# The Role of Quitlines in Comprehensive Tobacco Control Programs

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## Overview

Tobacco use continues to be the leading cause of death and disease in the United States; more than 440,000 people in this country die of tobacco-related diseases each year (CDC 2002a). Fortunately, cessation of tobacco use can reduce the risk of tobacco-related disease, even among those who have used tobacco for decades (USDHHS 2000a, USDHHS 2000b, Peto et al. 2000, Taylor et al. 2002). Cessation also saves money; tobacco use is estimated to cost the nation close to $157 billion annually in excess medical expenses and lost productivity (CDC 2002a).

Cessation rates, however, have been low. One recent national survey indicates that about 41% of smokers try to quit smoking each year, but only 4.7% maintain abstinence for at least 3 months (CDC 2002b).

An increase in either the percentage of tobacco users making quit attempts or in the success rate for such attempts can lead to a higher overall cessation rate (Burns 2000). Traditional cessation programs have mostly focused on the latter, assisting those who are trying to quit and actively seek help in doing so. They have not often sought to increase the rate of quit attempts in the general population. In other words, traditional cessation programs have adopted a clinical rather than a public health approach (Lichtenstein & Glasgow 1992). Over the past decade, however, there has been an effort to adopt a more public health-oriented approach to cessation (Niaura & Abrams 2002), that is, one that is concerned not only with the cessation rate of the individuals who seek help to quit, but with that of all tobacco users in the population. In this approach, cessation becomes an integral part of a comprehensive tobacco control program, by making help available for those who seek it, and by actively promoting cessation in the general population.

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Telephone-based tobacco cessation services, commonly known as quitlines, have shown the potential to address both of these aims. First, their effectiveness with smokers who use them is well established (Hopkins et al. 2001, Lichtenstein et al. 1996, Stead et al. 2004). Second, in many states with comprehensive tobacco control programs, quitlines play an integral role in media-based efforts to increase quit attempts in the general population (Zhu 2000). Consequently, as of 2003, 40 states have established some form of quitline (CDC unpublished data). This chapter briefly discusses the reasons quitlines are well suited to lead the cessation component of a comprehensive tobacco control program.

## Quitlines Are Effective in Helping Tobacco Users Quit

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Several meta-analytic reviews have established that proactive telephone counseling is an effective intervention for smoking cessation (Lichtenstein et al. 1996, Fiore et al. 2000, Hopkins et al. 2001, Stead et al. 2004). The current U.S. Public Health Clinical Practice Guideline and the Guide to Community Preventive Services both recommend proactive telephone counseling as a method to help smokers quit (Fiore et al. 2000, Hopkins et al. 2001).

### Proactive Quitlines

Most of the quitline studies conducted so far have focused on proactive quitlines. Proactive quitlines may provide some form of immediate "reactive" assistance when a tobacco user first calls, but they also provide more comprehensive services through outbound ("proactive") calls. The outbound service, which often entails multiple follow-up sessions, is typically scheduled by agreement with the smoker. Randomized, controlled trials have established the efficacy of such proactive interventions, with the most recent meta-analysis of 13 studies showing a 56% increase in quit rates when compared with self-help (Stead et al. 2004).

Several of these quitline studies were conducted under real-world or near real-world conditions, making application of the findings fairly straightforward (Lichtenstein et al. 2003). Proven treatments sometimes fail in practice because translation from clinical trials to service settings may involve changes in the conditions under which the original results were obtained (Flay 1986, Greenwald & Cullen 1985, Stevens et al. 2000). The effectiveness of quitlines, however, has been demonstrated in the context of existing quitline service operations,

and in fact quitlines have been shown to provide a robust behavioral service for people who want to quit smoking (Borland et al. 2001, Zhu et al. 2002).

### *Reactive Quitlines*

Reactive quitlines, which respond to callers' immediate requests for assistance but do not provide outbound counseling calls, have not been studied as widely as proactive quitlines. Although there is some evidence of its effectiveness, this strategy has not been recommended by the various guidelines.

There are two studies in the literature that support the use of reactive quitlines in the context of comprehensive tobacco control programs. In one study, a well-promoted quitline that provided a single, yet substantial (50-minute), pre-quit counseling session to smokers was shown to increase callers' quit attempts and reduce the incidence of relapse, when compared with an intervention that provided callers with only self-help materials (Zhu et al. 1996). In another study, communities in which a quitline was promoted were shown to have significantly higher quit attempt rates and significantly higher overall cessation rates than similar communities without a promoted quitline. This was true despite the fact that only a minority of smokers with access to the quitline actually called (Ossip-Klein et al. 1991). It is unclear whether the increase in cessation was the result of promotion alone or promotion in conjunction with the quitline itself. Media campaigns in conjunction with a variety of community interventions have been shown to increase cessation (Hopkins et al. 2001). A possible explanation for this phenomenon is that knowledge of cessation services, engendered through promotion, increases tobacco users' belief in the normalcy of quitting, which may lead to increased quit attempts among people who have access to the services, even those who do not use them. In other words, promotion of a quitline in itself may lead to additional quit attempts, which may in turn lead to greater permanent quitting success in the communities where it is promoted (Zhu 2000). More studies are needed to assess the efficacy of reactive quitlines. In the meantime, it is clear that states with reactive quitlines should spend significant resources on promotion (Wakefield & Borland 2000).

Most existing statewide quitlines have employed both proactive and reactive elements (Ossip-Klein & McIntosh 2003). The overall evidence indicates that such quitlines have the potential not only to provide effective assistance to those who seek it but also to increase quitting among tobacco users generally. Existing quitline budgets are sometimes insufficient to provide full service to all who want to use

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them, and there is ongoing discussion among quitline operators about what is the best distribution of their efforts and which populations are best served within these budget constraints (Zhu 2002a).

## Quitlines Are Accessible and Efficient

Aside from their proven effectiveness, quitlines have other advantages that have made them a top cessation strategy for states. These advantages have led the Interagency Committee on Smoking and Health, Cessation Subcommittee, to recommend the establishment of a national network of state-managed quitlines to provide universal coverage for tobacco cessation (Fiore et al. 2004).

One important advantage of quitlines is their accessibility. A telephone operation eliminates many of the barriers of traditional cessation classes, such as having to wait for classes to form or needing to arrange for transportation. Quitlines are particularly helpful for people with limited mobility and those who live in rural or remote areas. Due to their quasi-anonymous nature, telephonic services may also appeal to those who are reluctant to seek help provided in a group setting, helping them overcome what can be a significant psychological barrier (Zhu & Anderson 2000). As evidence of the greater accessibility of quitlines, surveys have indicated that smokers are several times more likely to use such a service than they are to use a face-to-face program (McAfee et al. 1998, Zhu & Anderson 2000). In fact, quitlines have little trouble keeping their counselors busy as thousands of tobacco users call for help (Owen 2000, Wakefield and Borland 2000, and Zhu et al. 2000). Moreover, populations that are underrepresented in traditional cessation services, such as smokers of ethnic minority backgrounds, actively seek help from quitlines (Zhu et al. 1995).

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Another advantage of quitlines is that the centralized nature of their operations creates opportunities for efficiency in executing the cessation component of a state's tobacco control program. A single large-scale promotional campaign for a statewide quitline is more feasible than numerous smaller campaigns for a wide range of local programs. A centralized quitline can also serve as an information clearinghouse and provide direct referrals to local programs for callers who want to use them. Centralization of counseling services brings an economy of scale. Since demand for quitline services is largely a function of how much they are promoted, which is itself a controllable factor, it is possible to staff a quitline so that all staff members are efficiently utilized. This is not always the case with smaller local programs that are more vulnerable to fluctuating

demand. In fact, the economy of scale may be sufficient to enable the quitline to offer multilingual and other specialized services to users, which would be cost-prohibitive for most local cessation clinics. The economy of scale associated with a centralized operation is the main reason that many states consider a quitline to be the primary strategy in a statewide cessation program: It acts as a safety net for the great majority of tobacco users statewide, a consideration that is even more important when states suffer cuts in their cessation budgets.

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## Interaction with Other Elements of a Comprehensive Tobacco Control Program

A comprehensive tobacco control program typically has four major goals (CDC 1999):

◆ Prevent initiation

◆ Increase cessation

◆ Reduce exposure to secondhand smoke

◆ Eliminate disparities in tobacco use and access to treatment

Quitlines focus on cessation, but other components of a comprehensive program also promote quitting, even if they do not directly provide cessation services. Media campaigns are an obvious example, but there are others. A health care system that has been mobilized to increase physician advice to smokers also promotes quitting. School-based programs, while focusing on prevention, may promote quitting among adolescent smokers. Work site restrictions on smoking and efforts to increase tobacco taxes or raise the unit price promote quitting as well (Burns 2000, Hopkins et al. 2001).

Secondhand smoke policies and price increases for tobacco products create pressure on tobacco users to quit, without necessarily providing any help to do so. If cessation services are not available, this pressure runs the risk of appearing punitive to tobacco users. However, this risk is lessened in states with well-promoted and widely available cessation services. As a single centralized operation with recognizable branding and universal toll-free access, a quitline is a good way to let tobacco users, wherever they are, know that help is available if they need it. In this way, a quitline complements other tobacco control activities that increase tobacco users' desire to quit. Such interactions create a synergy among different components of the program (Burns 2000).

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This synergy can be seen most clearly in the collaboration between a state's quitline and its media campaign (see Chapter 9). The media have been used extensively to educate the public about the dangers of smoking, and a common theme of such campaigns is the harmfulness of secondhand smoke (Stevens 1998). This theme is only indirectly related to cessation, but the two themes can be linked. For example, through a careful creative process, California's media campaign developed secondhand smoke ads that also promoted the quitline. Because the quitline's number was included, the cessation message in the ads became more complete, not only providing smokers with a reason to quit but also offering them help to do so. Interestingly, the secondhand smoke ads outperformed basic health ads in generating calls to the quitline. Thus, secondhand smoke ads, ostensibly focused on protecting the health of nonsmokers, became an efficient way to encourage smokers to use a cessation service (Anderson & Zhu 2000).

Another potential area for synergy among program components is to use quitlines to support physician advice to quit smoking (see Chapter 10). The U.S. Public Health Service guideline recommends that physicians ask about their patients' smoking status at every visit, advise every smoker to quit, and prescribe or recommend Food and Drug Administration-approved medications for every quit attempt in the absence of major medical contraindications. The guideline further suggests that physicians should help their patients formulate a quit plan, provide supplementary materials, and schedule a follow-up session to be conducted either in person or via the telephone (Fiore et al. 2000). In practice, time constraints and a lack of training on how to counsel their patients on cessation create barriers to physician implementation of the guideline. What physicians can easily do, however, is screen for tobacco use, advise tobacco users to quit, and refer patients to the quitline for cessation counseling (Schroeder 2003).

Collaboration between a quitline and other components of a comprehensive tobacco control program can also help eliminate disparities between various populations with respect to tobacco use and its toll on health and access to effective treatment services. For example, people of ethnic minority backgrounds are collectively less likely to use cessation services than whites (USDHHS 1998). In some cases, language can be a barrier to access. As mentioned previously, it would be cost-prohibitive to ensure that all local cessation programs across a state had multilingual capabilities. It is more feasible to address such a disparity in a centralized operation where separate language lines can be set up to cover the entire state or region. A

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media campaign using actors from the target community and conducted in the target language can both promote cessation in that community and encourage its members to access available services, thereby helping to address the disparity of access. Data from California have shown that a culturally and linguistically targeted campaign that is tagged with a quitline number can draw smokers of ethnic minority backgrounds as effectively as the general market campaign draws white smokers (Zhu et al. 1995). In this case, quitlines help address disparities by providing a "level playing field" in access to service.