfully quit and remain abstinent 12 months later (10). The methods outlined here show how best to use the limited time available to impact smoking behavior among patients.

METHODS

Treating Tobacco Use and Dependence, which is available online in its entirety (11) and in a summary for clinicians (12), details the PHS clinical practice guidelines for promoting smoking cessation among patients.

Clinician Intervention

The clinician intervention recommended in the PHS guideline comprises five activities, each beginning with the letter “A” (often referred to as the 5 As, as discussed in Chapter 5):

- *Ask* all patients about smoking
- *Advise* smokers to stop
- *Assess* if the smoker is willing to make a quit attempt
- *Assist* their efforts with self-help materials, a quit date, and possibly cessation medication
- *Arrange* follow-up

This intervention plan describes a general approach to patients who smoke and can be used in almost any outpatient encounter, whether the clinician and patient have 30 seconds or 30 minutes for the discussion (13).

Ask about smoking at every opportunity. For example, a nurse or other staff member should routinely ask patients “Do you smoke?” or “Are you still smoking?” at each visit, usually while measuring vital signs. Once it is known that a person smokes, an identifier should be placed prominently on the patient’s chart to remind the clinician and staff to discuss smoking at each visit (see Fig. 9.1). (See Chapters 21 and 22 for further information about chart alert stickers, automated prompts, and other clinician reminder systems.) Patients who have never smoked or who formerly smoked should be congratulated on their decision.

Advise all smokers to stop. A clear statement of advice (e.g., “As your physician, I must advise you to stop smoking now”) is essential. Many patients do not recall receiving this advice from their clinician. Therefore, the statement must be

Tobacco use: (circle one)	
Current	<input checked="" type="checkbox"/> Advised to quit
Former	Ready to quit in next 30 days? <input checked="" type="checkbox"/> Yes
Never	<input type="checkbox"/> No

Figure 9.1 • A tobacco-use “vital sign” stamp, which can appear prominently on the patient’s chart where vital signs are recorded to remind the clinician and staff to systematically assess smoking status at each visit. The traditional version, illustrated in the U.S. Public Health Service guideline (12), only contains the information in the left-most column of the version shown here (the first of the 5 *As*, “Ask”). This second generation stamp, courtesy of Stephen F. Rothemich, MD, MS, is designed for also obtaining and documenting the second and third *As* (“Advise” and “Assess”).

short, clear, and memorable. Personalization of the message by referring to the patient’s clinical condition or family history may add to the effectiveness of the advice. The type of motivation that will help smokers quit varies greatly from patient to patient. Although almost any clinical encounter provides an opportunity to discuss smoking, timing of the advice can be very important. The so-called teachable moment is that time when a patient’s circumstances make him or her more receptive to advice. Teachable moments occur when patients are affected by diseases caused by smoking, but they may also occur following auscultation or pulmonary function testing, or when a friend or relative is ill.

Assess if the smoker is willing to make a quit attempt. Patients’ level of interest in stopping smoking is usually evident in discussions with the clinician. If it is not, ask patients if they want to stop. See Chapter 5 for further information about the transtheoretical model and stages of readiness to change, which include precontemplation, contemplation, preparation, action, and maintenance (see pages 132–133).

Patients not ready to make a quit attempt (precontemplation or contemplation stages) may respond to a motivational intervention. The clinician can motivate patients to consider a quit attempt with the 5 *Rs*:

- **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**—repeat motivational intervention at every clinic visit

Assist the patient in stopping. For those patients who express a sincere desire to stop smoking, the clinician should help them set a specific date for the next attempt. There is evidence that patients who set a “quit date” are more likely to make a serious attempt to stop than those who do not (14). This date should be in the near future (generally within 4 weeks), but not immediate, giving the patient the necessary time to prepare to stop. Patients should be encouraged to announce their “quit date” to family, friends, and coworkers. Once a patient has selected a specific date to stop, information must be provided so that he or she can prepare for that date. For patients who can read, this is easily accomplished by providing them with a self-help brochure. Effective brochures provide the patient with necessary information about smoking cessation (e.g., symptoms and time course of withdrawal, cessation tips, reasons to quit, answers to common questions). A list of print and online patient education materials is provided later in the “Resources-Patient Education Materials” section at the end of this chapter. Patients who cannot read need to acquire this information from other sources, such as audiotapes, video materials, or counseling by a clinician or health educator.

Arrange follow-up visits. When patients know that their progress will be reviewed, their chances of successfully stopping improve. This monitoring may include a letter or telephone call from the office staff just before the quit date, reinforcing the decision to stop. Most relapses occur in the first weeks after cessation. A person who comes to the office after being a nonsmoker for 1–2 weeks has a much improved chance of remaining abstinent than those without follow-up (15). For this reason, it is critical that patients be contacted during their first 2 weeks of abstinence to reinforce their decision to stop. Nurses or other clinicians as well as the physician may conduct this follow-up in the office or by telephone. It should consist of an assessment of the patient’s progress, troubleshooting for any problems encountered or anticipated, and discussion of the effectiveness or side effects of cessation medications.

Although follow-up visits are critical during the first 2 weeks after cessation, clinic staff should remain in contact with the patient and schedule a formal follow-up visit in 1–2 months. For patients who cannot return for an appointment, contact by telephone or by mail may be helpful. Many patients can benefit from the social support and information offered through quit lines, Internet discussion sites, and local support group sessions offered by the American Cancer Society, the American Lung Association, or local churches or community organizations (see page 250). While only a small proportion of patients referred to such programs actually participate (16), these programs have the potential for large public health impact. However, for individual patients, clinicians should consider these referrals as augmenting, not replacing, a clinician’s care.

Patients may also express interest in techniques such as hypnosis and acupuncture. These have not been proved to be effective through randomized, controlled trials but are probably not harmful. Informed patients who wish to try these techniques should not be discouraged from doing so.

Pharmacologic Agents

Clinicians should consider recommending over-the-counter nicotine replacement therapy or one of several prescription medications that can increase the success rate for quit attempts. Table 9.2 summarizes currently available pharmacologic adjuvants for smoking cessation. U.S. Food and Drug Administration (FDA)-approved pharmacotherapies recommended as first-line agents include bupropion, varenicline tartrate, nicotine gum, nicotine inhaler, nicotine nasal spray, nicotine patch, and nicotine lozenges. Secondary pharmacotherapy options, not FDA-approved for use in smoking cessation but of proven benefit, include nortriptyline and oral clonidine (17,18). A nicotine vaccine, which will prevent transfer of nicotine through the blood–brain barrier, is in early development.

Selection of an appropriate agent depends on patient contraindications, patient preference, cost/coverage issues, and clinician familiarity with the pharmacotherapy. Among over-the-counter options, patches offer simplicity, while lozenges or gum give patients more control over dosing schedules. All forms of nicotine replacement therapy can help patients stop smoking, almost doubling long-term success rates (19), with similar efficacy to prescription medication. The long-term use of nicotine replacement therapies does not pose a known health risk and may be helpful with smokers who report persistent withdrawal symptoms. However, use of any nicotine replacement therapy should be avoided for 1 month following myocardial infarction, serious arrhythmia, or unstable angina.

Clinical trial data suggest that bupropion and varenicline tartrate are effective aids to smoking cessation. Bupropion can be paired safely with nicotine replacement therapy, although blood pressure may need more careful monitoring. Even when used alone, bupropion use leads to quit rates about double those achieved with the nicotine patch. The effects of bupropion go beyond antidepressant activity, but its mechanism of action in smoking cessation remains unknown. Additionally, the FDA has approved the use of bupropion sustained release for long-term maintenance. The more recently approved varenicline tartrate appears to be even more effective than bupropion. Nortriptyline and clonidine have smoking cessation efficacy, and while these may produce a number of unpleasant side effects, they should be considered when FDA-approved medications are not available to patients due to cost issues.

TABLE 9.2 Pharmacologic Adjuvants for Smoking Cessation

Agent (Brands)	Advantages	Disadvantages
Nicotine gum (Nicorette)	OTC Flexible dosing Fast nicotine delivery May delay weight gain	Proper use required Frequent use required No food or drink 15 min before use Possible jaw pain, mouth soreness, dyspepsia, hiccups Avoid use with dental problems or temporomandibular joint syndrome
Nicotine lozenge (Commit)	OTC Flexible dosing Fast nicotine delivery	Frequent dosing required No food or drink 15 min before use Possible mouth soreness, dyspepsia
Nicotine patch (Habitrol, Nicoderm CQ, Nicotrol)	OTC Different strengths available Daily application Overnight use may reduce early morning cravings	Slow nicotine delivery Less flexible dosing Possible skin irritations Possible sleep problems if worn at night
Nicotine nasal spray (Nicotrol NS)	Fastest nicotine delivery Reduces cravings in minutes Flexible dosing	Frequent dosing required Possible nasal and eye irritation, cough Most addictive nicotine replacement therapy
Nicotine inhaler (Nicotrol inhaler)	Flexible dosing Mimics hand-to-mouth routine of smoking	Frequent dosing required Possible mouth and throat irritation
Bupropion SR (Wellbutrin SR, Zyban)	Non-nicotine Easy use May be combined with nicotine replacement therapy May delay weight gain May be effective in depression (see Chapter 13)	Possible insomnia, dry mouth, headache, tremors, nausea, anxiety Avoid use with seizure disorders, bulimia, anorexia nervosa, history of head trauma, current use of bupropion or a monoamine oxidase inhibitor

TABLE 9.2 (Continued)

Agent (Brands)	Advantages	Disadvantages
Varenicline tartrate (Chantrix)	Easy use May ease withdrawal symptoms May block effects of nicotine during relapse May delay weight gain May be effective in depression (see Chapter 13)	Possible headache, vomiting, flatulence, insomnia, abnormal dreams, dysgeusia (taste disturbance)
Nortriptyline (Aventyl HCl, Pamelor)	Easy use Inexpensive May be effective in depression (see Chapter 13)	Not FDA approved for smoking cessation Possible tremor, headache, dry mouth, nausea, indigestion, constipation, diarrhea, fatigue, weakness, anxiety, insomnia Avoid use with alcohol, methyprylon, or monoamine oxidase inhibitor
Clonidine, oral (Catapres)	Easy use Inexpensive	Not FDA approved for smoking cessation Possible dizziness, weight gain, drowsiness, dry mouth, constipation Avoid use with alcohol

OTC = over-the-counter; FDA = U.S. Food and Drug Administration.

Quit Lines

The use of telephone-based tobacco cessation services, commonly known as *quit lines*, has been shown to improve smoking cessation rates (20). Their effectiveness with smokers who use them is well established. In many states with comprehensive tobacco control programs, quit lines play an important role in media-based efforts to encourage smoking cessation. Depending on the state, and sometimes by insurance status within states, quit lines offer either *reactive* counseling (smokers can call as needed during their quit attempt) or the more effective *proactive* counseling (a series of counseling calls initiated by quit line personnel timed around a quit attempt) (21). Quit lines are accessible and eliminate many barriers associated with traditional smoking cessation classes or support groups. These include having to wait for sessions to be offered, needing to arrange transportation

and/or childcare, and discomfort with participating in a group discussion. Patients underrepresented in traditional cessation services, such as smokers of ethnic minority backgrounds, actively seek help from quit lines (22). Every quit line serves thousands of tobacco users each year, a volume rarely achieved by other behavioral services, yet they currently reach only 1–5% of the tobacco users in their states each year.

Practices can extend their capability of providing intensive counseling by encouraging patients to utilize a quit line. One way to do this after offering brief advice to quit is simply to provide the national toll-free number (1-800-QUIT-NOW) that automatically routes callers to their state's quit line and to recommend that patients call (reactive telephone counseling). This can be done in 30 seconds. When incorporating all the 5As into busy office visits is not feasible, this "Ask, Advise, and Refer" strategy (22) is a very reasonable shortcut and far better than not addressing tobacco use at all.

In some states clinicians can send referrals directly to the quit line, whose counselors will then contact the patient directly (proactive telephone counseling). Proactive counseling, which eliminates the need for the patient to place the call and has been proved to be more effective than reactive counseling (20), is usually arranged by completing a referral form (often signed by both patient and clinician), which is then faxed to the service. Most state quit lines offer proactive counseling only to smokers ready to make a quit attempt in the next 30 days (preparation stage of the transtheoretical model, see page 132 in Chapter 5), and practices may therefore need to screen potential quit line referrals to verify their stage of readiness to change. For smokers not yet ready to quit, providing the telephone number for them to call is more appropriate. In either case, clinicians should be prepared to respond to calls from patients who are referred to quit lines and want prescription-only cessation medication options that were not discussed and arranged before their referral.

COMMON PROBLEMS AND POSSIBLE SOLUTIONS

Weight Gain

The issue of potential weight gain is important for many patients who try to stop smoking. Some patients cite weight gain as the reason for relapse after previous attempts to stop. The average amount of weight gained after cessation is approximately 5 lb. Some patients gain no weight after cessation, but a small proportion of people gain large amounts of weight.

There are several obvious recommendations that can be made to patients concerned about preventing weight gain. Attention to caloric intake can be as simple as monitoring portion size, making healthy food choices, and

avoiding “rewarding” themselves for not smoking with rich foods or special meals (see Chapters 7 and 8). Recommendations for more frequent physical activity (even in short bouts) may both help prevent weight gain and support smoke-free behavior (see Chapter 6).

Multiple Relapses

Many smokers, especially adults older than 40 years, have made several serious attempts to stop smoking but have always relapsed. Nicotine is a powerfully addictive drug. These patients have frequently tried various smoking cessation products and programs, all without success. Such patients are often discouraged by their failed attempts to stop and are therefore less willing to try again.

These patients (and their clinicians) need to be aware that relapse is a typical part of the cessation process. Most smokers require several attempts to achieve permanent abstinence, and knowing this may bring encouragement to relapsing smokers. Even in a relatively short clinic visit, a clinician can help a patient benefit from past relapses rather than view them as a personal failure and a reason to avoid future quit attempts. During the visit, the clinician can help the patient to identify the circumstances that led to past relapses and to develop strategies for use in either avoiding those circumstances or responding to them in a different manner.

A simple question from the clinician—such as “*When you resumed smoking, where did your first cigarette come from?*”—or “*what was going on in your life when you started up again?*”—will start the discussion of the reason(s) for relapse. There are several common reasons offered for relapse, including withdrawal symptoms, weight gain, “stress” at work or home, alcohol intoxication, or social pressure. Once the patient has described the circumstances of the relapse, the clinician can ask, “*How do you think you would deal with that situation if it happened again?*” or “*How do you think you could avoid that situation in the future?*” The clinician can offer advice about some situations and help with withdrawal symptoms (see Table 9.3), but the patient must develop a personalized plan for responding to circumstances that have caused past relapses.

Patients commonly say that they had a relapse due to stress at their job or at home. Marital difficulties, problems with other family members, loss of a job, or increased work responsibilities are often given as reasons for relapse. Patients, with the help of their clinician, need to anticipate the difficult times that may occur while they are attempting to quit and be prepared with a response other than taking up smoking again. Simple responses to craving, such as chewing gum, taking a walk, or engaging in relaxation exercises, may be all that a patient needs to cope with a difficult personal situation. In all cases, having a concrete plan in place to address these stressful situations is critical.

TABLE 9.3 Responding to Common Concerns during Smoking Cessation**I am gaining weight**

Not every person who stops smoking gains weight.

Average weight gains are small for people who do gain weight (5–10 lb).

Do not try to lose weight now—there will be time after you are an established nonsmoker.

Exercise is an effective technique to cope with withdrawal and avoid weight gain.

Avoid high-calorie snacks. Vegetables (such as carrot sticks) and fruits are good snacks.

The risks to health from smoking are far greater than the risks to health from a small weight gain.

A small increase in weight may not hurt your appearance. Smoking is unattractive, causing yellow teeth, bad breath, stale clothing odors, and, possibly, wrinkled skin.

Now that I have stopped, can I smoke a cigarette occasionally?

No. Nicotine addiction seems to be retriggered quickly in most former smokers. Do not risk getting hooked again.

What should I do when I get an urge to smoke?

Some people relieve cravings by chewing gum, sucking on a cinnamon stick, or eating a carrot stick.

Cravings for cigarettes are a normal part of withdrawal.

Most cravings last for only a few minutes and then subside.

Cravings become rare after a few weeks.

Use nicotine gum, if prescribed.

When I do not smoke, I feel restless and I cannot concentrate.

These are normal symptoms of nicotine withdrawal.

These symptoms are most acute in the first 3 days after stopping.

These symptoms will disappear after a few weeks.

What other withdrawal symptoms will I have?

Some smokers have few or no withdrawal symptoms.

Other common symptoms include anxiety, irritability, insomnia, mild headache, and gastrointestinal symptoms such as constipation.

Few smokers experience all these symptoms.

Like most other symptoms, they are only temporary.

Lack of Social Support for Stopping

Various social factors are frequently implicated in relapse, particularly when the patient is confronted by situations or friends who provide strong cues or prompts for smoking. Parties and other social gatherings are common sites of relapses, especially among patients who consume alcohol at these events.

During the time available in a brief office visit, it will not be possible for the clinician to help patients make major changes in their social skills or in their support system for behavior change. However, all patients should be encouraged to tell their family, friends, and coworkers of their decision to stop smoking in advance of their quit date and to seek their support and encouragement. Patients with little support for stopping can be referred to group cessation programs. Referral to a counselor or other health professional may also be useful.

It is often difficult for a patient to stop if his or her spouse or partner also smokes and is unwilling to stop. The unwilling spouse/partner should be encouraged to join in the quit attempt. If this is unsuccessful, that person should at least be encouraged to smoke only outside the home.

SPECIAL POPULATIONS

As discussed earlier, the advice and assistance a clinician provides should reflect an understanding of the patient's medical, social, and cultural background. By asking the patient about anticipated problems with smoking cessation and potential solutions to these problems, the clinician can help patients construct solutions that are relevant to their social and cultural setting. Clinicians should be prepared to provide factual medical information for their patients. For example, the older smoker who believes it is too late to stop and that quitting will do little good should be reminded that quitting at any age decreases the risk of future smoking-related illness and can increase both the length and quality of life.

Clinicians also need to recognize that smoking and tobacco use are viewed in different ways by different cultural groups, and that these views may influence how and why a patient stops. Self-help materials designed for special population groups are becoming more widely available. These materials address both the cultural and language issues faced by patients, and are generally available from local units of the American Cancer Society, American Lung Association, and local health departments (see "Resources" on page 250).

Young people comprise another group that can benefit from the advice and assistance of clinicians. Because most adult smokers first become addicted to nicotine during childhood and adolescence, advice from clinicians during these life stages is critical. Although any adolescent is a potential smoker,

those at highest risk of becoming addicted demonstrate low self-esteem, have poor academic performance, and engage in other risky behaviors such as alcohol or drug use. It is challenging but essential to provide these young people with anticipatory guidance that is appropriate for their age and developmental stage.

Some clinicians have used cigarette advertisements to initiate discussions about smoking with adolescents, showing them the deceptive nature of the advertisements. When rapport with a young person is established, clinicians can provide reasons for avoiding tobacco use that are relevant to an adolescent and can also help the patient practice refusal skills. Adolescents who are already regular smokers should be advised and assisted in the same manner as an adult patient. However, adolescents are often much more concerned with the immediate effects of smoking, such as “smokers’ breath and smell” and diminished athletic performance, and are often not influenced by information about long-term risks such as cancer and other tobacco-related diseases.

Finally, clinicians should routinely ask about vulnerable household members who might be exposed to secondhand smoke. Children of any age should be protected from exposure to environmental tobacco smoke. Parents who smoke should be advised to stop and to keep their children in smoke-free environments at home, at day care, and in other settings. Similar precautions must be taken when older adults are receiving care in the home. Even brief exposure to secondhand smoke could pose significant acute risks to ill older adults or to anyone at high risk for cardiovascular or respiratory disease. Those caring for relatives with heart or lung disease should be advised not to smoke in the presence of the sick relative. Some clinicians systematically identify passive smokers (including children) in their practices and routinely provide recommendations to reduce their exposure.

OFFICE AND CLINIC ORGANIZATION

Smoking cessation interventions cannot be delivered to patients routinely and systematically without a supportive office organization. Some simple changes in office procedures (see Chapter 21) can significantly increase the clinician’s effectiveness in treating patients who smoke. The goal is to ensure that all patients who smoke are routinely and efficiently identified, consistently monitored, and appropriately treated. Evidence-based office practices shown to reduce tobacco use among patients include the following (23):

- Implementing a tobacco-user identification system (e.g., expand vital signs to include an assessment of tobacco use)
- Providing education, resources, and feedback to promote interventions by clinicians

- Dedicating staff to provide tobacco dependence treatment and then rewarding delivery of this intervention in staff performance evaluations

To act as a coordinated team, all office staff members must understand that smoking cessation is an important task for the practice, and they must know their roles. The team approach is facilitated by naming a smoking cessation coordinator, usually a nurse. With the help of the other staff members, the coordinator will incorporate the various components of the planned intervention program into the day-to-day activities of the practice. The smoking cessation coordinator also helps maintain the staff members' commitment to the program and ensures that the system is operating smoothly. Both the system itself and staff fulfillment of their roles should be reviewed periodically and adjustments made as necessary. See Chapter 21 for further background on practice system redesign.

The team approach emphasizes staff identification of each patient who uses tobacco. When patients are identified as smokers, their charts should be marked in a prominent manner. The typical identifier is a brightly colored permanent sticker or stamp, but it can also be a removable sticker that is put on the chart at each visit. Practices with paper records can revise their forms to include tobacco use as a vital sign (Figure 9.1), and those with electronic health records can go one step further and display screen prompts to staff to obtain this information (see Chapter 22). The regular use of these chart reminders, which facilitates the provision of brief cessation advice as a routine part of every office visit for patients who smoke, has been shown to significantly increase cessation rates in office practices. It is important that all staff members understand and use this kind of charting system.

There should be a specific staff member assigned to scheduling the follow-up visits and making contact with the patient just before the planned "quit date," working closely with the staff person who conducts the follow-up visits. Staff members can also review with patients their self-help materials and instructions for use of any recommended or prescribed cessation medications.

Steps for making an office or clinic itself tobacco-free include posting no-smoking signs, removing ashtrays, displaying tobacco cessation and prevention information prominently, and eliminating tobacco advertising from the office, either by subscribing to magazines that do not carry such advertising or by crossing out the tobacco advertisements with bright markers.

CONCLUSION

Clinician assistance for individual smokers can have an enormous public health impact as well as benefiting each individual patient who quits. Even

with very modest expectations of cessation rates, 100,000 clinicians using effective intervention strategies could potentially assist more than 3 million smokers to quit each year. In conjunction with other tobacco-control efforts in communities, practice-based cessation intervention can lead to a marked reduction in the morbidity and mortality caused by smoking. As the former U.S. Surgeon General and author of the Foreword for the first edition of this book, C. Everett Koop, M.D., Sc.D., said “cigarette smoking is the most important public health issue of our time.” And it still is.

RESOURCES—PATIENT EDUCATION MATERIALS

American Academy of Family Physicians

Links to AAFP and national resources for patients and clinicians, including patient education materials, information about the “Ask and Act” tobacco cessation program, quit lines, nicotine replacement therapy, and tips on reimbursement.

Telephone: 800-274-2237

<http://www.aafp.org/online/en/home/clinical/publichealth/tobacco/resources.html>

American Cancer Society

Online cessation guide, tools for clinicians, and information on the Great American Smokeout.

Telephone: 800-227-2345

http://www.cancer.org/docroot/PED/content/PED_10_13X_Guide_for_Quitting_Smoking.asp

Centers for Disease Control and Prevention

Tobacco Information and Prevention Source (TIPS) with links to free how to quit guides, education materials, TIPS for youth. Much of the information and materials are also available there in Spanish.

Telephone: 800-232-1311

<http://www.cdc.gov/tobacco>

National Cancer Institute

Links to tobacco information, statistics, research, and other resources

Telephone: 800-422-6237

<http://www.cancer.gov/cancertopics/tobacco>

Smoke Free

NCI's free online smoking cessation program

<http://www.smokefree.gov>

SUGGESTED READINGS

Fiore MC, Bailey WC, Cohen SJ, et al. *Treating tobacco use and dependence*. Rockville: U.S. Department of Health and Human Services, <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat2.chapter.7644>, 2000.

Smoking Cessation Leadership Center. *Information on utilizing quit lines in clinical practice*. Website: <http://smokingcessationleadership.ucsf.edu/30seconds.html>. Accessed 2006.

U.S. Public Health Service. *Treating tobacco use and dependence—Provider's packet. A how-to guide for implementing the public health service clinical practice guideline*. U.S. Public Health Service. <http://www.surgeongeneral.gov/tobacco/clinpack.html>, 2003.

U.S. Surgeon General. *Patient education materials, comprehensive and abbreviated version of the clinical practice guide on smoking cessation, and links to the surgeon general reports*. Website: <http://www.surgeongeneral.gov/tobacco>. Accessed 2006.

References

1. Mokdad AH, Marks JS, Stroup DF, et al. Actual causes of death in the United States, 2000. *JAMA* 2004;291(10):1238–1245.
2. McGinnis JM, Foege WH. Actual causes of death in the United States. *JAMA* 1993; 270(18):2207–2212.
3. Centers for Disease Control and Prevention. Annual smoking—attributable mortality, years of potential life lost, and productivity losses—United States, 1997–2001. *MMWR* 2005;54:625–628.
4. Maciosek MV, Coffield AB, Edwards NM, et al. Priorities for improving utilization of clinical preventive services results. *Am J Prev Med* 2006;31:52–61.
5. Centers for Disease Control and Prevention. *The health consequences of smoking: a report of the surgeon general*. Atlanta: U.S. Department of Health and Human Services, CDC, 2004.
6. National Institutes of Health State-of-the-Science Conference Statement. *Tobacco use: prevention, cessation, and control*. Bethesda: National Institutes of Health, 2006.
7. U.S. Department of Health and Human Services. *The health consequences of involuntary exposure to tobacco smoke: a report of the surgeon general—executive summary*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, Coordinating Center for Health Promotion, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006:9.
8. Centers for Disease Control and Prevention. Cigarette smoking among adults—United States, 2004. *MMWR* 2005;54(44):1121–1124.
9. U.S. Department of Health and Human Services. *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, DC: U.S. Government Printing Office, November 2000.
10. Lancaster T, Stead LF. Physician advice for smoking cessation. *Cochrane Database Syst Rev* 2004;(4):CD000165.
11. Fiore MC, Bailey WC, Cohen SJ, et al. *Treating tobacco use and dependence*. Rockville: U.S. Department of Health and Human Services, 2000, <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat2.chapter.7644>.
12. U.S. Public Health Service. *Treating tobacco use and dependence—provider's packet. A how-to guide for implementing the public health service clinical practice guideline*. U.S. Public Health Service, 2003. <http://www.surgeongeneral.gov/tobacco/clinpack.html>.
13. Okuyemi KS, Nollen NL, Ahluwalia JS. Interventions to facilitate smoking cessation. *Am Fam Physician* 2006;74:262–271,276.
14. Cummings SR, Coates TJ, Richard RJ, et al. Training physicians in counseling about smoking cessation. A randomized trial of the Quit for Life program. *Ann Intern Med* 1989;110(8):640–647.
15. Kenford SL, Fiore MC, Jorenby DE, et al. Predicting smoking cessation: who will quit with and without the nicotine patch. *JAMA* 1993;278(8):589–594.
16. Hollis JF, Lichtenstein E, Mount K, et al. Nurse-assisted smoking counseling in medical settings: minimizing demands on physicians. *Prev Med* 1991;20(4): 497–507.

17. Gourlay SG, Stead LF, Benowitz NL. Clonidine for smoking cessation. *Cochrane Database Syst Rev* 2004;(3):CD000058.
18. Hughes JR, Stead LF, Lancaster T. Antidepressants for smoking cessation. *Cochrane Database Syst Rev* 2004;(4):CD000031.
19. Silagy C, Lancaster T, Stead L, et al. Nicotine replacement therapy for smoking cessation. *Cochrane Database Syst Rev* 2004;(3):CD000146.
20. Stead LF, Perera R, Lancaster T. Telephone counseling for smoking cessation. *Cochrane Database Syst Rev* 2006;(3):CD002850.
21. Keller PA, Bailey LA, Koss KJ, et al. Organization, financing, promotion, and cost of U.S. Quitlines, 2004. *Am J Prev Med* 2007;32(1):32–37.
22. Schroeder SA. What to do with a patient who smokes. *JAMA* 2005;294:482–487.
23. U.S. Public Health Service. *Treating tobacco use and dependence—a systems approach. A guide for health care administrators, insurers, managed care organizations, and purchasers.* U.S. Public Health Service, <http://www.surgeongeneral.gov/tobacco/systems.htm>, 2000.