



American Association of
HEALTH PLANS[®]

American Association of Health Plans
1129 20th Street, NW, Suite 600
Washington, DC 20036

**ADDRESSING
TOBACCO
IN
MANAGED CARE:**

**A Resource Guide
FOR Health Plans**



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Contents

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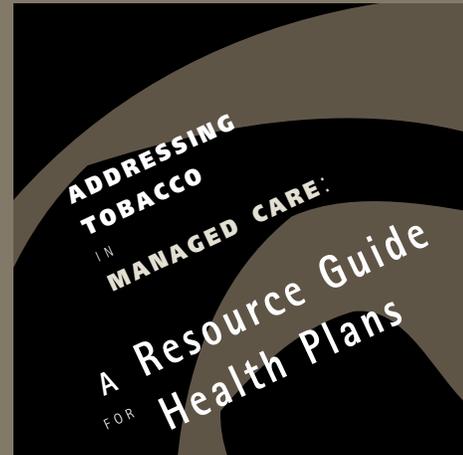
**A Resource Guide
FOR Health Plans**

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Introduction



A *Addressing Tobacco in Managed Care: A Resource Guide for Health Plans* provides information, examples and other resources for health plans interested in developing, implementing and evaluating effective interventions aimed at reducing tobacco use. This guide is a resource from the National Technical Assistance Office (NTAO) of the *Addressing Tobacco in Managed Care* initiative, a program developed and funded by The Robert Wood Johnson Foundation. The *Addressing Tobacco in Managed Care* initiative was timed to take advantage of several forces, including the release of new guidelines on tobacco control from the U.S. Public Health Service, new performance measures (HEDIS 3.0) and the decision by the American Association of Health Plans (AAHP) and its member plans to increase awareness and promote effective strategies to curtail tobacco use across all age groups.

Programs to reduce the use of tobacco have a long history in the United States. Evidence of the damaging effect of cigarette smoking on health had begun accumulating nearly half a century ago. In 1964, the U.S. Surgeon General released the first report that unequivocally announced the harm caused by tobacco use (U.S. Department of Health, Education, and Welfare, 1964). Since that time, many approaches have been used to deter people from beginning to use tobacco or assist them in their efforts to quit. These approaches have included behavioral counseling, clinical intervention, regulatory action and taxation. Indeed, the growing use of the broad term “tobacco control” illustrates the importance of using multiple and diverse approaches (e.g., educational, clinical, regulatory, economic and comprehensive) to tackle tobacco use from both sides of the coin – prevention and cessation. However,

despite much effort, cigarette smoking is the single most important risk factor associated with the leading chronic diseases today and approximately 24% of Americans smoke (Centers for Disease Control and Prevention, 2000). Clearly, tobacco use is a persistent problem whose solution may lie in continued and persistent use of the multifaceted and effective strategies for reducing tobacco control.

The *Addressing Tobacco in Managed Care* initiative is based on the premise that managed care has a unique opportunity to integrate multifaceted and effective tobacco control interventions. This is not to say, however, that all health plans have built the infrastructure to deliver and maintain such programs. Indeed, some health plans are further down the path than others in providing tobacco-related benefits and services. Because some health plans have already initiated a comprehensive tobacco control program while other health plans are just beginning to consider the development of one, this guide offers resources for all stages of development. It is constructed to allow each user to easily access those sections that most reflect the needs of individual health plans.

If you have questions about this resource guide, please contact:

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www.aahp.org/atmc.htm

REFERENCES

Centers for Disease Control and Prevention. (2000). "Cigarette Smoking Among Adults – United States, 1998." *Morbidity Mortality Weekly Report* 48(43):993-996.

U.S. Department of Health, Education, and Welfare. (1964). *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service*. Washington, DC: US Department of Health, Education, and Welfare, Public Health Service. PHS Publication No. 1103.

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SECTION 1

The Current State of Tobacco Control in Managed Care

R

Recent estimates indicate that 87% of workers provided with health insurance receive their care through managed care organizations (MCOs) (Employee Benefits Research Institute, 2000). A basic principle of MCOs is to emphasize health promotion and disease prevention as methods of improving or maintaining members' health. Over the past several years, a number of factors have made MCOs accountable for demonstrating the effectiveness of the prevention programs they offer. These factors include: (a) consumer and purchaser or employer expectations for better performance on a variety of prevention measures, including tobacco prevention and cessation; (b) external accreditation by organizations such as the National Committee for Quality Assurance (NCQA); and (c) performance measures and health plan report cards based largely on provision of preventive services (Koplan, 1998).

Performance Measures

Performance measures can be used by health plans in a wide variety of ways. A health plan that monitors its performance on one or more indicators over time is likely to initiate quality improvement efforts in a timely manner as a result of observing performance improvements and regressions. Performance improvement can also assist health plans see differences and disparities across their own plans and products. For example, a health plan may observe performance differences between its Medicaid and Medicare members, or between its health maintenance organizations (HMOs) and point-of-service (POS) products. Performance measures also enable health plans to assess the effectiveness of interventions offered in the plan (Davis, 1998).

Many health plans routinely use their results on the Health Plan Data and Information Set (HEDIS) to monitor their performance on numerous preventive health measures. In 1996, NCQA added a tobacco measure to HEDIS version 3.0 (NCQA, 1997). The HEDIS tobacco measure assesses the percentage of adults continuously enrolled during the reporting year who are either current smokers or who recently quit and received advice to quit smoking from a health care professional at least once during the reporting year. The data needed to calculate the result of the HEDIS 3.0 tobacco measure is collected via the health plan's member satisfaction survey. The following box contains questions used to calculate the HEDIS 3.0 tobacco measure.

HEDIS 3.0 TOBACCO QUESTIONS

1. Have you smoked at least 100 cigarettes in your entire life?
2. Do you smoke every day, some days or not at all?
3. How long has it been since you quit smoking cigarettes?
4. During the past 12 months, how many times have you visited a doctor or other health care professional in your plan?
5. On how many of these visits were you advised to quit smoking by a doctor or other health care professional in your plan?

In 1997, NCQA reported aggregate data for 1997 from 447 MCOs. The report indicates that the percentage of people who recalled receiving advice to quit smoking from their health care provider increased slightly from 61% in 1996 to 64% in 1997. According to the report, "If industry-wide performance were brought up to the 90th percentile benchmark of 74.3%, an additional 4.2 million enrollees who smoke would be advised about the benefits of quitting, and nearly 26,000 more people would quit smoking each year, saving hundreds of lives and saving tens of millions of dollars in health care costs" (NCQA, 1998).

Performance measures related to tobacco control have also been recommended by the Foundation for Accountability (FACCT), a consumer and purchaser organization that strives to develop outcome-based health plan performance measures. FACCT has recommended two tobacco-related performance measures: (1) provider advice and support to quit smoking and (2) the smoking quit rate. While the FACCT performance measures are not as widely used as those included in HEDIS, they are important because they focus on outcomes and are driven largely by purchasers and consumers of health care.

Cost-Effectiveness of Tobacco Control Programs in Managed Care

Growing evidence indicates that tobacco control programs are one of the most cost-effective interventions that can be delivered in the clinical setting (Warner, 1998). Indeed, smoking cessation has been called the gold standard of cost-effective interventions (Eddy, 1992). (See Table 1.)

TABLE 1

COST PER YEAR OF LIFE SAVED, SMOKING CESSATION AND OTHER HEALTH CARE INTERVENTIONS (IN 1993 U.S. Dollars)	
INTERVENTION	COST PER YEAR OF LIFE SAVED
Smoking Cessation	
Low Intensity*	\$100 – \$500
Brief Advice from MD	\$1,000 – \$3,000
High Intensity**	\$6,000 – \$15,000
Common Disease Prevention	\$1,500 – \$15,000
Secondary and Tertiary Care	\$20,000 – \$100,000

* For example, self-help cessation guides, brief advice from a non-MD, broadcast media campaigns.
 ** Nicotine gum as an adjunct to practice-based MD counseling.
 Source: Warner K.E. (1993). "Cost-Effectiveness of Nicotine Replacement Therapy." *In Future Directions in Nicotine Replacement Therapy*. Chester, UK: Adis International. Table 1, page 37.

- With regard to behavioral counseling, at least one study demonstrated that the cost-effectiveness of brief counseling during a routine office visit ranges from \$705 to \$988 per year of life saved for men and from \$1,204 to \$2,058 for women (Cummings, 1989).
- The use of nicotine gum with brief clinical counseling appears to substantially increase cost-effectiveness. One study incorporating nicotine gum with brief counseling found that the cost-effectiveness ranged from \$4,113 to \$6,465 for men and \$6,880 to \$9,473 for women per year of life saved (Oster, 1986).
- In a recent study of the cost-effectiveness of implementing the U.S. Public Health Service 1996 *Clinical Practice Guideline on Smoking Cessation*,

sponsored by the Agency for HealthCare Research and Quality (AHRQ), formerly the Agency for Health Care Policy and Research (AHCPR), the cost of quality-adjusted-life-year saved ranged from \$1,108 to \$4,542 (Cromwell, 1997).

Each of these studies notes that these cost-effectiveness results compare quite favorably with the cost-effectiveness of other widely accepted preventive practices such as mammography for women ages 40–49 (\$61,744 per quality-adjusted-life-year-saved) and hypertension screening in 40-year-old men (\$23,335 per quality-adjusted-life-year-saved) (Cromwell, 1997).

Tobacco control interventions delivered during pregnancy have the potential to be not only cost-effective, but also cost-saving. Because tobacco use during pregnancy is closely associated with low birth weight, and low birth weight is linked to numerous adverse pregnancy outcomes, smoking cessation during pregnancy has been well studied. A previous evaluation was conducted to assess the costs and benefits of a smoking cessation program for pregnant smokers, which consisted of an initial interview, smoking counseling by a health educator, non-smoking messages from the physician and a series of self-help booklets. In addition, smokers received non-smoking messages at each prenatal visit. Study results indicate that an HMO with 100,000 members saw cost savings from the program of \$13,432, with a net benefit of \$9,202, and a cost-to-benefit ratio of 3.17:1 – saving the health plan \$3.17 for every dollar spent on the program (Ershoff et al., 1990).

With a typical industry turnover rate of 20%, many health plans will undoubtedly wonder whether they will reap future economic benefit from resources invested in tobacco control today. Unfortunately, no study has yet estimated how much of the health benefit of smoking cessation is actually captured by the MCO that invests in tobacco control interventions. However, one study does demonstrate that smokers have consistently increasing rates of hospitalization, while the rate of hospitalization for smokers who quit declines after the year they quit (Wagner et al., 1995). Thus, the cost-savings that accrue from reduced utilization would more than pay for effective tobacco interventions within three to four years.

Current Array of Cessation Strategies Available to Health Plans

Tobacco dependence shows many features of a chronic disease. For most users, tobacco use results in a true drug dependence, one comparable to the dependence caused by opiates, amphetamines and cocaine (Jones, 1999). Epidemiologic data suggest that over 70% of the 50 million smokers in the United States today have made at least one prior quit attempt and approximately 46% try to quit each year (CDC, 1995). Unfortunately, most of these efforts are unsuccessful; among the 17 million adults who attempted cessation in 1991 only 7% were still abstinent 12 months later (CDC, 1994).

A chronic disease model is useful in the treatment of tobacco dependence. Through it a clinician can better recognize the long-term nature of the disorder with an expectation that patients will have periods of relapse and remission. Recent data suggest that the combined use of both pharmacotherapy and counseling may produce the best cessation results (Fiore et al., 2000). Fortunately, the current array of cessation strategies available to health plans is large and growing. There are now several effective counseling strategies and seven efficacious pharmacologic treatments for smoking cessation.

Several formats for counseling have been shown to work with different levels of effectiveness on abstinence rates including individual and group counseling, telephone counseling and self-help.

Individual and group counseling have been shown to be most effective in increasing abstinence rates. Effective content for individual and group counseling and behavioral therapy appear to result in higher smoking abstinence rates. This content includes: (1) providing smokers with practical counseling, including problem-solving skills; (2) providing social support as part of clinical treatment (intra-treatment support); and (3) helping smokers obtain social support outside of treatment (extra-treatment support) (Fiore et al., 2000). The U.S. Public Health Service clinical practice guideline recommends that these types of counseling and behavioral therapies be included in smoking cessation interventions and outlines the key elements of each. (See Table 2.)

Telephone counseling can also be an effective treatment format. Proactive telephone counseling – calls initiated by the counselor – have shown to be effective and should be used in smoking cessation interventions (Ossip-Klein, 1991). Reactive telephone counseling – hotline calls initiated by tobacco users – have shown mixed results, but have potential to be effective in increasing abstinence rates.

Self-help formats such as pamphlets, booklets, mailings, manuals, videotapes, audiotapes, referrals to a 12-step program and mass media community-level interventions are quite common, but have not shown consistent efficacy. Clinical self-help formats vary greatly in nature and intensity and tend to work with smokers who have attempted to quit without clinical support or contact. Tailored self-help interventions are based on a dimension or subset of dimensions of the individual. These types of interventions have been shown to be more effective than generic materials in some special populations like pregnant smokers and the elderly (Lipkus, 1999).

A combination of behavioral and pharmacologic methods improves the success rate when managing nicotine addiction.

**David Satcher,
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Health**

TABLE 2

COMMON ELEMENTS OF RECOMMENDED TYPES OF COUNSELING AND BEHAVIORAL THERAPIES FOR SMOKING CESSATION	
ELEMENT	EXAMPLES
PRACTICAL COUNSELING	
a) Recognize situations that increase the risk of smoking or relapse	<ul style="list-style-type: none"> • Negative affect • Being around other smokers • Drinking alcohol • Experiencing urges • Being under time pressure
b) Identify and practice coping or problem-solving skills	<ul style="list-style-type: none"> • Learn to anticipate and avoid temptation • Learn strategies to improve mood • Make lifestyle changes to reduce stress • Learn strategies to cope with urges
c) Provide basic information about smoking and quitting	<ul style="list-style-type: none"> • The fact that any smoking (even a puff) increases the likelihood of full relapse • Withdrawal typically 1-3 weeks after quitting • Withdrawal symptoms include negative mood, urges to smoke and difficulty concentrating • The addictive nature of smoking
INTRA-TREATMENT SUPPORT (direct contact with clinician)	
a) Encourage the patient in the quit attempt	<ul style="list-style-type: none"> • Note that effective tobacco treatments are now available • Note that one-half of all people who have ever smoked have now quit • Communicate belief in patient's ability to quit
b) Communicate caring and concern	<ul style="list-style-type: none"> • Ask how patient feels about quitting • Directly express concern and willingness to help • Be open to the patient's fears, difficulties and feelings
c) Encourage the patient to talk about the quitting process	<ul style="list-style-type: none"> • Ask about patient's reasons for quitting • Ask about concerns or worries about quitting • Ask about success the patient has achieved • Ask about difficulties encountered while quitting
EXTRA-TREATMENT SUPPORT (social support in smoker's environment)	
a) Train patient in support solicitation skills	<ul style="list-style-type: none"> • Show videotapes that model the skill • Practice requesting social support from family, friends and co-workers • Help patient to establish a smoke-free home
b) Prompt support seeking	<ul style="list-style-type: none"> • Help patient identify supportive others • Call the patient to remind him/her to seek support • Inform patient of community resources such as hotlines and helplines
c) Clinician arranges outside support	<ul style="list-style-type: none"> • Mail letters to supportive others • Call supportive others • Invite others to cessation sessions • Assign patients to be buddies with one another
Source: Fiore M.C., W.C. Bailey, S.J. Cohen, et al. (June 2000). <i>Treating Tobacco Use and Dependence</i> . Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service.	

In *Treating Tobacco Use and Dependence*, the most recent clinical practice guideline released by the U.S. Department of Health and Human Services, Public Health Service, pharmacotherapy is identified as a vital element of a multicomponent approach to smoking cessation. In fact, the publication recommends that all patients attempting to quit smoking be encouraged to use effective pharmacotherapies except in the presence of special circumstances (e.g., patients with medical contraindications, pregnant/breastfeeding women, adolescents and patients who smoke fewer than 10 cigarettes a day) (Fiore et al., 2000).

The guideline panel identified five first-line medications (pharmacotherapies found safe and effective for tobacco dependence treatment and approved by the U.S. Food and Drug Administration for smoking cessation) and two second-line medications (pharmacotherapies for which there is evidence of efficacy for treating tobacco dependence, but a more limited role and no current approval from the FDA for tobacco dependence), each of which has been demonstrated to significantly increase the rate of long-term smoking abstinence. (See Table 3.) Detailed descriptions of these pharmacotherapies, including suggestions for clinical use, are presented in the guideline. Brief overviews of these seven medications follow.

BUPROPRION SR

A non-nicotine medication shown to be effective for smoking cessation and approved for that use by the Food and Drug Administration (FDA). Bupropion SR can be used in conjunction with nicotine replacement therapies (e.g., gum, patch, nasal spray, inhaler). Bupropion SR is available only as a prescription medication both with an indication for smoking cessation (Zyban) and an indication for depression (Wellbutrin).

NICOTINE GUM

A nicotine replacement therapy currently available only as an over-the-counter medication.

NICOTINE INHALER

A nicotine replacement therapy currently available only as a prescription medication.

NICOTINE NASAL SPRAY

A nicotine replacement therapy currently available only as a prescription medication.

NICOTINE PATCH

A nicotine replacement therapy currently available both as an over-the-counter medication and a prescription medication.

CLONIDINE

Clonidine is used primarily as an antihypertensive medication. Although it has proven effective for smoking treatment, the FDA has not approved it for this use. Clonidine can be used as a second-line agent for smoking cessation under the supervision of a physician.

NORTRIPTYLINE

Nortriptyline is used primarily as an antidepressant and has been neither evaluated nor approved by the FDA as a smoking cessation medication. Nortriptyline can be used as a second-line agent for smoking cessation under the supervision of a physician.

TABLE 3

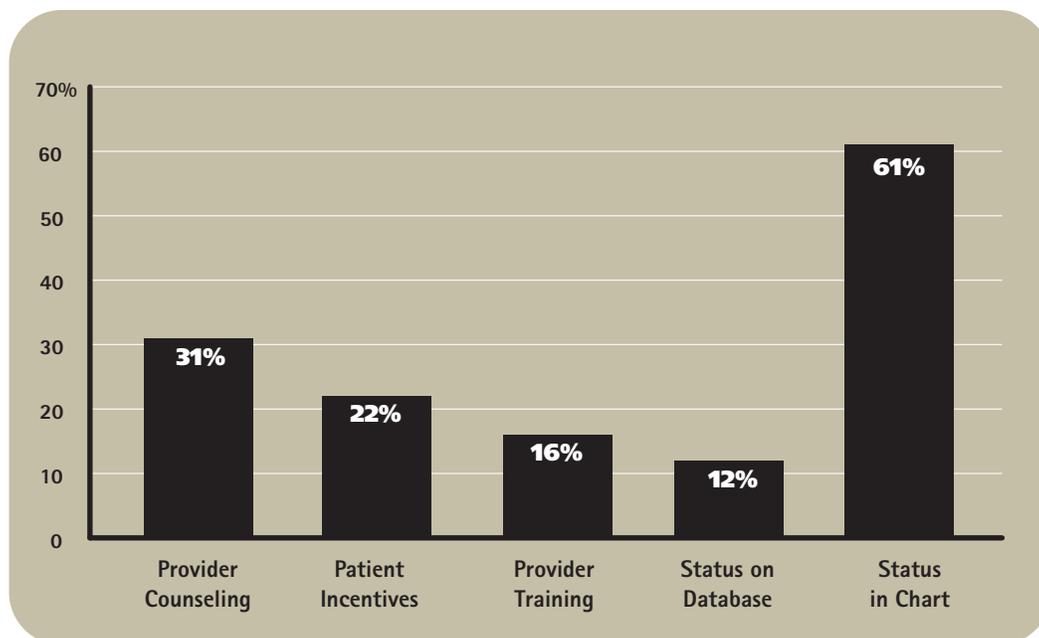
ESTIMATED ABSTINENCE RATES FOR SPECIFIC PHARMACOTHERAPIES FOR SMOKING CESSATION	
PHARMACOTHERAPY	ESTIMATED ABSTINENCE RATE (%)
First-Line Medications	
Bupropion SR*	30.5 (vs. 17.3 w/placebo)
Nicotine Gum	23.7 (vs. 17.1 w/placebo)
Nicotine Inhaler	22.8 (vs. 10.5 w/placebo)
Nicotine Nasal Spray	30.5 (vs. 13.9 w/placebo)
Nicotine Patch	17.1 (vs. 10.0 w/placebo)
Second-Line Medications	
Clonidine	25.6 (vs. 13.9 w/placebo)
Nortriptyline	30.1 (vs. 11.7 w/placebo)

*Sustained Release Bupropion
 Source: Fiore M.C., W.C. Bailey WC, S.J. Cohen SJ, et al. (June 2000). *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service.

In 1997-98, the *Addressing Tobacco in Managed Care* survey was conducted to collect baseline data on the extent to which health plans were incorporating effective tobacco control interventions into routine care and health plan activities (McPhillips-Tangum, 1998). Questionnaires were mailed to all health plans in AAHP's database of member and non-member plans (n=542). A total of 323 plans replied for an overall response rate of 60%. The following is a summary of the results:

- Although 71% of the health plans were aware of the 1996 AHRQ, formerly AHCP, smoking cessation guideline, only 9% had fully implemented the recommendations in the guideline, 39% had partially implemented them.
- Approximately 56% of MCOs provided some coverage for cessation classes and other tobacco control interventions.
- Smoking cessation programs for pregnant smokers were offered by 45% of MCOs.
- Although 61% of MCOs recorded smoking status in patients' medical charts, only 12% recorded smoking status in a computerized database.
- Despite the fact that 25% of MCOs measured population-based smoking prevalence, only 15% could identify individual smokers among their member population because of lack of documentation.

TOBACCO INTERVENTIONS IMPLEMENTED IN MCOs: ATMC BASELINE SURVEY



Source: McPhillips-Tangum C. (1998). "Results from the First Annual Survey on Addressing Tobacco in Managed Care." *Tobacco Control* 7 (suppl):S11-S13.

Overall, the results of the baseline survey indicate considerable room for improvement in the number and type of tobacco control interventions offered in managed health care plans. Because smoking cessation interventions for pregnant women have the potential to save costs as well as promote good health outcomes, attention should be focused on this important subset of patients. There is also a great need for health plans to improve their ability to identify individuals who smoke because targeted or tailored interventions depend on the ability to identify and reach out to these individuals.

REFERENCES

- Cromwell, J., W.J. Bartosch, M.C. Fiore, V. Hasselblad, T. Baker. (1997). "Cost-Effectiveness of the Clinical Practice Recommendations in the AHCPR Guideline for Smoking Cessation." *Journal of the American Medical Association* 278(21):1759-1766.
- Cummings, S.R., S.M. Rubin, G. Oster. (1989). "The Cost-Effectiveness of Counseling Smokers to Quit." *Journal of the American Medical Association* 261(1):75-79.
- Davis, R.M. (1998). "An Overview of Tobacco Measures." *Tobacco Control* 7 (suppl): S36-S40.
- Eddy, D.M. (1992). "David Eddy Ranks the Tests." *Harvard Health Letter* 17(9):10-11.
- Employee Benefits Research Institute/Mathew Greenwald and Associates. (2000). *1998 Health Confidence Survey*. Washington DC: Employee Benefits Research Institute.
- Ershoff, D.H., V.P. Quinn, P.D. Mullen, D.R. Lairson. (1990). "Pregnancy and Medical Cost Outcomes of a Self-Help Prenatal Smoking Cessation Program in a HMO." *Public Health Reports* 105(4):340-347.
- Fiore M.C., W.C. Bailey, S.J. Cohen, et al. (June 2000). *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service.
- Koplan, J.P. (1998). "Managed Care and Approaches to Tobacco Control." *Tobacco Control* 7 (suppl):S1-S2.
- Lipkus I.M., P.R. Lyna, B.K. Rimer. (1999). "Using Tailored Interventions to Enhance Smoking Cessation Among African-Americans as a Community Health Center." *Nicotine and Tobacco Research* 1:77-85.
- McPhillips-Tangum C. (1998). "Results from the First Annual Survey on Addressing Tobacco in Managed Care." *Tobacco Control* 7 (suppl):S11-S13.
- National Committee for Quality Assurance. (1998). *The State of Managed Care Quality – 1998*. Washington, DC: NCQA.
- National Committee for Quality Assurance. (1997). *HEDIS 3.0, volumes 1-3*. Washington, DC: NCQA.
- Ossip-Klein D.J., G.A. Giovino, N. Megahed, P.M. Black, S.L. Emont, J. Stiggins, et al. (1991). "Effects of a Smoker's Hotline: Results of a 10-County Self-Help Trial." *Journal of Consulting and Clinical Psychology* 59(2):325-332.
- Oster, G., D.M. Huse, T.E. Delea, G.A. Colditz. (1986). "Cost-Effectiveness of Nicotine Gum as an Adjunct to Physician's Advice Against Cigarette Smoking." *Journal of the American Medical Association* 256(10):1315-1318.
- Wagner, E.H., S.J. Curry, L. Grothaus, K.W. Saunders, C.M. McBride. (1995). "The Impact of Smoking and Quitting on Health Care Use." *Archives of Internal Medicine* 155:1789-1795.
- Warner, K.E. (1998). "Smoking Out the Incentives for Tobacco Control in Managed Care Settings." *Tobacco Control* 7 (suppl):S50-S54.

SECTION 2

Getting Started

T

his section provides information to assist health plans in conceptualizing the framework and objectives for a tobacco control program. The U.S. Department of Health and Human Services, Public Health Service, released in 2000 two important reports containing valuable information and resources for health plans. The following information is a summary and small subset of the information provided in those reports. Information on accessing the full text of these reports is included in Appendix E (page 70).

Treating Tobacco Use and Dependence: A Clinical Practice Guideline

In June 2000, the U.S. Public Health Service released *Treating Tobacco Use and Dependence*, a clinical practice guideline that contains new evidence and tools to help patients quit using tobacco (Fiore et al., 2000). The new guideline is an updated version of the *1996 Smoking Cessation Clinical Practice Guideline*. The original guideline reflected the results of research published between 1975 and 1994. The new guideline incorporates important new findings that emerged between 1995 and 1999.

The new guideline contains strategies and recommendations designed to help clinicians, tobacco dependence specialists, purchasers and health care administrators and insurers deliver and support effective treatments for tobacco use and dependence. The key recommendations in *Treating Tobacco Use and Dependence* are:

- Tobacco dependence is a chronic condition that often requires repeated intervention. However, effective treatments exist that can produce long-term or even permanent abstinence.
- Because effective tobacco dependence treatments are available, every patient who uses tobacco should be offered at least one of these treatments: patients *willing* to try quitting should be provided with treatments identified as effective in the guideline and patients *unwilling* to try quitting should be provided with a brief intervention designed to increase their motivation to quit.
- It is essential that clinicians and health care delivery systems (including administrators, insurers and purchasers) institutionalize the consistent identification, documentation and treatment of every tobacco user seen in a health care setting.
- Brief tobacco dependence treatment is effective, and every patient who uses tobacco should be offered at least brief treatment.
- A strong dose-response relation exists between the intensity of tobacco dependence counseling and its effectiveness. Treatments involving person-to-person contact (via individual, group or proactive telephone counseling) are consistently effective, and their effectiveness increases with treatment intensity (e.g., minutes of contact).
- Three types of counseling and behavioral therapy have proven especially effective and should be used with all patients attempting tobacco cessation. (See Section 1, page 10.)
 - Provision of practical counseling
 - Provision of social support as part of the treatment
 - Help in securing social support outside of treatment
- Numerous effective pharmacotherapies for smoking cessation now exist. Except in the presence of contraindications, these should be used with all patients attempting to quit smoking. (See Section 1, page 11.)
- Tobacco dependence treatments are both clinically effective and cost-effective relative to other medical and disease prevention interventions. As such, insurers and purchasers should ensure that all health plans include as a reimbursed benefit the counseling and pharmacotherapeutic treatments identified as effective in the guideline and that clinicians are reimbursed for providing tobacco dependence treatment just as they are for treating other chronic conditions.

Reducing Tobacco Use: A Report of the Surgeon General

Over the past four decades, the Surgeon General of the U.S. Public Health Service has released numerous reports focused on tobacco use and its effect on health. While early reports focused on informing Americans about the negative health effects of tobacco use, the most current report assesses past and current efforts to reduce the use of tobacco in this country (U.S. Department of Health and Human Services, 2000a). The major conclusions from *Reducing Tobacco Use: A Report of the Surgeon General* are:

- Efforts to prevent the onset or continuance of tobacco use face the pervasive, countervailing influence of tobacco promotion by the tobacco industry, a promotion that takes place despite overwhelming evidence of the adverse health effects of tobacco use.
- The available approaches to reducing tobacco use – educational, clinical, regulatory, economic and comprehensive – differ substantially in their techniques and in the metric by which success can be measured. A hierarchy of effectiveness is difficult to construct.
- Approaches with the largest span of impact (economic, regulatory and comprehensive) are likely to have the greatest long-term population impact. Those with a smaller span of impact (educational and clinical) are of greater importance in helping individuals resist or abandon the use of tobacco.
- Educational strategies conducted in conjunction with community- and media-based activities can postpone or prevent smoking onset in 20% to 40% of adolescents.
- Pharmacologic treatment of nicotine addiction combined with behavioral support enables 20% to 25% of tobacco users to remain abstinent one year after treatment.
- The impact of these various approaches to reducing tobacco use is likely to be underestimated because of the synergistic effect of these modalities. The potential for combined effects underscores the need for comprehensive approaches.

Setting Goals and Objectives

As with any quality improvement opportunity, it is wise to start with end results in mind. As such, setting a thoughtful and well-articulated goal for a tobacco control program helps keep health plans focused on efforts to reduce tobacco use. Many appropriate goals for tobacco control programs exist, ranging from improving health to reducing costs. A particular goal early in the program development process should be identified by the individual, group or committee in charge of the health plan's tobacco control efforts.

In 1992, Group Health Cooperative of Puget Sound (GHC) named the reduction of tobacco use as its primary prevention priority (Dacey, 1999). A goal was set to decrease tobacco use from approximately 25% to 12.5% by 2000. To assist in meeting the overall goal, a series of process-oriented objectives were also set, including: (1) documentation of smoking status on 95% of all medical charts; (2) documentation of a clinical intervention on the charts of at least 45% of identified smokers; (3) increased participation in "Free & Clear," GHC's behavioral smoking cessation program; and (4) achievement of a less than 10% fair/poor rating on surveys filled out by patients who were offered individual support and counseling on tobacco use by their providers.

Depending on the goal(s) of the health plan's tobacco control program, it may be necessary to set objectives aimed at both tobacco cessation and prevention of tobacco use (especially by children, adolescents and young adults). For example, reducing the tobacco use at a population level (also termed the prevalence of tobacco use) typically requires the use of effective strategies to help smokers quit *and* help non-smokers resist initiating the use of tobacco. *Healthy People 2010* includes numerous objectives designed to reduce the percentage of American adults who use tobacco from approximately 24% to less than 12% (U. S. Department of Health and Human Services, 2000b). The objectives are broad in their scope and nature and include the following:

- Reduce tobacco use by adults 18 years of age and older to 12% by 2010 (baseline = 24% in 1997).
- Increase smoking cessation attempts by adult smokers to 75% by 2010 (baseline = 43% in 1997).
- Increase insurance coverage of evidence-based treatment for nicotine dependency to 100% by 2010 (baseline = 75% in 1998).
- Reduce the proportion of children regularly exposed to tobacco smoke at home to 10% by 2010 (baseline = 27% in 1997).
- Increase the average federal and state tax on tobacco products to \$2.00 per pack by 2010 (baseline = \$0.63 in 1998).

Although there may appear to be a standard set of tobacco control goals and objectives (e.g., reduce tobacco use, document cessation advice, etc.), the most appropriate goals and objectives reflect the individual needs and priorities of health plans. Each health plan that initiates a tobacco control program should carefully assess what it wants to achieve and use that knowledge to establish the goals of the program.

Once the goals are established, it is a matter of setting specific and measurable objectives that match them. One way to identify appropriate objectives is to think of all the steps that need to be taken to achieve the goals and then develop an objective to reflect each step. Ultimately, these goals and objectives assist the health plan to evaluate the extent to which the tobacco control is functioning as planned and achieving the desired results.

REFERENCES

Dacey, S. (1999). "Tobacco Cessation Program Implementation – From Plans to Reality." *Tobacco Control* 9 (suppl):i30-i32.

Fiore M.C., W.C. Bailey, S.J. Cohen, et al. (June 2000). *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service.

U.S. Department of Health and Human Services. (2000a). *Reducing Tobacco Use: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease and Health Promotion, Office on Smoking and Health.

U.S. Department of Health and Human Services. (2000b). *Healthy People 2010* (Conference Edition). Washington, DC: U.S. Department of Health and Human Services.

SECTION 3

Tobacco Control Interventions: Case Studies

This section describes several types of tobacco control interventions and provides case studies to illustrate how health plans have implemented successful interventions. While this section explores systems-based interventions, provider-based interventions, patient-based interventions, community-based interventions and interventions for special populations as discrete concepts, it is important to remember that the most successful tobacco control interventions are likely to include elements of each of these approaches.

Systems-Based Interventions

Systems-based interventions are premised on the idea that focusing on the individual clinician or patient is necessary but not sufficient to achieve desirable results in reducing tobacco use. Systems-based interventions are designed to use the influence of health plans and purchasers to encourage and support effective identification and treatment of tobacco use. As such, these interventions most frequently involve strategies designed to increase documentation of tobacco use in medical records, prompt clinician counseling of smokers and support effective tobacco treatment by making changes to benefit and physician reimbursement practices.

Treating Tobacco Use and Dependence describes the following set of strategies that facilitate systems interventions (Fiore et al., 2000).

TABLE 4

SYSTEMS-BASED INTERVENTIONS: RECOMMENDATIONS AND IMPLEMENTATION SUGGESTIONS	
RECOMMENDATION	IMPLEMENTATION SUGGESTIONS
Implement a tobacco-user identification system in every clinic	<ul style="list-style-type: none"> • Prepare progress notepaper to include the documentation of smoking as a vital sign • Alter computerized medical record to remind clinician to ask about tobacco use and record it in the electronic record
Provide education, resources and feedback to promote provider intervention	<ul style="list-style-type: none"> • Provide lectures, seminars or in-services with CME and/or other credit for tobacco dependence training • Have patient self-help materials as well as bupropion SR and nicotine replacement starter kits available in all exam rooms • Include provision of tobacco dependence treatment on reports to clinicians and medical groups • Provide feedback to clinicians on the extent to which they are identifying, documenting and treating smokers
Dedicate staff to provide tobacco dependence treatment and assess the delivery of this treatment in staff performance evaluations	<ul style="list-style-type: none"> • Designate a tobacco dependence coordinator at every site • Delineate the responsibilities of the coordinator • Communicate to each clinician (nurse, physician, pharmacist, etc.) his or her responsibilities in the delivery of tobacco dependence services
Promote hospital policies that support and provide in-patient tobacco dependence services	<ul style="list-style-type: none"> • Implement a system to identify and document the tobacco use status of all hospitalized patients • Identify a clinician to deliver tobacco dependence in-patient treatment • Offer tobacco dependence treatment to all hospitalized patients who use tobacco • Reimburse providers for tobacco dependence in-patient consultation services • Expand hospital formularies to include FDA-approved tobacco dependence pharmacotherapies
Include effective tobacco dependence treatments (including counseling and pharmacotherapy) as paid or covered services for all subscribers or members of health insurance packages	<ul style="list-style-type: none"> • Include effective tobacco dependence treatments as part of the basic benefits package for all health insurance products • Inform subscribers and members of the availability of covered tobacco dependence treatments and encourage them to use them
Reimburse clinicians and specialists for delivery of effective tobacco dependence treatments and include these interventions among the defined duties of the clinicians	<ul style="list-style-type: none"> • For fee-for-service physicians, include tobacco dependence treatment as a reimbursable activity and inform them of the policy • For salaried physicians, include tobacco dependence intervention in job descriptions and performance evaluations

Source: Fiore M.C., W.C. Bailey, S.J. Cohen, et al. (June 2000). *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service. Pages 44-47.

CASE STUDY A

Name of Health Plan: **Group Health Cooperative of Puget Sound (GHC)**

Location: **Puget Sound (Seattle, Washington)**

Model Type: **Primarily group model**

Membership: **500,000**

Approach:

In 1991, a group of physicians, nurses, researchers and planners began to meet regularly to discuss what GHC could do about tobacco use (McAfee, 1998). Over time, the group came up with an approach that calls for systematic identification, advice, assistance and follow-up for all tobacco users.

The current program uses standardized tobacco chart stickers and vital signs stamps to identify smokers. Key patient education materials are kept in all exam rooms. These publications include the National Cancer Institute's pamphlet "Clearing the Air"; the Washington State Health Department's pamphlet on secondhand smoke entitled "One of the Best Things You Can Do for Your Kids"; and GHC's "Free & Clear" informational pamphlet, which prominently displays information on enrollment in the covered behavioral counseling program.

The GHC approach also calls for coverage of pharmacotherapies when the member is enrolled in the "Free & Clear" program and regular feedback to the member's physician (Dacey, 2000). This approach was adopted by GHC's quality improvement department and decreasing tobacco prevalence became GHC's number one prevention priority.

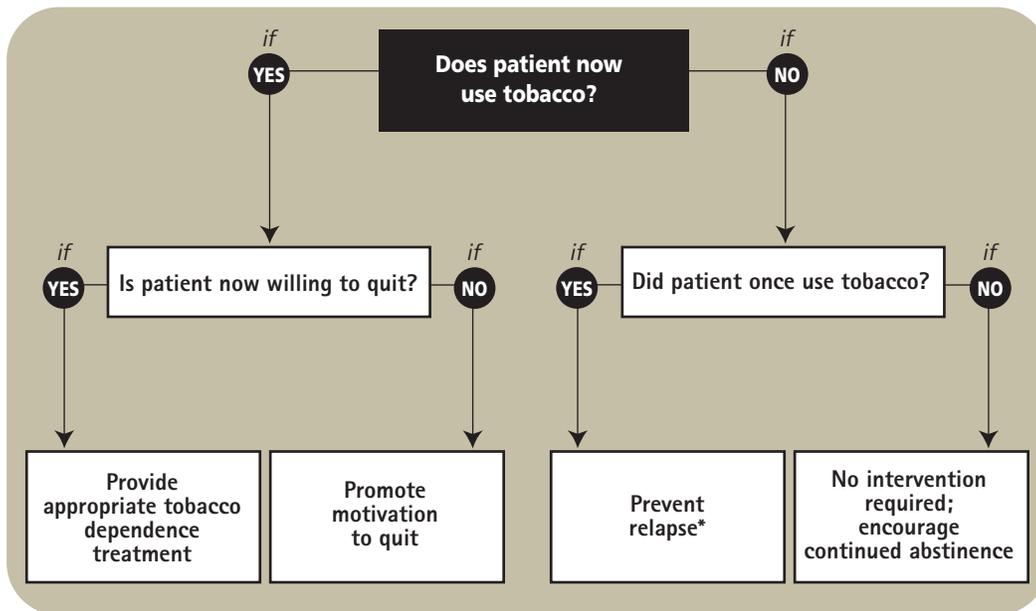
Results:

Nearly a decade later, the prevalence of tobacco use among GHC members is approximately 15% as compared to 23% for the state of Washington. GHC credits its success to the ability to develop and maintain systems-based interventions.

Provider-Based Interventions

At least 70% of smokers see a physician each year and the vast majority express a desire to quit smoking (Centers for Disease Control and Prevention, 1998). A physician's advice to quit is an important motivator for attempting to stop smoking (Ockene, 1987). Unfortunately, more than one-third of current smokers report never having been asked by their physician about their smoking status or urged to quit (Thorndike et al., 1998).

It is essential that at least a brief intervention is provided to all tobacco users at each clinical visit. Indeed, this is a central theme in *Treating Tobacco Use and Dependence* (Fiore et al., 2000). The guideline describes approaches to brief, effective clinician interventions for three types of patients: (1) current tobacco users willing to attempt to quit; (2) current tobacco users unwilling to attempt to quit; and (3) former tobacco users who have recently quit.



*Relapse prevention interventions are not necessary in the case of the adult who has not used tobacco for many years.

Source: Fiore M.C., W.C. Bailey, S.J. Cohen, et al. (June 2000). *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service.

For current tobacco users willing to attempt to quit, the five major steps to brief physician-based tobacco intervention are commonly referred to as the "5 As." As illustrated in Table 5 (page 26), the "5 As" suggest that clinicians *ask* each patient if he or she uses tobacco, *advise* patients to quit, *assess* patients' willingness to attempt to quit, *assist* patients in attempting to quit, and *arrange* for follow-up contacts to prevent relapse. Each of these strategies is designed to be very brief, requiring three or fewer minutes of a physician's time.

CASE STUDY B

Name of Health Plan: **Kaiser Permanente Northwest**

Location: **Portland, Oregon**

Model Type: **Group model**

Membership: **445,000**

Approach:

Several years ago, colleagues at Kaiser Permanente Northwest began asking themselves what it would take to implement the “4 As” (now the “5 As” with the addition of assessing) in a busy, managed care setting (Hollis et al., 2000). They knew that the “4 As” model was efficacious, but they also knew that few physicians were using it consistently with all patients who used tobacco. Their solution was to develop TRAC (Tobacco, Reduction, Assessment and Care), a team approach for delivering the “4 As” model. TRAC divides the responsibilities for the “4 As” – asking, advising, assisting and arranging for follow-up – among a team of clinical staff members as follows: (1) a clinical assistant asks about tobacco use during intake and documents the result in the patient’s medical chart; (2) clinicians are encouraged to give a clear 30 seconds of advice and/or encouragement to all patients identified as smokers or recent quitters; (3) a nurse assistant shows an educational videotape to patients willing to quit in the next six months, addresses concerns, and describes pharmacotherapy; (4) patients who set a specific quit date are called a few days after the scheduled quit date by a health educator who offers encouragement and answers questions.

TRAC also calls for quality monitoring and follow-up with clinicians to keep them informed about how they are doing on each component of the program.

Results:

In a randomized trial of the TRAC model, the nurse-assisted component nearly doubled the long-term quit rate compared to 30 seconds of physician counseling alone (Hollis et al., 1993). Most importantly, staff at Kaiser Permanente Northwest believe that the team approach makes it practical for busy clinicians to address tobacco use with all their patients who use tobacco.

TABLE 5

THE "5 AS" FOR BRIEF PHYSICIAN-BASED INTERVENTION	
Ask about tobacco use	Identify and document tobacco use status for every patient at every visit.
Advise to quit	In a clear, strong and personalized manner, urge every tobacco user to quit.
Assess willingness to make a quit attempt	Is the tobacco user willing to make a quit attempt at this time?
Assist in quit attempt	For the patient willing to make a quit attempt, use counseling and pharmacotherapy to help him or her quit.
Arrange follow-up	Schedule follow-up contact, preferably within the first week after the quit date.

Source: Fiore M.C., W.C. Bailey, S.J. Cohen, et al. (June 2000). *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service. Page 26.

Patient-Based Interventions

Historically, approximately 90% of smokers who have successfully quit smoking have done so on their own – that is, without the assistance of formal cessation programs (Fiore et al., 1990). More recently, with the greater availability of pharmacological treatments to assist in smoking cessation, it is thought that about 20% of smokers seek some type of assistance when trying to quit and 80% are unassisted (Zhu et al., 2000). Because of the large percentage of smokers who try to quit on their own, distribution of self-help materials is likely an important strategy for reducing tobacco use.

Written materials such as booklets are the most common forms of self-help materials. Considerable research literature exists on the efficacy of self-help materials. In a review of the research on self-help materials, the median long-term tobacco abstinence rate was approximately 5% – that is, about 5% of the people who used self-help materials successfully quit smoking (Curry, 1993). Furthermore, recent evidence indicates that self-help materials used without counseling and/or pharmacotherapy may produce negligible increases in long-term cessation (Fiore et al., 2000). This is not to say, however, that self-help materials play no role in a comprehensive tobacco control program. In fact, some evidence suggests that self-help materials may be effective with tobacco users who are less dependent on nicotine, more motivated and more confident in their ability to quit (Curry, 1993). In addition, self-help materials may be valuable components of a comprehensive community-based tobacco control program because they can be distributed relatively inexpensively to large populations.

Increasingly, reading level has been recognized as an important concern related to self-help materials. Indeed, trends in smoking are different for those with differing levels of education. While the prevalence of tobacco use has declined sharply among people with a college education, it has declined only marginally among people with less than a high school degree (Pierce et al., 1989). As such, self-help materials related to tobacco use should be written at no higher than a seventh-grade reading level (Glynn, 1990).

A Note on Reading Level

Many health plans will spend considerable time selecting or developing a self-help manual to accompany their tobacco control program. Despite the fact that many self-help materials have been developed, little evidence indicates that one is any more effective than another. Accordingly, an expert panel of the National Cancer Institute has recommended that health professionals try to increase the availability of existing self-help materials and other materials rather than develop new ones (Glynn, 1990).

In evaluating available self-help materials, the panel suggests that materials contain, at a minimum, the following components: information about the social and health effects of tobacco use; specific strategies and exercises for quitting; and specific strategies and exercises to avoid relapse and, in the event of relapse, to try to quit again (Glynn, 1990).

The best use of self-help materials may be as part of a more comprehensive tobacco control program, perhaps one involving adjunctive interventions such as telephone counseling or tailored feedback. Research results suggest that adding interventions, particularly proactive telephone counseling, increases the effect of self-help materials (Curry, 1993).

CASE STUDY C

Name of Health Plan: **PacifiCare Health Systems (PHS)**

Location: **Santa Ana, California**

Model Type: **Network model**

Membership: **3,600,000**

Approach:

To assist with the national effort to reduce the prevalence of tobacco use, PHS developed a tobacco control program called the StopSmoking Program (Krejci, 2000). The StopSmoking Program is a self-directed, multicomponent program using telephone counseling and self-help materials. On average, each participant receives between 7 and 14 telephone calls from a trained smoking cessation counselor over the course of a year. Participants are also mailed a quit kit consisting of self-help manuals, a videotape, an audiotape and “urge zapper” tools. PHS charges a co-payment of \$20 to members who enroll in the program. PHS also offers pharmacotherapies with a \$20 co-payment for members enrolled in the StopSmoking Program.

Results:

In 1999, the StopSmoking Program reported a one-year, self-reported quit rate of approximately 40%.

Community-Based Interventions

A comprehensive approach to reducing tobacco use recognizes that individual behavioral choices, such as smoking, occur in the complex and dynamic environment of the community. A number of large-scale, community-based programs have been developed and evaluated. Historically, community-based interventions have incorporated mass media strategies into larger health education programs. Community-based interventions such as the Stanford Five-City Project (Farquhar et al., 1990), the Minnesota Heart Health Program (Perry et al., 1992) and the Pawtucket Heart Health Study (Carleton et al., 1995) have aimed to reduce tobacco use. Unfortunately, these community-based trials relying on mass media and traditional health promotion activities have had little success in preventing or reducing tobacco use.

More recently, it has been recommended that community-based interventions focus more broadly on community advocacy and mobilization. The components of community advocacy and mobilization include electronic networking to support communication; direct advocacy to effect policy changes; media advocacy to strategically advance tobacco control as a public initiative; and countermarketing to alter the social context of tobacco use, especially among young people (U.S. Department of Health and Human Services, 2000).

A number of statewide programs have emerged as the newest testing grounds for developing and evaluating large-scale, comprehensive programs aimed at reducing tobacco use. Minnesota, California and Massachusetts have each developed tobacco control programs aimed at policy change, smoking cessation and prevention of tobacco use among children and adolescents. California and Massachusetts are operating state-funded telephone counseling programs to deliver tobacco cessation services to residents. The initial results from these statewide tobacco reduction programs have been favorable (U.S. Department of Health and Human Services, 2000).

CASE STUDY D

Name of Health Plan: **Blue Cross and Blue Shield of Minnesota**

Location: **Eagan, Minnesota**

Model Type: **Network model**

Membership: **220,000**

Approach:

In response to the epidemic of tobacco use at the national and state levels, Blue Cross and Blue Shield of Minnesota created “Minnesota Decides: A Community Blueprint for Tobacco Reduction” (Johnson, 2000). Minnesota Decides has a threefold purpose: (1) to create a public/private partnership; (2) to increase the number of stakeholders involved in the issue; and (3) to develop a state plan of action for tobacco reduction. Project partners include groups such as the local chapter of the American Cancer Society, the Minnesota Smoke Free Coalition, the state health department, the state attorney general’s office and local government.

In 1997, 10 community meetings were held to discuss which issues should be addressed and which strategies pursued as part of a state tobacco control plan. Several months later, a state summit was held to present findings from the community meetings and poll Minnesotans on ideas related to a state tobacco control plan. Ultimately, a 72-page blueprint was developed that conveys the findings from the Minnesota Decides project. The blueprint includes goals for a statewide tobacco control program and strategies identified to help reach those goals.

Results:

Minnesota Decides met each of its goals. The blueprint is now being used to shape the debate over how the Minnesota legislature should appropriate proceeds from the state tobacco settlement.

Interventions for Special Populations

Children and Adolescents

In the United States, more than 6,000 children and adolescents try their first cigarette each day (Centers for Disease Control and Prevention, 1998) and 22% of high school seniors smoke on a daily basis (Pierce and Gilpin, 1996). In addition, the Youth Risk Behavior Survey found that approximately 20% of male adolescents had used smokeless tobacco (chew or snuff) in the past 30 days (Kann et al., 1995). Clearly, an important aspect of reducing tobacco use is to implement effective tobacco use prevention programs for children and adolescents. Fortunately, a number of educational, community- and media-based interventions have been shown to postpone or prevent smoking initiation in 20% to 40% of adolescents (U.S. Department of Health and Human Services, 2000).

CASE STUDY E

Name of Health Plan: **Sierra Health Services/
Health Plan of Nevada**

Location: **Las Vegas, Nevada**

Model Type: **Network model**

Membership: **160,000**

Approach:

In 1997, Sierra Health Services became the first and only recipient of the Smith Kline Beecham Health Care Partnership Award. With the funding from that award, the health plan formed partnerships with several key organizations to address prevention of tobacco use among children and adolescents (De Vaux Oaks, 1998). Partnerships were formed with organizations such as the Nevada Tobacco Prevention Coalition of the American Cancer Society, a local school district, the local NBC affiliate and two radio stations that focused on teens as their target audience. Together, the partners decided to create a tobacco prevention program called “Smoking Stinks.” As one of the first steps, a public awareness campaign was created. Volunteers from the partnership donated their time and talent to produce the radio and television spots. The partnership also developed in-service training programs for middle school teachers and provided a “Smoking Stinks” activity/curriculum guide for students.

Results:

The “Smoking Stinks” program has been extremely well received in the Las Vegas area. The activity/curriculum guide has been adopted for wider use among all the school district’s middle school classes, more than 9,000 students have signed “Chain of Life” forms that pledge their commitment to leading tobacco-free lives, and the health plan is looking for new ways to expand the program.

CASE STUDY F

Name of Health Plan: **HealthPartners, Inc.**

Location: **Minneapolis, Minnesota**

Model Type: **Group model**

Membership: **660,000**

Approach:

In 1995, the results of a Minnesota survey indicated that 39% of high school seniors smoked in the previous month before they were surveyed, compared to 31% nationwide. The results of the survey also indicated that 18% of ninth graders were smoking on a regular basis, and the rate of smoking among girls was climbing dramatically. In response to these alarming facts, HealthPartners worked with providers, schools, the media and other important community partners to launch an aggressive and innovative anti-tobacco media campaign.

The campaign included MTV-style television commercials, radio ads, billboards, events and other activities to show adolescents that smoking isn't cool. The first of the television ads became known as the "Garbage Face" spot. In it a teenage girl who smokes is transformed via animation into a face of garbage to illustrate to adolescents that smoking is unattractive and undesirable. Although the media campaign served as the cornerstone of HealthPartners' tobacco control program, they also worked on a youth access prevention bill and distributed 1 million smoking cessation calendars to assist adolescent smokers day-by-day through the difficult process of quitting.

Results:

The campaign was very successful in reaching its target audience – Minnesota teens. HealthPartners purchased advertising to penetrate the target market by 50%, and paid advertising was supplemented by voluntary public service contributions from local radio and television stations. Feedback from schools, health officials, providers, the anti-tobacco community and teens indicate that Minnesota teens now have a different image of smoking – a negative one.

Hospitalized Patients

Smoking cessation treatments for hospitalized patients have proven to be effective (Fiore et al., 2000). Such patients may be particularly motivated to attempt to quit for two reasons. First, the illness that caused the hospitalization may have been a direct result of smoking. Second, every hospital in the United States must now be smoke-free to be accredited by the Joint Commission on Accreditation of Healthcare Organizations. As a result, all hospitalized smokers are temporarily housed in a smoke-free environment.

The latest recommendation from *Treating Tobacco Use and Dependence* is to provide effective smoking cessation treatments for all hospitalized patients who smoke (Fiore et al., 2000). In particular, the guideline suggests that the following steps be taken with every hospitalized patient:

- Ask each patient on admission if he or she uses tobacco, and document tobacco use status.
- For current tobacco users, list tobacco use status on the admission problem list and as a discharge diagnosis.
- Use counseling and pharmacotherapy to assist all tobacco users to maintain abstinence and treat withdrawal symptoms.
- Provide advice and assistance on how to quit during hospitalization and remain abstinent after discharge.

CASE STUDY G

Name of Health Plan: **Providence Health System (PHS)**

Location: **Portland, Oregon**

Model Type: **IPA network model**

Membership: **660,000 (PPO and IPA)**

Approach:

At PHS, tobacco control programs are a top priority for reducing disease and death due to heart disease (Bentz, 2000). Every patient admitted to a PHS hospital is asked about current tobacco use by the admitting department, and the tobacco status of every patient is recorded in the hospital demographic database. Lists of patients who use tobacco are printed each day in the respiratory care departments and a dedicated respiratory therapist provides tobacco cessation counseling as part of routine in-patient care at no additional cost to patients. In addition, PHS funds one physician in their health system to serve as the tobacco control “champion.” The efforts of this physician led to PHS becoming the first health plan in Oregon to provide financial incentives to physicians for tobacco counseling during routine office visits.

Results:

Between 1994 and 1998, PHS saw a reduction in tobacco use prevalence among its members from approximately 22% to 17%. During this time, the prevalence of tobacco use in Oregon decreased only slightly, from approximately 23% to 22%.

Pregnant Women

Tobacco use during pregnancy carries many risks for the woman and the fetus. Cigarette smoking can cause adverse fetal outcomes, including stillbirths, spontaneous abortions, low birth weight, decreased fetal growth, placental abruption and sudden infant death syndrome (SIDS) (Fiore et al., 2000). Given these well-documented, negative effects of smoking during pregnancy, most women are highly motivated to quit smoking during pregnancy.

RECOMMENDED QUESTIONS FOR IMPROVING DISCLOSURE OF SMOKING STATUS AMONG PREGNANT WOMEN

Which of the following statements best describes your cigarette smoking?

1. I smoke regularly now – about the same as before finding out I was pregnant.
2. I smoke regularly now, but I've cut down since I found out I was pregnant.
3. I smoke every once in a while.
4. I have quit smoking since I found out I was pregnant.
5. I wasn't smoking around the time I found out I was pregnant and I don't currently smoke cigarettes.

Source: Fiore M.C., W.C. Bailey, S.J. Cohen, et al. (June 2000). *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service. Page 95.

The first step in intervention for pregnant smokers is to assess tobacco status early in the pregnancy, or prior to conception if at all possible. Because most pregnant smokers realize that smoking is harmful to the fetus, clinicians should be aware that simply asking “Do you smoke?” may not produce an honest response. Research has shown that the use of multiple-choice questions (see the box below), as opposed to a simple yes/no question, can increase disclosure among pregnant women by as much as 40% (Mullen et al., 1991).

A variety of effective interventions can be used once a pregnant smoker has been identified. Prenatal providers who intervene briefly with personalized advice, assistance and self-help materials tailored for pregnancy can double prenatal smoking quit rates (Mullen et al., 1994). *Treating Tobacco Use and Dependence* clearly defines clinical recommendations for assisting pregnant women to quit. (See Table 6.) It is also important, however, to assist women who have quit smoking during pregnancy to remain abstinent after giving birth. Postpartum relapse may be decreased by taking every opportunity to emphasize the relationship between maternal smoking and poor health effects on infants and children. (For more information, see Appendix D: Smoking Cessation Intervention for Pregnant Patients.)

TABLE 6

RECOMMENDED CLINICAL PRACTICES FOR ASSISTING A PREGNANT SMOKER TO QUIT	
CLINICAL PRACTICE	RATIONALE
Assess pregnant woman's tobacco use status using a multiple-choice question to improve disclosure	<p>Many pregnant women deny smoking, and the multiple-choice question format improves disclosure. For example, which of the following statements best describes your cigarette smoking?</p> <ul style="list-style-type: none"> • I smoke regularly now – about the same as before finding out I was pregnant. • I smoke regularly now, but I've cut down since I found out I was pregnant. • I smoke every once in a while. • I have quit smoking since finding out I was pregnant. • I wasn't smoking around the time I found out I was pregnant, and I don't currently smoke cigarettes.
Congratulate those smokers who have quit on their own	This can encourage continued abstinence.
Motivate quit attempts by providing educational messages about the impact of smoking on both the woman's and the fetus' health	These are associated with higher quit rates.
Give clear, strong advice to quit as soon as possible	Quitting early in pregnancy provides the greatest benefit to the fetus.
Suggest the use of problem-solving methods and provide social support and pregnancy-specific self-help materials	This can reinforce pregnancy-specific benefits and ways to achieve cessation.
Arrange for follow-up assessments throughout pregnancy, including further encouragement of cessation	The woman and her fetus will benefit even when quitting occurs late in pregnancy.
In the early postpartum period, assess for relapse and use relapse prevention strategies, recognizing that patients may minimize or deny use	Postpartum relapse rates are high, even if a woman maintains abstinence throughout pregnancy; relapse prevention may start during pregnancy.

Source: Fiore M.C., W.C. Bailey, S.J. Cohen, et al. (June 2000). *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service.

CASE STUDY H

Name of Health Plan: **Kaiser Permanente
Southern California (KPSC)**

Location: **Pasadena, California**

Model Type: **Group/staff model**

Membership: **2.5 million**

Approach:

At KPSC, every pregnant patient is asked about tobacco use during the first prenatal visit (Quinn, 2000). Pregnant smokers receive advice from their physician about the importance of quitting, and they are mailed a self-help booklet entitled “Living Smoke-Free.” The self-help booklet contains tailored messages for pregnant smokers using four racially/ethnically diverse characters, each of whom represents a different stage of readiness to quit smoking. “Living Smoke-Free” is mailed to patients along with a cover letter from their physician to distinguish it from other prenatal materials a pregnant woman receives from KPSC.

Results:

The KPSC prenatal smoking project has been successful, demonstrating that brief advice from a physician and provision of a low-cost, self-help cessation booklet tailored for pregnant women can make a difference in helping women quit smoking during pregnancy.

CASE STUDY I

Name of Health Plan: **Tufts Health Plan**

Location: **Waltham, Massachusetts**

Model Type: **IPA**

Membership: **680,000**

Approach:

While 12.2% of women smoke during pregnancy in Massachusetts, the percentage of pregnant women in the Tufts Health Plan members who smoke is approximately 9%. In 1995, Tufts Health Plan collaborated with the Massachusetts Department of Public Health to learn about “Quitting for You 2,” a smoking cessation program for pregnant women. As the program has developed, its name has changed to Tufts Health Plan’s Smoking Cessation Program for Pregnant Women.

The program’s objectives were to reduce the number of cigarettes smoked during pregnancy and/or assist the member to permanently stop smoking. The program is based on the “4 As” (now the “5 As”).

Potential program participants are identified through risk assessment by OB/GYNs as well as PCPs and member self-referral. Program interventions consist of provider education, outreach, chart stickers, written member educational materials, three counseling program options, as well as support for self-quit efforts.

Results:

Data for 1998 demonstrate a statistically significant difference between the average number of cigarettes smoked at the initial counseling call and the average number of cigarettes smoked at the time of call five. In addition, 30.3% of program participants who gave birth quit smoking at least two weeks before they delivered while 35.5% of all women in the program met their self-defined quit date.

Seniors

Approximately 4.5 million Americans ages 65 and older smoke cigarettes (Rimer et al., 1994). Smoking cessation in older adults can reduce the risk of heart attack, lung cancer and death from heart disease. Fortunately, effective smoking cessation treatments for older adults exist, and it is now recommended that such treatments for nicotine dependence be offered to older smokers (Fiore et al., 2000). Most of the smoking cessation interventions that have proven effective in the general population are also effective with older adults. For example, the efficacy of the “4 As” (now the “5 As”) has been demonstrated with adults ages 50 and over (Boyd, 1996). As with pregnant women, materials tailored for older smokers appear to be even more effective with seniors than generic materials. The *Clear Horizons* guide, targeted to the special quitting needs and barriers faced by older adults, has proven especially effective for older smokers, and its effectiveness is further enhanced with the use of brief telephone counseling (Orleans et al., 1995).

REFERENCES

- Bentz, C.J. (2000). "Implementing Tobacco Tracking Codes in an Individual Practice Association or Network Model Health Maintenance Organization." *Tobacco Control* 9 (suppl):i42-i45.
- Boyd, N.R. (1996). "Smoking Cessation: A Four-Step Plan to Help Older Adults Quit." *Geriatrics* 51(11):52-57.
- Carleton, R.A., T.M. Lasater, A.R. Assaf, H.A. Feldman, S. McKinlay, et al. (1995) "The Pawtucket Heart Health Program: Community Changes in Cardiovascular Risk Factors and Projected Disease Risk." *American Journal of Public Health* 85(6):777-785.
- Centers for Disease Control and Prevention. (1998). "Incidence of Initiation of Cigarette Smoking – United States, 1965-1996." *Morbidity and Mortality Weekly Report* 47(12):837-840.
- Curry, S.J. (1993). "Self-Help Interventions for Smoking Cessation." *Journal of Consulting and Clinical Psychology* 61(5):790-803.
- Dacey, S. (2000). "Tobacco Cessation Program Implementation – From Plans to Reality." *Tobacco Control* 9 (suppl 1):i30-i32.
- Des Vaux Oakes, J. (1998). "Forming Community Coalitions: 'Smoking Stinks.'" *Tobacco Control* 7 (suppl):S-27-S28.
- Farquhar, J.W., S.P. Fortmann, J.A. Flora, C.B. Taylor, W.L. Haskell, et al. (1990). "Effects of Community-Wide Education on Cardiovascular Disease Risk Factors: The Stanford Five-City Project." *Journal of the American Medical Association* 264(3):359-365.
- Fiore M.C., W.C. Bailey, S.J. Cohen, et al. (June 2000). *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service.
- Fiore, M.C., T.E. Novotny, J.P. Pierce, et al. (1990). "Methods Used to Quit Smoking in the United States: Do Cessation Programs Help?" *Journal of the American Medical Association* 263(20):2760-2765.
- Glynn, T.J., G.M. Boyd, J.C. Gruman. (1990). "Essential Elements of Self-Help/Minimal Intervention Strategies for Smoking Cessation." *Health Education Quarterly* 17(3):329-345.
- Hollis, J.F., R. Bills, E. Whitlock, V. Stevens, J. Mullooly, E. Lichtenstein. (2000). "Implementing Tobacco Interventions in the Real World of Managed Care." *Tobacco Control* 9 (suppl 1):i18-i24.
- Hollis, J., E. Lichtenstein, T. Vogt, et al. (1993). "Nurse-Assisted Counseling for Smokers in Primary Care." *Annals of Internal Medicine* 118:521-525.
- Johnson, D.S. (2000). "Minnesota Decides: A Community Blueprint for Tobacco Reduction." *Tobacco Control* 9(suppl):i65-i67.
- Kann, L., C.W. Warren, W.A. Harris, J.L. Collins, K.A. Douglas, et al. (1995). "Youth Risk Behavior Surveillance – United States, 1993." *Morbidity and Mortality Weekly Report* 44(SS-1):1-56.
- Krejci, R. (2000). "Tobacco Cessation Program Implementation – From Plans to Reality: Skill Building Workshop – Network Model." *Tobacco Control* 9 (Suppl 1):i33-i36.
- McAfee, T. (1998). "Waking the Health Plan Giant: Group Health Cooperative Stops Counting Sheep and Starts Counting Key Tobacco Indicators." *Tobacco Control* 7 (suppl):S41-S44.
- Mullen, P.D., J.P. Carbonari, E.R. Tabek, M.C. Glenday. (1991). "Improving Disclosure of Smoking by Pregnant Women." *American Journal of Obstetrics and Gynecology* 165(2):409-413.
- Mullen, P.D., G. Ramirez, J.Y. Groff. (1994). "A Meta-Analysis of Randomized Trials of Prenatal Smoking Cessation Interventions." *American Journal of Obstetrics and Gynecology* 171:1328-1334.
- Ockene, J.K. (1987). "Smoking Interventions: The Expanding Role of the Physician." *American Journal of Public Health* 77(7):782-783.
- Orleans, C.T., B.K. Rimer, L. Fleisher, et al. (1995). *Clear Horizons: A Quit Smoking Guide for Smokers Aged*

50 and Older. Philadelphia: Fox Chase Cancer Center.

Perry, C.L., S.H. Kelder, D.M. Murray, K. Klepp. (1992) "Community-Wide Smoking Prevention: Long Term Outcomes of the Minnesota Heart Health Program and the Class of 1989 Study." *American Journal of Public Health* 82(9):1210-1216.

Pierce J.P. and E. Gilpin. (1996). "How Long Will Today's New Adolescent Smoker Be Addicted to Cigarettes?" *American Journal of Public Health* 86(2):253-256.

Pierce, J.P., M.C. Fiore, T.E. Novotny, E.J. Hatziandreu, R.M. Davis. (1989). "Trends in Cigarette Smoking in the United States: Educational Differences Are Increasing." *Journal of the American Medical Association* 261(1):56-60.

Quinn, V.P. (2000). "Prenatal Smoking Intervention in Managed Care Settings: The Kaiser Permanente Southern California Prenatal Smoking Project." *Tobacco Control* 9 (suppl):i61.

Rimer, B.K., C.T. Orleans, L. Fleisher, S. Cristinzio, N. Resch, J. Telepchak, et al. (1994). "Does Tailoring Matter? The Impact of a Tailored Guide on Ratings and Short-Term Smoking-Related Outcomes for Older Adults." *Health Education Research* 9(1):69-84.

Thorndike, A.N., N.A. Rigotti, R.S. Stafford, D.E. Singer. (1998). "National Patterns in the Treatment of Smokers by Physicians." *Journal of the American Medical Association* 279(8):604-608.

U.S. Department of Health and Human Services. (2000). *Reducing Tobacco Use: A Report of the Surgeon General*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease and Health Promotion, Office on Smoking and Health.

Zhu S.H., T. Melcer, J. Sun, B. Rosbrook, J.P. Pierce. (2000). "Smoking Cessation with and Without Assistance: A Population-Based Analysis." *American Journal of Preventive Medicine* 18(4):305-311.

SECTION 4

Developing a Tobacco Control Initiative

T

his section provides several suggestions to assist health plans in designing effective tobacco control programs. Many of these suggestions are accompanied by specific tools and guidelines that help health plans work through key steps such as making the decision to build or buy a program, designing a tobacco control benefit and building an internal business case for a tobacco control program. All of the tools and guidelines in this section were developed by health plan professionals who have successfully implemented tobacco control initiatives in their plans.

Assessing Your Health Plan

Health plans, like smokers, may be in differing stages of readiness to take action. A popular health education model, referred to as the stages of change theory, suggests that individuals move through the following four stages en route to making permanent behavioral change:

- **Precontemplation:** When the individual is not even thinking about making a change
- **Contemplation:** When the individual is thinking about making a change but is not yet ready to take action

- **Action:** When the individual is taking specific action to make a change
- **Maintenance:** When the change has been made and the individual is taking action to maintain the change

Before beginning to develop or adopt a tobacco control program, it is important to consider which stage of change best describes your health plan with regard to developing a tobacco control intervention. If your plan is in the precontemplation or contemplation stage, one of the first steps may be to assess the plan's readiness and capacity to develop such an initiative. The following box presents a useful set of questions developed as a self-assessment tool for health plans considering the development of a tobacco control intervention.

IS YOUR HEALTH PLAN READY TO DEVELOP A TOBACCO CONTROL INTERVENTION?

If you answer "yes" to any or all of the following questions, your plan is probably ready to take on the challenge of developing a tobacco control intervention.

- Is there concern among health plan staff about the prevalence of tobacco use among your plan members and/or in your community?
- Are any departments (i.e., pharmacy, quality improvement, disease management, health education, public affairs, etc.) already working on tobacco-related activities?
- Does your plan already offer any benefit or coverage for pharmacotherapy related to tobacco dependence?
- Are senior leaders and decision makers in the plan supportive of developing efforts to reduce and prevent the use of tobacco?
- Do purchasers in your area express interest in tobacco treatment for their employees (i.e., do they ask about this in RFPs)?
- Is your plan interested in performance report cards (i.e., HEDIS, FACCT, etc.) and/or accreditation through NCOA or other organizations?
- Is there a senior-level person in the health plan (i.e., a physician, medical director or opinion leader) who would be willing to serve as the "champion" for developing an evidence-based tobacco control intervention?
- Can you identify several other professionals in your plan who would be willing to serve on a tobacco program planning committee? (Ideally, these individuals should represent different areas of the plan such as pharmacy, quality improvement, disease management, provider relations, member services, etc.)

Program Planning

Designing a tobacco control intervention in a complex, dynamic managed care setting is not an easy task, but it can be made easier and more efficient with effective program planning. The following are six critical factors for tobacco control program planning success (McAfee et al., 1995; Carlson et al., 2000):

Use a population-based perspective and data

- Recognize tobacco use as a key health indicator
- Focus on the needs of your population and be evidence driven
- Know the results of relevant scientific research and apply those results

Obtain broad organizational support

- Seek support at all levels of the organization (i.e., CEO, middle managers, customer service staff, etc.)
- Figure out departmental self-interest and work with it
- Set a high goal and interim objectives for reaching it

Provide adequate support for clinical activity

- Remove financial and organizational barriers to effective tobacco dependence treatment
- Rigorously and comprehensively evaluate to be prepared for internal and public scrutiny
- Integrate the tobacco control program into other quality improvement, disease management and guideline projects
- Communicate the availability of the program through numerous channels (i.e., newsletters, direct mailings, company advertisements, etc.)
- Form lasting partnerships between tobacco control program staff and clinical staff

Establish local ownership

- Identify and support local leadership
- Share data and progress reports

Empower and support local health care teams

- Solicit opinions and feedback from health care professionals
- Wherever appropriate, make changes based on health care teams' suggestions

Provide organizational support for policy and community-based activities

- Apply organizational weight to policy and community initiatives
- Engage physicians in policy advocacy

Making the Decision to Build or Buy

Once a health plan has decided on the activities and programs it will include in its tobacco control program, the plan will want to consider whether to develop (or build) the program in house, purchase the materials or services from another company, or use a combination of these approaches. For example, a health plan that develops a tobacco control program that will include self-help materials, telephone counseling and discounted access to pharmacotherapy can work with numerous vendors who can provide some or all of these materials and services. The decision to build or buy should be based on the health plan's resources and capabilities with regard to such activities as developing educational materials, designing and maintaining a telephone counseling center, and initiating and managing a system for providing discounted nicotine replacement therapy to health plan members.

Health plans that decide to purchase some materials or services from an outside vendor will be confronted with numerous choices. Typically, a health plan would identify all possible vendors and then develop a request for proposals (RFP). Health plans commonly contract with a vendor to provide telephone counseling for smokers. The following is a set of sample questions.

ASSESSING TELEPHONE COUNSELING VENDORS

EVALUATING THE PROGRAM

- What are the components of the program?
- Is the program based on research and science?
- Are aspects of the program relevant for special populations such as teens, pregnant smokers or older smokers?
- How does the program identify and track smokers?
- What methods have been used to evaluate the effectiveness of the program?
- How are outcome measures such as "successful quitting" and "program completion" actually defined and measured?
- What are the 6- and 12-month quit rates, and how are they measured (i.e., self-report or biochemically confirmed)?

EXPERIENCE

- Does the vendor have experience working with the type of membership you have in your health plan (i.e., Medicaid, Medicare, etc.)?
- Has the program been successfully offered in your type of health plan (i.e., a network model, group model, mixed model, etc.)?
- How long has the vendor been in business?
- Can you interview past and previous clients?

REFERRAL, RECRUITMENT AND FEEDBACK

- How are smokers referred into the system?
- How are non-English-speaking members served?
- Are there specific outreach strategies used for high-risk groups such as teens and pregnant smokers?
- How are providers involved in the referral process?
- Are providers given feedback on their patients enrolled in the program?

COUNSELING COMPONENT

- Does the program include both inbound and outbound calling?
- Are support materials used? If so, what type(s)?
- Which behavioral techniques does the counseling staff use?
- What is the process from initial contact through treatment and follow-up?
- Is readiness to change or any other theoretical framework applied?
- How are the counselors trained and qualified?
- How are calls handled after normal business hours?
- How is relapse prevention addressed?
- How are requests for pharmacotherapy addressed?

MARKETING

- What is the marketing plan?
- What are the costs of the marketing materials?
- Is marketing the program the responsibility of the vendor or the health plan?

COST AND CAPACITY

- What is the cost per member?
- Can the vendor handle the volume of new members your plan would enroll?
- Does the implementation timeline meet your health plan's needs?

Strategies to Address Barriers to Implementing a Tobacco Control Initiative

BARRIER	STRATEGY	ADVANTAGES	DISADVANTAGES
Providers might not appropriately identify smoking/tobacco use status in medical charts	Provide chart stamps or stickers to identify status on charts	This is relatively inexpensive and easy to implement. Chart stickers are available from pharmaceutical companies and some local coalitions. Vital sign stamps are inexpensive to purchase.	Some providers may be reluctant to adopt a new approach for documenting tobacco status.
<p>SYSTEMS ISSUES:</p> <p>Lack of systematic and/or complete information on which to determine individual tobacco use status</p> <p>Lack of system to identify and track smokers</p> <p>Incomplete database (smoking status not captured)</p>	Using member databases, the health plan can generate periodic reports for physicians. The reports should contain, at a minimum, the name of each member who is enrolled with that physician and whether a health risk assessment has been performed and any tobacco-related diagnosis present. Physicians and their staff should review the medical charts of members on the list to determine whether treatment should be or is being offered.	This will provide the information necessary for health plans or providers to ensure assessment of smoking status and counseling during an office visit or to conduct outreach.	Because this relies on the use of member claims and eligibility databases, it may require additional start-up time and significant systems support for implementation.
Insufficient provider time to provide tobacco counseling	<p>Train office staff to assess tobacco status as a vital sign</p> <p>Train office staff to assist with follow-up arrangements; have a checklist of topics discussed to promote chart documentation</p> <p>Establish that staff will set next appointment on exit or make telephone follow-up contact</p> <p>Provide incentives for office staff/providers</p>	<p>This provides tobacco use status on every chart.</p> <p>Staff will be knowledgeable about resources and be able to direct members to classes and telephone counseling and ensure that a member has received a prescription for medication, if appropriate.</p> <p>This provides additional counseling and assessment for member.</p>	<p>Staff may perceive this as additional work.</p> <p>Staff may not feel they are qualified.</p> <p>A system will need to be established to track return visits and follow-up with those who miss appointments.</p>
Long waiting period for preventive care	<p>Allow nurses or other clinicians to provide smoking cessation counseling to members with or without a physician appointment, to provide referrals to community programs, and to distribute educational material</p> <p>Have nurse or office staff offer brief counseling plus a video and self-help materials</p> <p>Tailor newsletters</p>	This does not require much, if any, capital investment.	This may be contrary to standard operating protocols.

BARRIER	STRATEGY	ADVANTAGES	DISADVANTAGES
Co-payment required for counseling or medications	Waive copayments for counseling visits or classes and reduce or eliminate medication co-payments	This may permit members the opportunity to seek preventive care, including counseling.	This may result in increased utilization (although not necessarily inappropriate utilization).
Low or no reimbursement/incentives may result in some providers not referring members for classes or counseling or referring members to health department or community classes	<p>Ensure that reimbursement rates are adequate to support the delivery of tobacco cessation services in-network</p> <p>Develop methods (i.e., news-letters, meetings) for communicating to physicians about the need to counsel members at every possible clinical encounter, or refer to inhouse programming</p> <p>Provide incentives</p>	<p>Providers will be more likely to identify, counsel and treat if they are receiving adequate reimbursement for the office visit.</p> <p>The cost of this is reasonable, especially if existing newsletters and standing meetings are used as the primary methods of communication.</p>	<p>Changing reimbursement policies may be complex and time consuming.</p> <p>Some physicians may not read the newsletter or attend meetings.</p>
Providers might not offer brief counseling during acute and follow-up visits	<p>Use an existing newsletter as a vehicle for training physicians about the importance of counseling at all visits: well, acute and follow-up</p> <p>Use physician staff or advisory committee meetings as a forum for sharing information about the importance of counseling at all visits</p> <p>Provide physician incentives (recognition, etc.)</p>	<p>There is virtually no cost for this.</p> <p>There is virtually no cost for this.</p> <p>It is possible to track counseling because a claim must be processed. Plans using incentives provide \$1 to \$3 per visit for counseling.</p>	<p>Physicians may not routinely read the newsletter.</p> <p>Not all physicians attend staff or advisory committee meetings.</p> <p>Plan may not want to incur additional cost for incentives.</p>
Insufficient number of physicians to ensure timely access to preventive services	<p>Enlarge the network to ensure that it is of appropriate size and design to allow for timely access to preventive services</p> <p>Allow nurses or other clinicians to provide counseling with or without a physician appointment</p> <p>Consider telephone intervention</p>	<p>This may have a positive impact on tobacco use screening and counseling and other preventive service and screening levels.</p> <p>This does not require much (if any) capital investment, but will require some training.</p>	<p>Altering the size or design of the network may take longer than other approaches and may not even be possible in remote or rural locations.</p> <p>This approach may be contrary to standard operating protocols.</p>
Limited hours in medical clinics or provider practices	<p>Institute weekend or after hours smoking clinics</p> <p>Consider telephone counseling services</p>	This may enhance members' perceptions of the health plan or medical clinic as an organization that is working with them to keep them healthy.	If weekend and after-hours clinics are not well used, this may not be cost effective.

BARRIER	STRATEGY	ADVANTAGES	DISADVANTAGES
Providers may underestimate the number of tobacco users in their practice	Conduct a practice-based tobacco use assessment; use the data from the assessment to provide feedback to providers on the proportion of smokers in their practice who have actually received counseling and follow-up	A practice-based assessment can be very informative to providers. An assessment will provide information about not only the tobacco use level but also the reasons for infrequent counseling.	It may be difficult to convince physicians to participate in a practice-level assessment. Conducting assessments and providing feedback can be labor intensive.
Providers might not review, or may incorrectly assess, a tobacco user's status	Computerized medical records can allow providers to quickly and accurately assess a member's tobacco use status if it has been recorded in the vital sign section. Most computerized medical records can be programmed to provide specific messages to providers about tobacco status and suggested interventions at various points along the stage of change continuum.	This may be very effective in helping providers to provide advice to quit or assist in maintaining a member's smoke-free status. A computerized medical record can be used to enhance the delivery of a broad array of clinical services, not just tobacco control.	Computerized medical records are expensive to develop, implement and maintain. Some providers may be reluctant to use computerized medical records.
Providers might think that smokers do not want to be counseled about smoking	Demonstrate through newsletters and meetings that patient satisfaction levels increase when counseling is received	Members who understand the connection between tobacco use and disease processes are more likely to quit smoking now or in the future. Most providers only see 1-2 smokers per day who are ready to quit.	Counseling takes an additional 3 to 5 minutes of providers' time per day.
Providers unaware of stages of change model	<p>Illustrate stages of change model through newsletters and meetings</p> <p>Emphasize assisting member to move through stage of change process</p>	<p>Increase understanding of stage of change process and tobacco use as a chronic disease</p> <p>A) Decrease provider frustration with intervening with an addictive process</p> <p>B) Applicable to other disease interventions</p>	Increased training time and newsletter space.
Providers unaware of effective counseling techniques	Provide training on 5 As (Ask, Assess, Advise, Assist and Arrange) and 4 Rs (Relevance, Risks, Rewards and Repetition)	Providers will be more likely to provide effective and tailored counseling, and smokers will increase quit attempts.	Increased time in providing training to do effective counseling.

BARRIER	STRATEGY	ADVANTAGES	DISADVANTAGES
Patient not ready to quit smoking	Provide brief counseling and emphasize benefits of quitting Enlist family members	With counseling, a member may begin to think about quitting.	None
Patient has thought about quitting but has never made a quit attempt	Provide brief counseling and emphasize provider willingness to provide support and medication, if desired	With counseling, an individual may actively consider quitting.	Individual may still not be ready to attempt a quit.
Spouse or significant other smokes	Offer to provide counseling to other smoker in the home	Smokers are much more likely to quit if both quitting together.	Spouse or significant other may feel as though you are violating his or her privacy.
Staff who smoke	Provide cessation information and offer medication and/or counseling	Someone who has previously smoked can be a strong supporter of office practice and others trying to quit.	Staff may feel as though you are intruding in their personal lives.

Adapted with permission from Strategies to Promote Childhood Immunization, The Prudential Center for Health Care Research Centers for Disease Control and Prevention.

Designing a Tobacco Benefit

Treating Tobacco Use and Dependence recommends that effective tobacco dependence treatments (e.g., counseling and pharmacotherapy) be covered services or benefits for all health plan members (Fiore et al., 2000). Designing and implementing a new benefit or revising an existing one can be a very complex process. Many arrangements will have to be made depending on the actual design that the health plan chooses. A good way to start this process is by raising and answering the following questions with the members of the health plan's tobacco workgroup or other planning committee:

What is motivating the health plan to have a benefit for tobacco treatment?

- Are health concerns, politics, competition or cost concerns driving the health plan to implement a tobacco treatment benefit? The motivating force(s) will frequently influence the design of the benefit.

What is covered?

- Will the benefit apply only to pharmacotherapy or will it also provide coverage for counseling? What type(s) of pharmacotherapy will be covered (e.g., nicotine patch, gum, nasal spray, inhaler, bupropion)? Will there be any

coverage for over-the-counter tobacco treatments? What type(s) of counseling will be covered (e.g., group classes, telephonic, one-on-one, etc.)? Will the counseling be a prerequisite for the covered pharmacotherapy?

Who is eligible?

- Will the benefit cover fully insured subscribers and members only? What about self-insured groups? Is there already a benefit for public programs (e.g., Medicaid and Medicare)?

Who pays and how much?

- Will there be a co-payment for pharmacotherapy? If so, will it be the same as the regular pharmacy co-payment? Will there be a co-payment for the counseling component?

Will there be a limit on how frequently the benefit can be used?

- Does the benefit take into account the fact that most smokers make several attempts to quit before becoming tobacco abstinent? Will there be a cap on the number or duration of treatments any one member can receive? If so, can the plan actually enforce the cap?

When will the benefit be available?

- When will the new benefit become effective – immediately, upon renewal or at some other time? Will it be rolled out to everyone simultaneously or will it be done in stages?

How will the availability of the benefit be communicated?

- How will members be made aware of the new benefit? Is there an opportunity to notify members through several channels (e.g., newsletters, direct mailings, internet site, etc.)? How will physicians be made aware of the benefit? How will the availability of the new benefit be communicated internally to member or customer service representatives, marketing and sales representatives and so forth?

What is the scientific basis for the benefit the health plan has selected?

- For example, if you are recommending that your health plan cover bupropion and nicotine replacement therapy it may be necessary to cite the scientific basis for this recommendation. Similarly, you should become familiar with the literature on behavioral counseling and its efficacy with and without a pharmacotherapeutic component.

Is there a senior sponsor ready to move roadblocks and apply needed resources to get the benefit in place?

- Unless developing a tobacco control program is a top priority for the CEO, CFO and other key leaders in your health plan, you should have a "senior sponsor" ready to promote and defend the program, especially when competition for resources occurs.

Once all the details have been worked out, it will be time to develop the actual language for the tobacco treatment benefit. To begin this process, it may help to look for examples of benefits developed in your health plan for similar programs or services. If no relevant comparison or example can be found in your own health plan, you might find it helpful to look at the language other health plans have used. The following are two examples of the benefit language health plans have used to describe their tobacco treatment programs.

Sample A:

Name of Health Plan: Health Alliance Plan (HAP)

Location: Detroit, Michigan

Model Type: Mixed model (IPA and group)

Membership: 465,000

Tobacco cessation services are a benefit of HAP. In addition to counseling by HAP-affiliated primary care physicians, smoking control programs, including smoking cessation classes, are a covered benefit. Smoking cessation services do not count as mental health services. The member must possess an authorized referral by a HAP-affiliated primary care physician. Services are rendered by a HAP-affiliated provider. For office visits, the copayment in effect for the member's contract applies. When smoking cessation services are not available within the member's HAP network, authorized services through another HAP network are a benefit when each of the above criteria are met.

Nicotine replacement therapy is a benefit of HAP under the prescription drug rider. The benefit includes prescription agents and over-the-counter nicotine replacement therapy (NRT). Members must have the prescription drug rider. The NRT (patch, gum, inhaler, nasal spray) must be 1) FDA approved; 2) prescribed by a HAP-affiliated provider; and 3) dispensed by a HAP-affiliated pharmacy with physician prescription. The usual copayment for prescription medications applies. Up to a 30-day supply may be dispensed at one time. The benefit is limited to a three-month supply in any one calendar year. The benefit may be repeated in subsequent years when all criteria are met.

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Sample B:

Name of Health Plan: **Group Health Cooperative of Puget Sound (GHC)**

Location: **Seattle, Washington**

Model Type: **Primarily group model**

Membership: **500,000**

When provided through GHC, services related to tobacco cessation are covered, limited to:

- Participation in one individual or group program per calendar year covered at 100% of the total charges;
- Educational materials; and
- One course of nicotine replacement therapy per calendar year subject to the outpatient prescription drug copayment for each 30-day supply or less of a prescription or refill when provided at GHC facilities and prescribed by a GHC provider, provided the member is actively participating in GHC's "Free & Clear" program.

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Developing a Business Case for Internal Support and Funding

In some health plans, it may be necessary to develop a written document to make a persuasive argument in favor of developing a tobacco control program. Frequently, these documents are referred to as business cases and they outline the basic facts about what you want to do, how you plan to do it, how much it is going to cost and the benefits that the plan might reap. Frequently, these business cases are presented to senior leaders during periods of fiscal planning and resource allocation. The format of these business cases differs from health plan to health plan, but all business plans are likely to contain a core set of elements. Your first step should be to look within your own health plan for examples of business cases presented for similar programs. If you find that you must develop one from scratch, see the Sample Outline of a Business Case for Developing a Tobacco Control Program.

A carefully constructed business case can be a very useful tool if funding to create or expand a tobacco control program must be formally justified. Even if it is not required, the development of the business case can be a constructive process. As indicated in the sample outline for a business case, the process of developing the case requires that the planning committee and/or project manager think carefully about the program's purpose, components, costs and intended effects. Such a process, in itself, is likely to have a positive effect on the design, implementation and evaluation of a tobacco control program.

SAMPLE OUTLINE OF A BUSINESS CASE FOR DEVELOPING A TOBACCO CONTROL PROGRAM

EXECUTIVE SUMMARY

STATEMENT OF THE PROBLEM

- Describe the prevalence of tobacco use in your plan and/or community.
- Briefly describe the health effects of tobacco use with an emphasis on those effects most relevant to the health plan (i.e., impact on heart disease, diabetes, asthma, cancer, low birth weight, etc.).

DESCRIPTION OF THE TOBACCO CONTROL PROGRAM

- State the overall goal(s) of the program (i.e., reduce health care costs, improve asthma and diabetes outcomes, improve HEDIS scores, achieve market parity with competitors, etc.).
- Describe the components of the program. Be concise but be sure that you provide enough information to inform someone who may not know a great deal about tobacco control programs.
- Define the exact specifications regarding which members will be permitted to use the program, how frequently, at what cost and so on.
- Include the sample benefit language if you are proposing a change in benefit structure.

ANTICIPATED BENEFITS OF THE PROGRAM

- Make the connection between the goal(s) of the program and the program description. This is the place to help the reader make the connection between what you plan to do and how it can be beneficial for the health plan. For example, if the program goal is to reduce health care costs associated with tobacco use in pregnancy and associated low birth weight, this is the place to describe anticipated savings from decreasing the incidence of low birth weight.
- Use data from your health plan to illustrate the benefits of the program. For example, if you are focusing on reducing the incidence of low birth weight, include data on the number of low birth weight infants born in your plan during the previous year, the hospitalization costs for those infants, and so on.
- Use national or state data to fill in data voids. For example, the data available in your health plan may not indicate which low birth weight infants were born to mothers who used tobacco during pregnancy, but you can look at national and state-level data provided by CDC and other sources to estimate the percentage of these births likely to have been the result of tobacco use during pregnancy.

ANTICIPATED COSTS OF THE PROGRAM

- Based on projected utilization of the program, describe the costs associated with materials and services your health plan will need to purchase to support the program (e.g., the costs of the counseling component, self-help materials, pharmacotherapy, marketing materials, etc.).
- Describe the costs associated with initial start-up of the program (e.g., costs associated with communicating a change in benefits, revisions to member handbooks and other start-up costs).
- Describe the costs associated with staff and resources to maintain the program (i.e., additional FTE, computer time, equipment costs, etc.).
- Put the costs in the format most frequently used in your health plan (i.e., cost per member per month).
- Include a budget. Ideally, the budget should separately illustrate the costs of the program during the first year (including start-up and single-time costs) and the costs of the program for subsequent years.

PROJECTED RETURN ON INVESTMENT (IF APPLICABLE)

- Total all the costs and total the anticipated savings.
- Divide the savings by the costs to calculate the return on investment.

TIMELINE

Create a realistic timeline to illustrate when key steps toward implementation of the new program are to occur. The timeline should clearly indicate the "go live" date or effective date of the new tobacco control program.

REFERENCES

- Carlson, C.L., P. Chute, S. Dacey, T.A. McAfee. (2000). "Designing Tobacco Control Systems and Cessation Benefits in Managed Care: Skill Building Workshop." *Tobacco Control* 9 (suppl):i25-i29.
- Fiore M.C., W.C. Bailey, S.J. Cohen, et al. (June 2000). *Treating Tobacco Use and Dependence*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service.
- McAfee, T., J. Wilson, S. Dacey, et al. "Awakening the Sleeping Giant: Mainstreaming Effort to Decrease Tobacco Use in an HMO." *HMO Practice* 9:138-143.

SECTION 5

Implementing a Tobacco Control Initiative

T

his section provides information on implementing and marketing your tobacco control initiative along with a brief discussion of the importance of applying the principles of quality improvement to ensure that your tobacco control initiative remains focused on achieving your desired goals.

Principles of Implementation

Group Health Cooperative of Puget Sound offers the following three suggestions for successful implementation of a tobacco control initiative in a managed care setting (McAfee, 1998).

- Be persistent – it can take years to change the behavior of providers and systems so keep at it.
- Identify individuals at different levels of the organization, make them accountable for specific objectives and provide them with feedback along the way so that they know how they are doing.
- Make sure that the changes staff are asked to make are easily integrated into existing ways of working.

A Sample Implementation Plan

The following sample implementation plan was presented by PacifiCare Health Systems during the 2nd annual conference on *Addressing Tobacco in Managed Care* (Krejci, 2000).

SAMPLE IMPLEMENTATION PLAN FOR THE PACIFICARE STOP SMOKING PROGRAM				
ACTION ITEM	OWNER	START DATE	DUE DATE	NOTES
Conduct needs assessment				
Develop goals and objectives				
Identify target population				
Design program evaluation				
Develop marketing and communication plan				
Assess pharmacy options				
Decide on whether to file program as a core benefit or a value-added benefit				
Identify which (if any) regulatory agencies need to be involved (i.e., HCFA and state insurance agency)				
File program and all promotional materials with regulatory agencies				
Decide on strategies to be used for program enrollment				
Determine staff and operational needs (i.e., FTE, tech support, etc.)				
Develop budget				
Identify internal training and communication needs				
Establish timeline				
Identify medical groups to pilot the program				
Promote program in member and provider newsletters				
Develop and print marketing (collateral) materials for employers, health fairs, provider offices, sales and marketing and so on				
Identify needed information services support for database development and maintenance, member validation, program reporting and so on				

Source: Krejci, R. (2000). "Tobacco Cessation Program Implementation – From Plans to Reality: Skill Building Workshop – Network Model." *Tobacco Control* 9 (suppl):i33-i36.

Marketing the Program

For the benefits of offering a tobacco control program to be realized, the program must be utilized. Under-utilization should be a top concern. Not only do health plans have to work with physicians and smokers who may not be aware of the program, but they must contend with the addictive nature of tobacco and the powerful marketing strategies used by the tobacco industry. Clearly, plans will need several effective marketing strategies to achieve the utilization necessary to meet their health plan's goals and objectives.

Barriers to program utilization can include: (a) a lack of awareness of the program on the parts of health plan members and providers; (b) complex enrollment or referral procedures; (c) program costs or co-payments; (d) inconvenient program logistics (e.g., meeting times, places, etc.); (e) lack of coverage for pharmacotherapy; (f) pharmacotherapy benefits that are conditional on enrollment in other programs (e.g., behavioral counseling); (g) utilization limits on counseling and/or pharmacotherapy; and (h) smokers who simply aren't ready to quit.

Clearly, some of these barriers are constructed by health plans in the design of their tobacco control programs. Some health plans may be worried about attracting a larger number of smokers into their programs than they can handle or afford. Given typical participation rates of 2% to 5% for tobacco cessation programs this is probably an unwarranted concern. Similarly, although it may be well intentioned to make sure that smokers are committed to the program by requiring them to pay for a portion of the costs, this strategy will effectively prevent many smokers from using the program (Henningfield, 2000). Therefore, it is important for health plans to carefully consider their motivations for including any cost sharing or other requirements on program participation. If the ultimate goal is to reduce tobacco use and dependence, it is important to remove all barriers possible – real and perceived.

REFERENCES

Henningfield, J.E. (2000). "Tobacco Dependence Treatment: Scientific Challenges; Public Health Opportunities." *Tobacco Control* 9 (suppl):i3-i10.

Krejci, R. (2000). "Tobacco Cessation Program Implementation — From Plans to Reality: Skill Building Workshop — Network Model." *Tobacco Control* 9 (suppl):i33-i36.

McAfee, T. (1998). "Waking the Health Plan Giant: Group Health Cooperative Stops Counting Sheep and Starts Counting Key Tobacco Indicators." *Tobacco Control* 7 (suppl):S41-S44.

SECTION 6

Evaluating a Tobacco Control Initiative

This section provides information on designing and conducting a useful evaluation for a tobacco control initiative. Program directors often find themselves under pressure to evaluate their programs. This pressure can come from administrative requirements (NCQA, HEDIS, etc.), boards of directors, supervisors, funding agencies or a variety of other sources. Although some program directors find evaluation to be a cumbersome exercise that takes time and energy from the program itself, evaluation can be quite useful to the program. The results of tobacco control program evaluation should help shape the future direction of the program. Therefore, the goal of evaluation should be to produce maximally useful data that can be readily put to use.

Questions for the Planning Stages

Should this tobacco control program be developed at all? This is the question that underlies the needs assessment done at the time a health plan is considering what (if anything) it can do about tobacco use and dependence. As such, this question is really part of program planning and should be addressed early in that process.

Is this program likely to help us meet our goals and objectives? This question should also be addressed early in the program planning stage. Although this question seems very basic, it is quite common for programs to be misaligned with goals and objec-

tives. If the stated goal of a tobacco control program is to reduce the prevalence of tobacco use, it is important to develop a program that includes the most effective strategies for tobacco cessation (e.g., combined use of counseling and pharmacotherapies). In this case, the program would be poorly aligned with program goals if the focus were exclusively on educational messages that are not particularly effective for tobacco cessation when used alone.

Questions About Program Operations

Is the program being implemented as planned? Finding an answer to this question can be laborious because it often requires reviewing program records, but it is a critical question that must be asked and answered. If this question is overlooked and program goals are met, the health plan could erroneously attribute the success to a program that did not happen as planned (or at all). On the other hand, if this question is overlooked and program goals are not met, the health plan may erroneously conclude that the program is ineffective when in fact the program never really happened as planned.

Is the program reaching its target audience? This question implies that the characteristics of the target population are known in terms of size and demographics. If so, counting and characterizing the enrolled members will be easy in a program that has a defined enrollment procedure (e.g., a telephone tobacco cessation program), but it will be more difficult in a situation where the target population is all smokers who visit a primary care physician over a specified time period. In the latter case, program evaluators have frequently had to obtain their evaluation data by conducting "exit interviews" with patients leaving providers' offices.

Who is the program failing to reach, and why? Frequently, a useful activity is assessing the attitudes and beliefs of people who are part of the target population for the tobacco control program but do not enroll or take part in the program. Finding out whether such persons were unaware of the program or were aware but found the program unappealing for some reason can be helpful information for improving the program.

Are participants satisfied with the program? The need to ask this question is typically driven by the health plan's need to satisfy its members and purchasers. For this reason, participant satisfaction ratings are one of the most commonly used process measures in program evaluation.

Are program participants complying with the action(s) requested of them? This question is intended as a measure of program performance rather than as an outcome measure. If participants are not performing as expected (e.g., attending classes, reading self-help materials, complying with recommendations on pharmacotherapies), changes in the

program may be warranted. For example, a tobacco cessation program with no information about taming urges may be unsuccessful because even well-intentioned participants might find it too difficult to abstain and quickly become discouraged. In this case, adding program material to address handling cravings and urges may result in improved program outcomes.

Questions About Program Outcomes

Is the program having the effect it is designed to have? Deciding what is meant by "effect" or "outcome" can be more difficult than it first appears. The effect of any tobacco control program can be thought of as a chain of events leading to a desired outcome (Pirie, 1990). For example, a tobacco cessation program for pregnant women may have various effects on the participants, including changes in maternal knowledge, maternal smoking, infant birth weight and infant morbidity. Thus, the outcome of the program could be evaluated on many levels. The choice of which outcome to study may be determined by the requirements of those receiving the evaluation results. For example, will the health plan administrators be satisfied if it is effective in helping women to stop smoking, or do they need to see evidence pertaining to infant birth weight before they will be convinced of the program's value?

Outcome measures are often the first questions to be asked, but they should be the last ones answered. The answers to outcome questions can only be meaningful when the program seems to be operating in a satisfactory manner (Rutman, 1980).

Technical Considerations: Conducting the Evaluation

Actually conducting the evaluation can be a large and time-consuming task. However, given the importance of the results, it is critical to take a thoughtful and careful approach. The following issues need to be addressed in nearly all types of program evaluation:

What is the design?

- Were there comparison groups?
- How were they chosen?
- When were the measurements taken?

How are data to be collected?

- Will a questionnaire be used? If so, will it be distributed via mail, conducted over the telephone or done in person?
- Will interviews be conducted? If so, with whom and how many?
- Will direct observations be done? If so, of whom and how?

What is the quality of the data-collection instrument?

- What is its reliability (i.e., will it yield the same results if repeated measures are done)?
- What is its validity (i.e., does it yield accurate results)?

How are the data to be processed and analyzed?

- How will data be coded?
- What statistical techniques will be used to analyze the data?

Using Evaluation Data to Improve the Initiative

The final step in many evaluations is to summarize the results in the form of a report and/or recommendations. In a health plan, however, a tobacco control program director should close the quality improvement loop by using the results of the evaluation to make changes and improvements in the program itself. To do so, the results of the evaluation need to be timely, credible and useful. The results will be credible if the procedures for conducting the evaluation are carefully followed.

The usefulness of the evaluation results will depend on several factors, including a clear understanding of the program goals and objectives, an understanding of the environment in which the program operates, presentation of the data in a way that informs important programmatic decisions and, most importantly, having asked the right questions. (For more information on this important topic, see the references listed for this section).

REFERENCES

- Pirie, P.L. (1990). "Evaluating Health Promotion Programs: Basic Questions and Approaches." In *Health Promotion at the Community Level*, edited by N. Bracht. Newbury Park, CA: Sage. Pages 201-208.
- Rutman, L. (1980). *Planning Useful Evaluations: Evaluability Assessment*. Beverly Hills, CA: Sage.

Appendices

APPENDIX A

PREVALENCE OF ADULT CIGARETTE USE IN THE UNITED STATES — NATIONAL HEALTH INTERVIEW, 1997

	PERCENT
TOTAL	24
RACE AND ETHNICITY	
American Indian or Alaska Native	34
Asian or Pacific Islander	16
Asian	15
Native Hawaiian and other Pacific Islander	21
Black or African American	26
White	25
Hispanic or Latino	20
Not Hispanic or Latino	25
GENDER	
Female	22
Male	27
AGE	
18 to 24 years	28
25 to 44 years	28
45 to 64 years	24
65 years and older	12
FAMILY INCOME LEVEL	
Poor	34
Near poor	31
Middle/high income	23
EDUCATION LEVEL (AGED 25 YEARS AND OLDER)	
Less than high school	33
Fewer than 9 years	26
9 to 11 years	36
High school graduate	30
At least some college	18
13 to 15 years	24
16 years or more	11
DISABILITY STATUS	
Persons with disabilities	33
Persons without disabilities	23

Source: U.S. Department of Health and Human Services (2000). *Healthy People 2010* (Conference Edition). Washington, DC: U.S. Department of Health and Human Services.

APPENDIX B

PREVALENCE OF TOBACCO USE AMONG STUDENTS IN GRADES 9 THROUGH 12 IN THE UNITED STATES — YOUTH RISK BEHAVIOR SURVEY, 1997

	CURRENT TOBACCO USE		
	(used cigarettes, spit tobacco or cigars on 1 or more of the 30 days preceding the survey)		
	BOTH GENDERS	FEMALES	MALES
TOTAL	43	36	48
RACE AND ETHNICITY			
Hispanic or Latino	37	31	41
Black or African American	29	22	38
White	47	41	52
GRADE			
9th grade	38	33	42
10th grade	41	37	44
11th grade	44	34	53
12th grade	47	40	52
PARENTS' EDUCATION LEVEL			
Less than high school	41	36	48
High school graduate	46	41	51
At least some college	43	35	48

Source: U.S. Department of Health and Human Services (2000). *Healthy People 2010* (Conference Edition). Washington, DC: U.S. Department of Health and Human Services.

APPENDIX C**PATIENT EDUCATION FACT SHEET: A SAMPLE****What You Need to Know About Quitting Smoking****Why should I quit smoking?**

There are many reasons why quitting is important:

- **Smoking is bad for your health.**
Smoking is responsible for 420,000 deaths each year in the United States. That's one in every five deaths! It's a leading cause of heart disease, cancer and lung problems.
- **Smoking harms others.**
Secondhand smoke not only makes non-smokers uncomfortable, it also kills over 50,000 of them each year. Babies who breathe secondhand smoke are more likely to die from sudden infant death syndrome (SIDS).
- **Smoking is unattractive.**
Smoking stains your fingers and teeth, creates wrinkles on your face and leaves a stale smell on your breath, hair and clothes.
- **Smoking is expensive.**
If you smoke a pack a day, you spend over \$1,350 a year on cigarettes. Being a smoker also raises some of your insurance costs.

How do I quit smoking?

Some people choose to quit "cold turkey" (all at once) while others prefer to stop gradually. Listed below are some tips to help you through the quitting process. Remember, different things work for different people, so if you're having a hard time with one method, try another or a combination of methods.

Before you quit

- Set a quit date and mark it on your calendar.
- Write down your reasons for quitting, and look at them often.
- Figure out when, where and why you usually smoke. These are your smoking "triggers."
- Talk to your doctor about using nicotine gum or the nicotine patch (now available without a prescription) or about attending a stop smoking class. Other medicine such as Zyban can be prescribed to reduce the craving to smoke
- Ask friends and family members to support you in your decision to quit. Because they've been through the process themselves, ex-smokers may be good sources of support.

APPENDIX C (CONTINUED)**PATIENT EDUCATION FACT SHEET: A SAMPLE****After you quit**

- Remove smoking reminders like cigarettes, lighters and ashtrays from your home, car and work-place. Consider cleaning the furniture and carpets to remove the smell of smoke.
- Be aware of your smoking triggers and think of things you can do instead. If you used to smoke when you were stressed, at those times try exercising or thinking about something calming. If you used to smoke after a meal, brush your teeth and see how clean your mouth feels. If you used to smoke when you went out with friends, suggest gathering at a place where smoking isn't allowed.
- Many people find that they eat more then they stop smoking (because quitting awakens your taste buds and because eating keeps your mouth occupied). Be sure to watch your meal portions, drink plenty of water and snack of healthy foods like raw vegetables. Even if you do gain a few pounds, it's still much healthier than smoking.
- Reward yourself for not smoking. Take the money you save by not buying cigarettes and spend it on yourself. You deserve it!

Source: Health Alliance Plan

APPENDIX D**SMOKING CESSATION INTERVENTION FOR PREGNANT PATIENTS****Ask the patient to choose the statement that best describes her smoking status:**

- A. I have NEVER smoked or have smoked LESS THAN 100 cigarettes in my lifetime.
- B. I stopped smoking BEFORE I found out I was pregnant, and I am not smoking now.
- C. I stopped smoking AFTER I found out I was pregnant, and I am not smoking now.
- D. I smoke some now, but I have cut down on the number of cigarettes I smoke SINCE I found out I was pregnant
- E. I smoke regularly now, about the same as BEFORE I found out I was pregnant.

If the patient stopped smoking before or after she found out she was pregnant (B or C), reinforce her decision to quit, congratulate her on success in quitting, and encourage her to stay smoke free throughout pregnancy and postpartum.

If the patient is still smoking (D or E), document smoking status in her medical record, and proceed to Advise, Assess, Assist and Arrange.

ADVISE-1 minute

Provide clear, strong advice to quit with personalized messages about the benefits of quitting and the impact of smoking and quitting on the woman and fetus.

ASSESS-1 minute

Assess the willingness of the patient to attempt to quit within 30 days.

If the patient is ready to quit, proceed to Assist.

If the patient is not ready, provide information to motivate the patient to quit and proceed to Arrange.

ASSIST-3 minutes +

Suggest and encourage the use of problem-solving methods and skills for smoking cessation (e.g., identify "trigger" situations).**Provide social support as part of the treatment (e.g., "we can help you quit").****Arrange social support in the smoker's environment (e.g., identify a "quit buddy" and smoke-free space).****Provide pregnancy-specific, self-help smoking cessation materials.**

ARRANGE-1 minute +

Assess smoking status at subsequent prenatal visits and, if patient continues to smoke, encourage cessation.

APPENDIX E**SELECTED RESOURCES ON THE WEB**

The following Web site addresses may be useful sources of additional information on tobacco control practices and policies.

Addressing Tobacco in Managed Care:
www.aahp.org/atmc.htm

Agency for Healthcare Research and Quality:
www.ahrq.gov

American Academy of Family Physicians:
www.aafp.org

American Cancer Society:
www.cancer.org

American Legacy Foundation:
www.americanlegacy.org

American Lung Association:
www.lungusa.org/contact

American Psychological Association:
www.apa.org

Americans for Nonsmokers' Rights:
www.no-smoke.org

National Cancer Institute:
www.nci.nih.gov

National Center for Tobacco-Free Kids:
www.tobaccofreekids.org

National Guideline Clearinghouse:
www.guideline.gov

National Heart, Lung, and Blood Institute:
www.nhlbi.nih.gov/index.htm

National Institute on Drug Abuse:
www.nida.nih.gov/NIDAHome1.html

Office on Smoking and Health at the Centers for Disease Control and Prevention:
www.cdc.gov/tobacco;
www.cdc.gov/tobacco/statehi/statehi.htm

Society for Research on Nicotine and Tobacco:
www.srnt.org

World Health Organization:
www.who.int

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ALASKA Department of Health and Social Services*Tobacco Control Program Coordinator*

Division of Public Health
Section CHEMS
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Room 514

Juneau, AK 99811-0616

Phone: (907) 465-8641

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ARIZONA Office of Health Promotion and Education*Tobacco Control Program Coordinator*

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Phoenix, AZ 85020

Phone: (602) 870-3145

Fax: (602) 870-3252

ARKANSAS Department of Health*Tobacco Control Program Coordinator*

Office of Tobacco Control and Prevention
4815 W. Markham, Slot 3
Little Rock, AR 72205

Phone: (501) 661-2783

Fax: (501) 661-2009

CALIFORNIA Department of Health Services*Tobacco Control Program Coordinator*

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Fax: (916) 327-5424

COLORADO Department of Public Health and Environment*Tobacco Control Program Coordinator*

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Phone: (303) 692-2515

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CONNECTICUT Department of Public Health*Tobacco Control Program Coordinator*

Health Education and Intervention
410 Capitol Avenue, 1st Floor
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Hartford, CT 06134-0308

Phone: (860) 509-7803

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DELAWARE Department of Health and Social Services*Tobacco Control Program Coordinator*

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DISTRICT OF COLUMBIA Department of Health*Tobacco Control Program Coordinator*

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Washington, DC 20002

Phone: (202) 442-9177/5433

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FLORIDA Department of Health*Tobacco Control Program Coordinator*

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Honolulu, HI 96813

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IDAHO Department of Health and Welfare*Tobacco Control Program Coordinator*

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ILLINOIS Department of Public Health*Tobacco Control Program Coordinator*

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INDIANA State Department of Health*Office of Tobacco and Health*

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IOWA Department of Public Health*Tobacco Control Program Coordinator*

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KANSAS Department of Health and Environment*Tobacco Control Program Coordinator*

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KENTUCKY Department of Public Health*Tobacco Control Program Coordinator*

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LOUISIANA Department of Health and Hospitals*Tobacco Control Program Coordinator*

Chronic Disease Control Program

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New Orleans, LA 70112

Phone: (504) 568-7210

Fax: (504) 568-7005

MAINE Department of Human Services

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Augusta, ME 04333

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Fax: (207) 287-3005

MARYLAND State Department of Health and Mental Hygiene*Office of Health Promotion, Education, and Tobacco Use Prevention*

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**NEW JERSEY Department of Health
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APPENDIX F (CONTINUED)**STATE HEALTH DEPARTMENT TOBACCO CONTROL PROGRAMS****NORTH CAROLINA Department of Health and Human Services**

Tobacco Control Program Coordinator
 1915 Mail Service Center
 Raleigh, NC 27699-1915
Phone: (919) 733-1340
Fax: (919) 733-0488

NORTH DAKOTA Department of Health

Tobacco Control Program Coordinator
 600 East Boulevard Avenue, Judicial Wing,
 2nd Floor
 Bismarck, ND 58505-0200
Phone: (701) 328-3138
Fax: (701) 328-1412

OHIO Department of Health

Tobacco Control Program Coordinator
 246 North High Street, P.O. Box 118
 Columbus, OH 43266-0118
Phone: (614) 466-2144
Fax: (614) 644-7740

OKLAHOMA Department of Health

Tobacco Control Program Coordinator
 1000 North East 10th Street
 Oklahoma City, OK 73117-1299
Phone: (405) 271-3619
Fax: (405) 271-9053

OREGON Department of Human Resources

Tobacco Control Program Coordinator
 800 NE Oregon Street
 Portland, OR 97232
Phone: (503) 731-4273
Fax: (503) 731-4082

PENNSYLVANIA Department of Health

Tobacco Control Program Coordinator
 P.O. Box 90, Room 1003
 Harrisburg, PA 17108
Phone: (717) 783-6600
Fax: (717) 783-5498

RHODE ISLAND Department of Health

Tobacco Control Program Coordinator
 Cannon Building, 3 Capitol Hill, Room 408
 Providence, RI 02908-5097
Phone: (401) 222-3293
Fax: (401) 222-4415

SOUTH CAROLINA Department of Health and Environment Control

Tobacco Control Program Coordinator
 P.O. Box 101106
 Columbia, SC 29211
Phone: (803) 898-0740
Fax: (803) 253-4001

SOUTH DAKOTA Department of Human Services

Tobacco Control Program Coordinator
 Division of Alcohol and Drug Abuse
 3800 East Highway 34
 Hillsvie Plaza
 Pierre, SD 57501
Phone: (605) 773-3123
Fax: (605) 773-7076

TENNESSEE Department of Health

Tobacco Control Program Coordinator
 Cordell Hull Building, 6th Floor
 425 5th Avenue North
 Nashville, TN 37247-5201
Phone: (615) 741-0686
Fax: (615) 532-8478

TEXAS Department of Health

Tobacco Control Program Coordinator
 Office of Tobacco Prevention and Control
 1100 West 49th Street, Room T406
 Austin, TX 78756
Phone: (512) 458-7111 (ext. 2621)
Fax: (512) 458-7240

APPENDIX F (CONTINUED)**STATE HEALTH DEPARTMENT TOBACCO CONTROL PROGRAMS****UTAH Department of Health**

Tobacco Control Program Coordinator
P.O. Box 142106
288 North 1460 West
Salt Lake City, UT 84114-2106
Phone: (801) 538-9998
Fax: (801) 538-6629

VERMONT Department of Health

Tobacco Control Program Coordinator
108 Cherry Street
P.O. Box 70
Burlington, VT 05402
Phone: (802) 863-7355
Fax: (802) 651-1634

VIRGINIA Department of Health

Director, Division of Chronic Disease
1500 East Main Street
P.O. Box 2448, Suite 104
Richmond, VA 23218
Phone: (804) 692-0002
Fax: (804) 371-6152

WASHINGTON Department of Health

Tobacco Control Program Coordinator
Chronic Disease Prevention and Risk Reduction
P.O. Box 47855
New Market Industrial Campus, Building 13
Olympia, WA 98504-7855
Phone: (360) 236-3628
Fax: (360) 236-3646

**WEST VIRGINIA Department of Health
and Human Resources**

Tobacco Control Program Coordinator
1411 Virginia Street East
Charleston, WV 25301
Phone: (304) 558-0644
Fax: (304) 558-1553

WISCONSIN Division of Health

Tobacco Control Program Coordinator
1414 East Washington Avenue, Room 240
Madison, WI 53703-3044
Phone: (608) 266-8322
Fax: (608) 266-8925

WYOMING Department of Health

Tobacco Control Program Coordinator
417 Fremont
Laramie, WY 82072
Phone: (307) 755-1413
Fax: (307) 745-8733