

Activities To Promote Health Care Providers as Participants in Community-Based Tobacco Control

Elizabeth A. Lindsay, Norman Hymowitz, Robert E. Mecklenburg, Linda C. Churchill, and Blake Poland

RATIONALE The goal of the Community Intervention Trial for Smoking Cessation (COMMIT) was to implement community-based interventions that had been demonstrated to help smokers, especially heavy smokers, achieve and maintain cessation. Building on the extensive experiences of past and ongoing smoking cessation studies supported by the National Cancer Institute (NCI), community-based heart disease prevention efforts, and other groups involved with smoking cessation, COMMIT combined interventions into a comprehensive program designed to have an effect on the smoking patterns of entire communities (COMMIT Research Group, 1991; Lichtenstein et al., 1990-91). Through a community organization approach, citizens from the community, with professional staff member support, assumed the major role in planning, adapting, and implementing the interventions. The COMMIT protocol was a mix of activities designed to create a supportive context for not smoking as well as activities that provided direct education or other services to smokers. To create a context for stopping smoking within this channel of activities, COMMIT promoted nonsmoking policies in all health care facilities. To reach smokers directly, planners considered who had personal access to heavy smokers and who might influence them. Physicians and dentists are among the few direct communication lines (i.e., person-to-person contact) to the majority of heavy smokers. On average, 70 percent of smokers see their physicians each year (Centers for Disease Control and Prevention, 1993), and more than 60 percent visit their dentists (Hayward et al., 1989).

A series of studies with physicians and dentists have demonstrated that, if appropriately trained and motivated, these health care professionals can give cessation advice and support to a large enough number of smokers who respond successfully to justify the time spent (Wilson et al., 1988; Cohen et al., 1987, 1989a, and 1989b; Ockene et al., 1991 and 1990-91; Janz et al., 1987; Gilbert et al., 1992; Ockene, 1987; Gerbert et al., 1989; Jones et al., 1993). Several trials demonstrated that physicians and dentists have an important effect on smokers. Although the success rates varied and often were modest, if this effect were spread across a community of physicians and dentists, the impact would be substantial and greater than any other single strategy (Russell et al., 1979). Although other health care providers also could be important in helping smokers, there is little research on which to base an approach to other health professionals.

Proponents of physician interventions argue that, in addition to having frequent contact with both healthy and ill smokers, physicians are ideally placed to influence smokers to quit because they are respected and trusted (in a way that cajoling friends or family members may not be) and patients see their physicians when perceived vulnerability to health threats is highest. Thus, there is an opportunity for intervention, especially if complaints can be related to patients' smoking.

There were preliminary evidence and a strong rationale that the dental profession also could play an important role in smoking cessation. More than 85 percent of dentists are general practitioners and thus in family practice (U.S. Department of Health and Human Services, 1990). Because of the frequency and continuity of dental care, the relationship between the dentist and the patient, and often the patient's family, is well established. Knowledge about each patient's social background can be useful during the intervention process. Regular dental care provides opportunities for accelerating the prequitting decisionmaking process and for postquitting followup reinforcement. Patients can be shown tobacco effects in their own mouths (e.g., gum disease and buildup of plaque on teeth) effects that are real to them at the moment rather than a more distant threat to their future health. In addition, dental visits often are longer than medical visits and can provide quality, face-to-face interactive time that provides many opportunities to reinforce patients' reasons for wanting to stop and for assisting patients with the process (Mecklenburg et al., 1993). In the early stages of the COMMIT intervention, the major national dental organizations adopted policies urging members to integrate tobacco intervention services into their clinical practices. For example, workshops on smoking cessation were offered at national and State meetings.

Previous studies made it clear that training physicians and dentists in smoking cessation was not sufficient in and of itself for a practice to reach the number of smokers necessary to produce a measurable change in smoking cessation at the 1-year followup (Kottke et al., 1989; Cummings et al., 1989). A comparison of studies that produced significant changes in smoking cessation with those that did not pointed to the importance of the presence of a reminder system in the office routine to cue health care professionals to address the smoking issue with patients. This meant motivating and training office staff members to set up office procedures that would make cessation interventions happen systematically.

There is evidence that the potential for physician and dental professional effect on smokers goes unrealized. Physicians and dentists believe that they should advise patients to stop smoking and have taken steps to eliminate smoking in their offices, but they often feel unprepared to intervene or feel that their intervention is unlikely to make a difference (Secker-Walker et al., 1989). In two random statewide surveys of Michigan adults, Anda and colleagues (1987) reported that fewer than half of smokers indicated that their physicians had ever asked them to quit. Based on surveys of physicians in the United States, Ockene and colleagues (1988) reported that, although

physicians feel a responsibility to help smokers, fewer than two-thirds advise all smoking patients to quit. COMMIT baseline surveys of physicians and dentists indicated that 71 percent of physicians and 51 percent of dentists said that they routinely asked patients about smoking (Lindsay et al., 1994; Jones et al., 1993). In comparison, baseline surveys of smokers in the COMMIT communities indicated that only 39 percent of smokers had been told to stop smoking by either their physicians or their dentists (Lindsay et al., 1994). It appears that physicians had intentions to address the smoking issue with patients but perceived that they were intervening more often than they actually were. It is important to note that patients' recall of whether their physicians did raise the issue with them also will include errors, and therefore, it could be concluded that there was little congruence between perceptions of physicians and patients.

CHALLENGES AND BARRIERS Barriers to physicians' efficacy have been explored by several surveys. These barriers include restrictions of the time that can be spent with each patient, remuneration for counseling patients, medical school training that provides little in prevention skills, low success rates that are discouraging, and lack of knowledge about how to be more successful (Anda et al., 1987; Orlandi, 1987; Orleans et al., 1985). There was evidence that few physicians or dentists went beyond offering advice to stop and rarely made referrals, handed out self-help literature, set quit dates, or offered followup (Ockene et al., 1991). Addressing these issues became an important foundation for the protocol activities planned for the health care provider channel.

In summary, medical and dental care teams became the focus of the health care provider channel activities. There was evidence that physician and dentist offices could change with appropriate motivation, education, and followup. There also was evidence that patients would appreciate the advice of these health care professionals and often would respond by trying to stop smoking. It also was clear that an integrated approach should be promoted that involved key roles for office staff members and a smoke-free office environment. It was important to mobilize other health care providers in the community, but at the time of protocol development, there was no systematic approach to recommend because of the lack of research among nurses, pharmacists, and other providers. Therefore, the primary mandate was to involve all health care providers in planning activities but to focus training on medical and dental care teams. COMMIT planners anticipated that activities directed at health care professionals beyond physicians and dentists would evolve as appropriate according to the needs of individual communities, but no resources were allocated specifically for this purpose.

GOALS AND PROCESS OBJECTIVES FOR HEALTH CARE PROVIDERS Based on the understanding of how health care providers can influence smoking cessation, the following overall goals were set to guide activities in this channel:

- Involvement and leadership: Health care providers will be aware of, promote, and play an active role in smoking intervention efforts in the community.

- Changes in clinical procedures: Health care providers will regard smoking cessation advice as the minimal standard of practice; they will ask all patients whether they smoke; and some providers will go beyond providing advice.
- Policy changes: All health care facilities will adopt and effectively implement policies for a smoke-free environment.
- Public response: Smoking patients will more actively seek assistance from the health care system to stop smoking.

The health care provider channel received considerable emphasis in COMMIT, which is clearly evident by the range and number of intervention activities involved (Table 1).

INTERVENTION ACTIVITIES

Activities of “Influentials”

As a community health project, COMMIT needed “buy-in” and leadership from many members of the health care community. Participation took many forms. Each community identified influential health care professionals who were interested in smoking as a community health problem. In addition to their involvement in continuing medical and dental education, these influentials stimulated community change by promoting smoke-free health care facilities; supporting new regulations—and the enforcement of existing regulations—on the sale of tobacco to minors and smoking in public places, schools, and worksites; and serving as spokespersons with the media, schools, and community groups. COMMIT organizers invited known leaders from the physician and dental communities to take on educational roles and to guide activities in a health care provider task force, which involved representatives from many other professions. Most communities involved nurses and pharmacists in these efforts. Chiropractors were active participants in some communities, and in others, occupational and public health nurses played important roles.

Physician and Dentist Training

There were three levels of training activities provided for medical and dental care teams designed to achieve the educational goals and facilitate regular counseling of all smokers following a standard protocol. These activities have been described in detail elsewhere (Lindsay et al., 1994; Ockene et al., 1990-91; Manley et al., 1991); they include a basic program, comprehensive program, and a more advanced program to develop skills to teach others the basic and comprehensive programs.



Table 1
Health care provider activities and process objectives

Activities for Each Community	Cumulative Objectives (1988-1992)	Number Completed	Process Objectives Achieved (%)
Three or More Local Influential Medical Care Providers Trained	33 providers	74 providers	224
Three or More Local Influential Dental Care Providers Trained	33 dentists	49 dentists	148
Annually, At Least Three Physicians Will Be Active on Community Board	132 physicians	211 physicians	160
Annually (from 1989) At Least One Dental Care Provider Will Be Active on Community Board	33 dentists	93 dentists	282
Annually (from 1989) At Least Three Dental Care Providers Will Be Active on Community Board	99 providers	124 providers	125
At Least One Physician Attended National Training	11 physicians	23 physicians	209
At Least One Dentist Attended National Training	11 dentists	17 dentists	155
At Least Two Dental Care Providers Attended National or Regional Training	22 providers	25 providers	114
Basic Training of Physicians	80%		101
Basic Training of Dentist/Dental Care Providers	65%		94
Comprehensive Training of Physicians	25%		100
Comprehensive Training of Dentist/Dental Care Providers	20%		95
Physician Office Staff Training	30%		200
Dentist Office Staff Training	30%		147
Resource Materials Sent to Physician Offices	90%		111
Resource Materials Sent to Dentist Offices	90%		111
Promotional Materials Sent to Physician Offices	90%		110
Promotional Materials Sent to Dentist Offices	90%		108
Presentations to Physician Offices Not Smoke-Free	60%		147
Presentations to Dentist Offices Not Smoke-Free	60%		138
Presentations to Health Care Facilities Not Smoke-Free	100%		100

^a Average for combined communities.

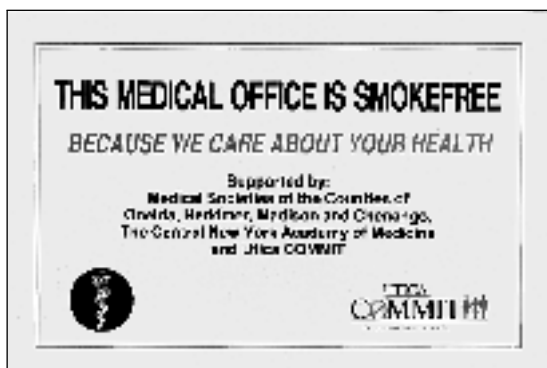
The most advanced level of training was provided centrally for several individuals from each community and was intended to develop leadership and educational skills for medical and dental care teams within the intervention communities. These central training events provided guidelines for how to deliver the NCI-developed programs (basic and comprehensive programs) and how to plan community-level educational programs. *Basic* (approximately 45 minutes, like that of traditional rounds presentations) and *comprehensive* training (a minimum of a 2 1/2-hour workshop) that included didactic presentations, opportunities for discussion, and planning as well as skills-building exercises were then made available to all medical and dental care teams at the community level.

In the 11 COMMIT communities, there were 909 primary care physicians (mean = 83 per community) and 731 general care dentists (mean = 66 per community) in the intervention communities. During the 4 years of the COMMIT intervention, an estimated 80 percent (727) of primary care physicians and 65 percent (475) of general care dentists attended some level of training.

WHAT HAPPENED: SUCCESSFUL COMPONENTS AND CHALLENGES

Goal 1. Involvement and Leadership

Representatives from many health professions spent time as volunteers to provide leadership through the COMMIT Board and task forces. Most of these volunteers took on a 4-year commitment and sustained their involvement with project. The chairs of the health care provider task forces usually were physicians. Participants on this task force provided many different kinds of leadership and support to the COMMIT intervention. The specific contributions were dependent on individual interests and skills and the opportunities afforded by the particular form of activities in each community. The role of the knowledgeable expert on health was always important for media events. Radio, television, and newspapers often looked to the health care provider leaders for comment on the smoking issue. The experts participated in talk shows, wrote articles for newspapers, and responded to health issues at press conferences. For example, at the time of the release of the 1989 U.S. Surgeon General's report (U.S. Department of Health and Human Services, 1989), there was an opportunity to discuss implications of the report at the community level.



Physicians, dentists, and other health professionals played leadership roles in creating smoke-free hospitals and other medical and dental facilities, submitting articles for the *COMMIT Newsletter*, and encouraging their colleagues to prescribe the nicotine patch when it was first introduced. The importance of this visibility and the sense of local expertise are difficult to measure but are critical in the diffusion process as a context for promoting other activities.

Task Force Issues The protocol's emphasis on physician and dentist training interfered with smooth functioning of task forces in several communities. Planning of training events was time consuming, and committees spent an inordinate amount of time attempting to deal with physician and dentist reluctance to attend comprehensive training. At the same time, there was concern that, even with training, these health care professionals could have only a minimal effect on patients' smoking behavior.

Representatives of other health care professions could see an important role for their groups in COMMIT but did not see sufficient resources allocated for this purpose. This lack of resources was overcome in many communities by local initiatives, but the group process suffered because of the resentment engendered by this perception of inequality and inappropriate attention to physicians and dentists. At the same time, there was a reluctance among staff members and other members of the task force to address issues because of the (1) traditional independence, rank, and respect for physicians and dentists and (2) possibility of not meeting project objectives.

Some communities reported that the task force lacked a strong, visionary, and powerful leadership committed to the spirit as well as the letter of the protocol. Some groups tended to focus on meeting the minimum requirements of the protocol and did not push their creativity beyond the minimum. This was unfortunate because a community approach, by its nature, should be comprehensive and coordinated. For example, physicians and dentists are in an excellent position to refer smokers to other health professionals for quit-smoking therapy, and they may work jointly by providing a prescription for nicotine replacement therapy. In urban settings, where physicians and dentists often work in combination clinics and free-standing health centers, such cooperation and interaction among physicians, dentists, nurses, and other health professionals may be more readily anticipated than in private office settings that are often more limited in scope.

Although these limitations within the protocol were a problem for many communities, there were many examples of pushing beyond the protocol requirements. For example, the Santa Fe, NM, group developed a videotape that was circulated among a variety of health professionals. In Paterson, NJ, a poor urban community with a large minority population, hypertension nurses and clinicians who conducted onsite high blood pressure screening programs throughout the community were trained to measure the carbon monoxide in the expired air of smokers and to counsel smokers, particularly those with high blood pressure, to quit smoking. In several communities, "grand rounds" presentations and comprehensive symposia and workshops, although targeted to physicians and dentists, were extended to include other professionals. In one instance, a comprehensive training event included presentations (e.g., a lawyer from the Rose Cipollone case in New Jersey [*Cipollone v. Liggett Group*], a presentation on environmental tobacco smoke, an update on smoking and health issues) of interest to a diverse audience. By offering Continuing Medical Education (CME) credits for nurses and other

health professionals, it was possible to attract a varied concerned audience, boost attendance, and add to the success of the program. Sometimes training was provided specifically for other health care providers. For example, in Fitchburg/Leominster, MA, special training was offered to hospital nurses who wanted to take advantage of the “teachable moment” when smoking patients in a smoke-free hospital must deal with a period of abstinence.

Goal 2. Changes in Procedures To ensure that medical and dental care teams put state-of-the-art procedures into place, a chain of events appears necessary (Figure 1). This is a complex process, and breakdowns at any stage in the chain will compromise the overall impact on patient outcomes.

Changes in Procedures Require a Chain of Events There were challenges to be met and solutions to be found at every link of this chain.

Link 1. Physicians and Dentists and Their Office Staffs Must Want To Learn About and Be Willing To Attend Training for Smoking Cessation. Most communities were able to provide basic training to more than 80 percent of physicians and 65 percent of dentists. However, physicians and dentists were reluctant to attend comprehensive training. Some communities made an effort to schedule the comprehensive training at “attractive” times, such as in association with the American Cancer Society’s The Great American Smokeout (GASO) or in conjunction with a New Year’s “Quit and Win” contest. Some communities expanded the training program to enhance its attractiveness to other health professionals and to use the event as an occasion to train and educate members of the COMMIT Board and task forces, local health department staff members, and other key people in the community. This ensured strong attendance and enhanced the ability

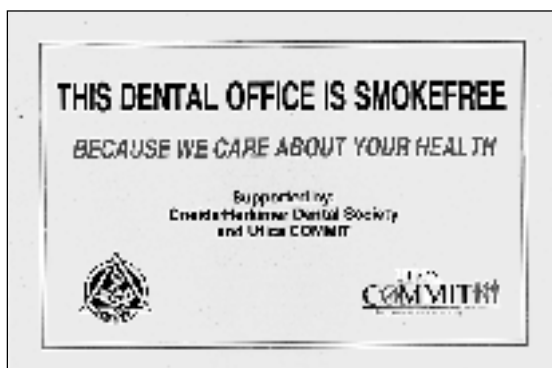
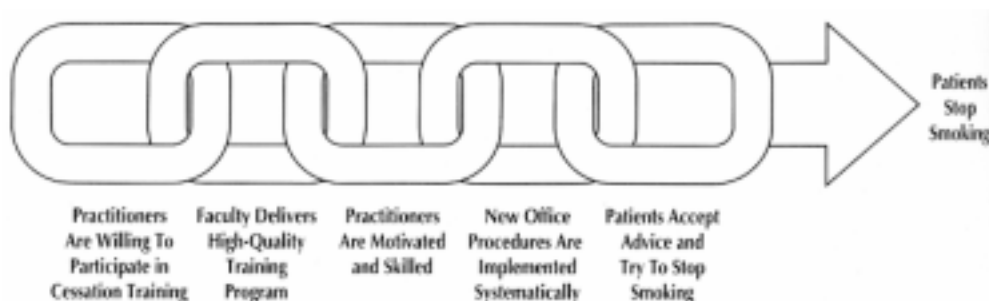


Figure 1
Chain of events that enable health professionals to help patients



of the entire community to intervene on smoking. However, not all communities followed this procedure.

In many communities, training events were cancelled because of insufficient registration. Most task forces spent many meetings considering how to attract professionals to 2 1/2 hours of training about smoking cessation. A wide range of incentives was offered, such as CME credits, dinners in pleasant locations, and in one community, eligibility for a drawing for a weekend of skiing. Across the COMMIT communities, there were many variations on optimum timing for training events; virtually every possibility was explored. In some communities, experts were imported, local opinion leaders made personal telephone calls, and so forth. In several communities, the organizers took the program to health care providers in their offices. This strategy provided an excellent opportunity to meet with office staff members, help them tailor and “mobilize” the office for intervention on smoking, and provide necessary followup and continued contact.

The nicotine patch became available early in 1992, during the final 9 months of the 4-year intervention period. Some communities saw the patch as an opportunity to make a final push to attract health care providers to training events. Rather than physicians raising the issue of smoking cessation with their patients, many smokers were asking their physicians about the patch. The need to know more about how to prescribe the patch provided a window of opportunity to attract physicians to training. In addition, drug company representatives were willing to work with COMMIT staff members to help promote and stage the training events.

However, in some communities the task force did not respond to this opportunity because it had already reached its objectives and because of the perception that there was not sufficient demand among physicians and dentists for more training on smoking cessation. This reality was borne out in one community that cancelled a workshop as the result of a lack of registration during the height of the nicotine patch campaigns.

Link 2. The Faculty Members for Training Events Need To Have the Knowledge, Skills, and Motivation To Deliver Effective Training to Their Colleagues in the Community. Some communities reported that they felt they needed “an out-of-town expert” to attract physicians and dentists to a training event. Others noted that the individuals trained to lead sessions were not available or tended not to be committed to the need for training or, in some cases, the content of the recommended training. On the other hand, the local physician and dentist leaders were important in many communities because of their role in persuading their colleagues to attend at least one training event. The local professionals also demonstrated that the recommended intervention could be implemented within regular practices and were able to address in a credible manner the practical concerns related to the local situation.

Most often, the organizers were satisfied with the quality of the presentations but not with the level of participation. There are advantages

to a mix of outside expertise and inside leadership. In addition, when the audience at the training events included nurses, dental hygienists, or other health care providers, there was not only more satisfaction in terms of levels of participation but also more interest and richness in what the audience brought to the session.

Link 3. The Education Provided Must Be Effective Enough To Motivate Practitioners To Address Smoking More Systematically and To Provide Enough Knowledge and Other Resources To Enable Changes in Procedures. (Note: It was important that the presentations provided through COMMIT have an effect on health professionals' behavior similar to the effect of the educational programs tested in the research that provided the basis for the training program [Wilson et al., 1988; Ockene et al., 1990-91; Gilbert et al., 1992; Kottke et al., 1989; Cummings et al., 1989].) There was a wide range in the quality of the educational programs provided. In many instances, staff and participants reported high-quality presentations. Sometimes the faculty members for these sessions would present what they were comfortable with rather than the NCI training package. There was no centralized evaluation of training sessions; therefore, it is unknown whether specific training events had the effect on practices that was intended in the original training objectives.

Link 4. After Attending These Training Events, Physicians and Dentists and Their Office Staff Members Need To Take Action by Setting Up Their Offices To Facilitate Smoking Control Activities and To Provide Effective Advice and Support to Their Smoking Patients. It takes motivation, knowledge, and support to make changes in procedures. It also is necessary to reduce the barriers to action that exist for health care providers. Health care providers have often listed lack of reimbursement for smoking cessation advice as an important barrier to implementing the procedure, and it was found that in communities where this activity is billable (for example, Bellingham, WA, and Brantford, Ontario, Canada), knowledge about the use of appropriate billing codes appeared to be one of the most powerful elements in the training program. It is not known whether those who attended training changed the way they dealt with smokers because the observation of changes in practices among those who attended training was not part of the evaluation process. Project staff members noted that little change in office systems was evident unless COMMIT staff members personally visited offices. In other words, training of office staff members was essential. Instructing physicians and dentists to make changes in their office systems to help them remember to address smoking often did not lead to these systems being set up. Even with in-office



training, many offices resisted setting up a reminder system but welcomed the other office support resources that COMMIT offered.

Link 5. Patients Need To Respond to the Advice and Support Provided by These Health Care Professionals and Successfully Stop Smoking. Even if a health care professional does everything right, a patient's ability to successfully stop smoking depends on many factors. Degree of nicotine dependence; level of motivation beliefs about the determinants of health, self-confidence, perceived self-efficacy and locus of control; and presence of a supportive environment at work, home, and among peers contribute to individuals' willingness and ability to follow through on their physicians' advice (U.S. Department of Health and Human Services, 1989). Previous studies have shown that stopping smoking is a long-term process and that it is often important to help smokers move through stages of change prior to their final successful attempt to stop. For example, helping contented smokers become discontented with their habit, shortening the number of years that individuals think about stopping before making their first attempt, helping relapsers start thinking about quitting again, and supporting ex-smokers are all potentially important effects of the interventions taught to health care providers through the training and materials. Baseline and midpoint surveys of smokers in the COMMIT communities indicated that smokers do take the advice of their physicians seriously and, if advised, do try to stop smoking (Ockene et al., 1991 and 1990-91). Final analysis of the COMMIT surveys of smokers will provide some insight into their responses to these aspects of the intervention. Unfortunately, specific physician intervention cannot be linked with patients' success in stopping smoking.

Goal 3.

Policy Changes

Leaders in the health care provider community approached by COMMIT organizers to participate on the Board and task forces often already had played a key role in advocacy and policy issues change within their communities prior to the beginning of COMMIT. This history varied by community, but when these leaders were already in place, it often gave those communities a headstart on this aspect of COMMIT work. However, this history may not be an advantage if these individuals have alienated stakeholders through their previous efforts within the community. The baseline survey demonstrated that most large health care facilities in most communities had some smoking control policies in place. However, the objective to have totally smoke-free hospitals, including their psychiatric and substance abuse wings, was ambitious. Success with enforcing this strict definition varied, but overall progress was made in strengthening the number and comprehensiveness of the policies. Some communities were more successful than others in this area. Factors that appear to have a positive impact on large health care facility changes were the influence of State health department initiatives, leadership provided by State or county medical and dental societies, interest of key influentials, and influence and momentum from the national media and professional journals.

At the end of the 4-year intervention, approximately 96 percent of medical offices and 88 percent of dental offices were totally smoke-free.

In the comparison communities, the rates were approximately 91 and 92 percent, respectively (Poland, 1993). The identification of leadership, staff support for the activities, and the climate created by the overall intervention may have been key factors in explaining the difference in physicians' offices. However, it appears that dentists' offices were not similarly influenced.

Goal 4.

Public Response

The baseline surveys for COMMIT indicated that smokers would welcome their physicians' or dentists' offer to help them stop smoking. Seventy-one percent of heavy smokers and 81 percent of light-to-moderate smokers said that they would try to stop if directed to do so by their physicians (Ockene et al., 1990-91). These data contradict what health professionals have expressed as a concern, that is, that their patients are not interested in talking about smoking cessation and may respond in a hostile manner to such overtures. It is important to correct this misconception. However, it is also important to state that some approaches by health care providers are more welcome than others. Poland's interviews (Ockene et al., in preparation) with patients in Brantford revealed diversity among patient responses. Some were immediately defensive when the topic was raised by their physicians; some indicated the need for more empathy from their physicians; and others simply wanted to be told to stop. There was a sense among many patients that physicians had little to offer them to help with smoking cessation. Health care providers need to know that there are standards of practice for cessation intervention developed through consensus that they can learn by attending an appropriate training event. At the same time, they must listen carefully to their patients to understand the individual nature of the help each patient will need.



To encourage patients to become aggressive consumers of stop-smoking advice, most communities sponsored Ask Your Doc campaigns, often in association with cessation events such as the GASO, Quit and Win contests, and making New Year's resolutions. COMMIT posters throughout the town and in health care provider offices and public service announcements on the radio encouraged the public to quit smoking and to ask their health care providers for help. One community purchased advertising space to announce which physicians and dentists were particularly interested in providing smoking cessation counseling. The aggressive marketing of the nicotine patch early in 1992 led many smokers to ask their physicians about the patch and smoking cessation, which was an excellent time for a community to set up an Ask Your Doc campaign as well as to offer additional training events.

Linkages to Other Activities in the Intervention

Many COMMIT activities were promoted through medical and dental offices, and this linkage made an important contribution to the comprehensive strategy. In general, office staff members were receptive to requests to distribute cessation resource guides and self-help material and to publicize the Smokers' Network and other magnet events

such as Quit and Win contests. These activities did not increase their workload and in some cases provided tools that made their job easier.

Taking advantage of and coordinating with ongoing events in the community enhanced the effect of the physicians' and dentists' interventions. Not only could practitioners encourage patients to quit smoking, they could encourage them to use self-help materials distributed in association with a community Quit and Win contest and use the contest as an occasion to select a quit date. Indeed, one community conducted a competition among physicians' offices, with the prize a color television set for the winner's waiting room. The winning office enrolled 150 smokers in the Quit and Win contest.

In general, a good response can be expected from medical and dental office staff members if the focus is on enhancing what they already feel they need to do and making that easier for them. Organizers can expect a less enthusiastic response when a request involves any extra work or does not fit within the regular office routine. A key factor is how an office is set up to provide resources to patients. An office with mechanisms in place will be much more receptive than one that is disorganized with regard to this aspect of its work. Sometimes providing the rack on which materials can be distributed will persuade some offices to distribute antismoking materials to patients.

**The Nicotine Patch—
An Opportunity
for Linkages** The availability of the nicotine patch provided a focal point for linkages among several task forces and activities. Several communities, such as Utica, NY, built a campaign around the availability of the nicotine patch. For example, media attention given to the patch encouraged the public to ask questions of COMMIT offices and health care providers. This, in turn, provided an opportunity to distribute cessation resources and hold training events for health care providers. On the other hand, several communities were reluctant to become involved with the patch promotion, particularly if it meant affiliation with one pharmaceutical company rather than a more generic approach.

**THE FUTURE—
RECOMMENDATIONS** The first and most important recommendation is to approach the health care provider community as a whole and develop a team approach to how they can best be part of a communitywide program. Allow the leadership to emerge from the group without preconceptions about the professional affiliation of the leadership. Physician and dentist trainings are valuable tools and are an important part of the approach, but they should be part of an overall strategy for all health care providers.

Remember that physicians and dentists are members of a community as well as health care professionals. Include them on working groups and task forces responsible for formulating local policy, whether the policy concerns smoke-free hospitals or a communitywide ordinance banning sales of cigarettes to underage youth. Physicians and dentists also are members of special societies that can play leadership roles in the formulation of policy and legislation. Call on the lung association, cancer society, or heart association local affiliates for guidance and tap the resources of the

State or local medical and dental societies. Local boards of health, health departments, and hospital associations also have an interest in promoting sound policy for the control of tobacco. Call on them. The more key people included in the development of the policy in the first place, the more support will be generated for the policy later.

Policies and practices in individual clinics can create a nonsmoking environment that can affect smokers. Creating no-smoking offices with no ashtrays, signs posted, literature available, and support for staff training is part of a comprehensive approach to tobacco control.

To promote changes in practices and policies in physicians' and dentists' offices requires applying everything known about helping people and communities change behavior. Just as smoking cessation is a process, integration of smoking intervention in an office is a long-term process. One strategy is almost never enough to bring about changes. Some professionals will need motivation; some will need information; others will be ready to act but need the skills to implement new procedures (Prochaska and DiClemente, 1983).

Creativity and good marketing strategies are essential. If physicians or dentists will not attend training programs, it is possible to use other means to reach them. Bring pizza for office staff members and show them a videotape during lunch hours on how to help smokers stop smoking, set up a wall rack with self-help quit-smoking material, present the physician or dentist with the "Heart Rx Kit" from the American Heart Association, and review the material on smoking cessation. Revisit the office, bringing more materials and supplies and using each visit as an occasion to encourage intervention on smoking. Involve the office in the GASO activities, Quit and Win contests, and other community events. The physician or dentist may never become as personally involved in the smoking issue as is wished, but small changes in procedures among many health professionals are important outcomes. People do not take action unless they feel that they should and that what they do will make a difference. In addition, practical issues that make the actions feasible also will determine whether change happens.

During the COMMIT intervention, the acceptance by the medical profession regarding smoking as a professional responsibility was different from that by the dental profession. Randomized controlled trials had demonstrated the efficacy of physicians' interventions, and the professional literature urged the medical profession to take action on the smoking issue. Lomas and colleagues (1991), in their studies of the implementation of consensus guidelines, concluded that it takes approximately 7 years for an accepted change in procedure to be integrated by the majority of physicians. Dentistry was many years behind medicine in recognizing the relationship between smoking and oral disease. The connection has been made stronger in the past 5 years with an increase in the number of published research articles and literature reviews as well as the establishment of new standards

in dental education curricula. Although substantial action was taken at the national level to promote the role of the dental care team in smoking control, it appears that at the community level the profession was not yet ready to accept this responsibility.

Although the medical profession appeared ready to accept smoking control as part of regular practice, there were many factors that determined whether physicians learned how to implement it effectively and whether they put what they learned into practice. Attracting medical and dental care teams to the COMMIT training events was challenging in most of the



COMMIT communities, and in some communities, it was almost impossible. Baseline surveys showed that physicians felt adequately prepared to help their patients stop smoking, yet they were not doing things known to be part of an effective approach (Lindsay et al., 1994). This lack of perceived need to know could have been a block to attending training. Physicians needed to know that there was more that they could do within the confines of their regular practices to help patients stop smoking. Those factors should be considered in promoting training to community health care providers.

The CME literature shows that information exchange presented in a regular lecture format affects knowledge and attitudes but is rarely sufficient to bring about any change in procedures. More experiential learning strategies, such as discussion and practice with followup in the office and supplemented by techniques to cue or reinforce the procedure, are critical to integrating changes into practice (Davis et al., 1992). Basic training (less than 1 hour) was primarily a motivational tool to stimulate involvement. Seventy-five percent of physicians and eighty percent of dentists in many COMMIT communities received no training beyond the basic session. It is likely that almost no changes in procedures followed these training events. (Analysis and reporting of the postintervention survey is under way.) However, it is possible that basic training raised awareness and motivation sufficiently that physicians and dentists started to pay more attention to what resources were available and began to mention smoking more frequently to their patients. It is also possible that after attending *basic* training, many physicians and dentists perceived no need to attend *comprehensive* training.

The quality of the comprehensive training, which included demonstration and practice opportunities, varied across the communities. Some health care providers trained to lead these sessions were highly committed and good educators. Others had strengths as community leaders but, in some cases, were not strong advocates of the COMMIT activities that they were representing. It was often difficult for dedicated leaders to remain enthusiastic and strong proponents of comprehensive training when they had such difficulty in attracting their colleagues to sessions.

Cessation counseling can be a frustrating process when a 15-percent quit rate is considered success in primary care settings. It may be unrealistic to expect health care provider leaders in the community to remain dedicated to this issue when there are many competing issues. Although it made sense from a cost perspective to train local health care providers to lead the educational activities, the presentations may have been more effective when a local leader was teamed with a cessation expert brought in for the training event. However, this strategy also met with mixed success. It is possible that by the time a community offered a session with an expert, those who had an interest in smoking cessation felt that they had already given this issue sufficient time.

COMMIT staff members across the study attempted many format variations in marketing, timing, speakers, location, and incentives to attract medical and dental care teams to training. There appears to be no ideal format. Because it is so difficult to attract health professionals to training sessions that are longer than 1 1/2 hours, it may be better to divide the program into bite-size pieces with realistic goals in each session for making changes in health care providers' interactions with smokers. However, it may be unrealistic to think that health care providers will attend more than one session. Another approach, when time is short, is to ensure that the audience is homogeneous in terms of its learning needs and then focus the approach on those needs. For example, if the participants are not convinced that they should bother with smoking cessation in their practices, presenters can provide a motivational approach that will move them closer to action. If audience members are ready to learn what to do, they should be told clearly and convincingly what they can do. This type of approach requires strong and versatile educational leaders. Therefore, ongoing training and support for these leaders are important.

The integrated approach to practitioners' offices taken by the COMMIT protocol appears to have been successful. COMMIT staff members reported good results when physician or dentist training was followed by a visit to offices to reinforce the training, train office staff, and introduce other COMMIT activities. This approach was labor intensive, and those who consider adopting it will need to consider its costs and benefits.

It is important to consider the large systemic forces that direct change in professional practices. For the medical profession, procedures that are perceived to be required for competency and demands from patients are two of these important forces (Fox, 1989). Changes at the level of policy within the professions were occurring before and continued throughout the COMMIT intervention period. In the medical profession, these changes were under way early in the study; however, change occurred at a much later stage in the dental care profession. The pacing of changes in professional standards of practice was beyond the control of this intervention. On the other hand, it was possible to promote patient demand. The attention given to Ask Your Doc campaigns and the availability of the nicotine patch increased this demand. The analysis of the final survey of smokers will demonstrate the effect of these approaches.

CONCLUSIONS Support is growing within both the medical and dental professions to make smoking cessation a part of competent practice. This support from the professions is critical, and as more health care professionals perceive endorsement and support of this work as a standard of competent practice, there should be an increased openness to opportunities to learn more about smoking cessation interventions.

Dental and dental hygiene schools are adding tobacco issues to their undergraduate curricula and continuing education programs. Recently revised curriculum guidelines for all professional schools have incorporated tobacco topics. In 1993, the American Association of Dental Schools established a Tobacco-Free Initiatives Special Interest Group so that educators could share experiences and accelerate the process of developing student knowledge, skills, and interest in tobacco intervention services. In addition, the importance of the dental profession is recognized in fulfilling the national health objectives for the 1990's; tobacco objective 3.16 (U.S. Department of Health and Human Services, 1991) states: "Increase to at least 75 percent the proportion of primary care and oral health care providers who routinely advise cessation and provide assistance and follow-up for all of their tobacco-using patients."

The medical profession has established smoking cessation as an issue clearly within the jurisdiction of primary care providers as well as of many specialists. Indicative of this support is the recent dedication of a full issue of the *Journal of the American Medical Association* (1994) to the subject of smoking. Surveys indicated that physicians and dentists now clearly perceive smoking as a problem they should address. However, they are not yet applying state-of-the-art interventions in their practices. COMMIT offered training to medical and dental care teams who did not perceive the need to attend training on smoking cessation or who felt that the many demands on their continuing education time prevented making smoking a high priority. It is likely that there will be an increasing readiness to attend training as these professionals see this issue as a part of a competent practice and as their patients increasingly ask them for help.

Through COMMIT, many things have been learned about how to approach the medical and dental professions. It is time now to expand this learning through work with all health professionals in communities. An integrated approach to planning and implementing a communitywide approach to smoking cessation will create congruence and synergy among providers that should help more patients stop smoking.

REFERENCES

- Anda, R.F., Remington, P.L., Sienko, D.G., Davis, R.M. Are physicians advising smokers to quit? The patient's perspective. *Journal of the American Medical Association* 257(14): 1916-1919, 1987.
- Centers for Disease Control and Prevention. Physician and other health-care professional counseling of smokers to quit—United States, 1991. *MMWR. Morbidity and Mortality Weekly Report* 42(44): 854-857, 1993.

- Cohen, S., Stookey, G., Katz, B., Drook, C., Smith, D. Encouraging primary care physicians to help smokers quit. *Annals of Internal Medicine* 110: 648-652, 1989a.
- Cohen, S.J., Christen, A.G., Katz, B.P., Drook, C.A., Davis, B.J., Smith, D.M., Stookey, G.K. Counseling medical and dental patients about cigarette smoking: The impact of nicotine gum and chart reminders. *American Journal of Public Health* 77: 313-316, 1987.
- Cohen, S.J., Stookey, G.K., Katz, B.P., Drook, C.A., Christen, A.G. Helping smokers quit: A randomized controlled trial with private dentists. *Journal of the American Dental Association* 49(3): 147-152, 1989b.
- COMMIT Research Group. Community Intervention Trial for Smoking Cessation (COMMIT): Summary of design and intervention. *Journal of the National Cancer Institute* 83(22): 1620-1628, 1991.
- Cummings, S., Coates, T., Richard, R. Training physicians in counseling about smoking cessation: A randomized trial of the "Quit for Life" program. *Annals of Internal Medicine* 110: 640-647, 1989.
- Davis, D.A., Thomson, M.A., Oxman, A.D., Haynes, B. Evidence for the effectiveness of CME: A review of 50 randomized controlled trials. *Journal of the American Medical Association* 268(9): 1111-1117, 1992.
- Fox, R.D. (Editor). *Change and Learning in the Lives of Physicians*. New York: Praeger, 1989.
- Gerbert, B., Coates, T., Zahnd, E., Richard, R.J., Cummings, S.R. Dentists as smoking cessation counselors. *Journal of the American Dental Association* 118(1): 29-32, 1989.
- Gilbert, J.R., Wilson, D.M., Singer, J.S., Lindsay, E.A., Taylor, D.W., Willms, D., Best, J.A. A family physician smoking cessation program: An evaluation of the role of follow-up visits. *American Journal of Preventive Medicine* 8(2): 91-95, 1992.
- Hayward, R.A., Meetz, H.K., Shapiro, M.F., Freeman, H.E. Utilization of dental services: 1986 patterns and trends. *Journal of Public Health Dentistry* 49(3): 147-152, 1989.
- Janz, N.K., Becker, M.H., Kirscht, J.P., Eraker, S.A., Billi, J.E., Woolliscroft, J.O. Evaluation of a minimal-contact smoking cessation intervention in an outpatient setting. *American Journal of Public Health* 77: 849-851, 1987.
- Jones, R.B., Pomrehn, P.R., Mecklenburg, R.E., Lindsay, E.A., Manley, M., Ockene, J.K. The COMMIT dental model: Tobacco control practices and attitudes. *Journal of the American Dental Association* 124(9): 92-104, 1993.
- Journal of the American Medical Association* 271(8): 569-636, 1994.
- Kottke, T.E., Brekke, M.L., Solberg, L.I., Hughes, J.R. A randomized trial to increase smoking intervention by physicians. *Journal of the American Medical Association* 261(14): 2101-2106, 1989.
- Lichtenstein, E., Wallack, L., Pechacek, T.F. Introduction to the Community Intervention Trial for Smoking Cessation (COMMIT). *International Quarterly of Community Health Education* 11(3): 173-185, 1990-91.
- Lindsay, E.A., Ockene, J.K., Hymowitz, N., Giffen, C., Berger, L., Pomrehn, P. Physicians and smoking cessation: A survey of office procedures and practices in the Community Intervention Trial for Smoking Cessation. *Archives of Family Medicine* 3(4): 341-348, 1994.
- Lomas, J., Enkin, M., Anderson, G.M., Hannah, W.J., Vayda, E., Singer, J. Opinion leaders versus audit and feedback to implement practice guidelines. *Journal of the American Medical Association* 265: 2202-2207, 1991.
- Manley, M., Epps, R.P., Husten, C., Glynn, T., Shopland, D. Clinical interventions in tobacco control: A National Cancer Institute training program for physicians. *Journal of the American Medical Association* 266(22): 3172-3173, 1991.
- Mecklenburg, R.E., Christen, A.G., Gerbert, B., Gift, H.C., Glynn, T.J., Jones, R.B., Lindsay, E., Manley, M.W., Severson, H. *How To Help Your Patients Stop Using Tobacco: A National Cancer Institute Manual for the Oral Health Team*. NIH Publication No. 93-3191. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, National Institutes of Health, 1993.
- Ockene, J., Lindsay, E.A., Manley, M. Tobacco control activities of primary care physicians in the Community Intervention Trial for Smoking Cessation, in preparation.
- Ockene, J.K. Physician-delivered intervention for smoking cessation: Strategies for increasing effectiveness. *Preventive Medicine* 16: 723-737, 1987.
- Ockene, J.K., Aney, J., Goldberg, R.J., Klar, J.M., Williams, J.W. A survey of Massachusetts physicians' smoking practices. *American Journal of Preventive Medicine* 4: 14-20, 1988.
- Ockene, J.K., Kristeller, J., Goldberg, R., Amick, T.L., Penelope, P.S., Hosmer, D., Quirk, M., Kalan, K. Increasing the efficacy of physician-delivered smoking intervention: A randomized clinical trial. *Journal of General Internal Medicine* 6: 1-8, 1991.
- Ockene, J.K., Lindsay, E., Berger, L., Hymowitz, N. Health care providers as key change agents in the Community Intervention Trial for Smoking Cessation (COMMIT). *International Quarterly of Community Health Education* 11(3): 223-237, 1990-91.

- Orlandi, M.A. Promoting health and preventing disease in health care settings: An analysis of barriers. *Preventive Medicine* 16: 119-130, 1987.
- Orleans, C.T., George, L.K., Houpt, J.L., Brodie, K.H. Health promotion in primary care: A survey of U.S. family practitioners. *Preventive Medicine* 14: 636-647, 1985.
- Poland, B. "Concept and Practice in Community Mobilization for Health: A Qualitative Evaluation of the Brantford COMMIT Smoking Cessation Intervention Trial." Unpublished doctoral dissertation, McMaster University, 1993. 402 pp.
- Prochaska, J.O., DiClemente, C.C. Stages and processes of self-change of smoking: Toward an integrative model of change. *Journal of Consulting and Clinical Psychology* 51(3): 390-395, 1983.
- Russell, M.A., Wilson, C., Taylor, C., Baker, C.D. The effect of general practitioners' advice against smoking. *British Medical Journal* 2: 231-235, 1979.
- Secker-Walker, R.H., Solomon, L.J., Hill, H.C. A statewide survey of dentists' smoking cessation advice. *Journal of the American Dental Association* 118(1): 37-40, 1989.
- U.S. Department of Health and Human Services. *Reducing the Health Consequences of Smoking: 25 Years of Progress. A Report of the Surgeon General, 1989*. DHHS Publication No. (CDC) 89-8411. Rockville, MD: U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control, Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1989.
- U.S. Department of Health and Human Services. *Seventh Report to the President and Congress on the Status of Health Personnel in the United States*. DHHS Publication No. HRS-P-OD-90-1. Washington, DC: Supt. of Docs., U.S. Govt. Print. Off., 1990.
- U.S. Department of Health and Human Services. *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. DHHS Publication No. (PHS) 91-50212. Washington, DC: Supt. of Docs., U.S. Govt. Print. Off., 1991, p. 153.
- Wilson, D.M., Taylor, D.W., Gilbert, J.R., Best, J.A., Lindsay, E.A., Willms, D.G., Singer, J. A randomized trial of a family physician intervention for smoking cessation. *Journal of the American Medical Association* 260(11): 1570-1574, 1988.

AUTHORS

Elizabeth A. Lindsay, Ph.D.
Associate Professor
Community Health Research Unit
Department of Epidemiology and
Community Medicine
University of Ottawa
Ottawa, Ontario K1H 8M5
CANADA

Norman Hymowitz, Ph.D.
Professor of Clinical Psychiatry
Department of Psychiatry and Mental
Health Services
University of Medicine and Dentistry of
New Jersey Medical School
Newark, NJ 07103

Robert E. Mecklenburg, D.D.S., M.P.H.
Oral Health Coordinator
R.O.W. Sciences, Inc.
Suite 400
1700 Research Boulevard
Rockville, MD 20850-3142

Linda C. Churchill, M.S.
Project Director
Department of Preventive and Behavioral
Medicine
University of Massachusetts Medical School
Room S-7, 746
55 Lake Avenue North
Worcester, MA 01655

Blake Poland, Ph.D.
Scientist
Social Evaluation and Research Department
Addiction Research Foundation
33 Russell Street
Toronto, Ontario M5S 2S1
CANADA