Developing and improving national

toll-free tobacco quit line services

A World Health Organization manual

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Foreword

WHO MAY BENEFIT FROM THIS MANUAL?

A broad array of people and institutions with many different types of interests and expertise are needed to bring a quit line into existence and ensure that it realizes its full potential. This manual is designed to be useful to many different partners, including potential funders, tobacco control policy-makers, programme developers, service providers and evaluators. Some sections are very specific, such as those concerned with staffing, and may be of more interest to those actually involved in direct quit-line operations. Others are more theoretical, and may be of more interest to those working to integrate quit lines into the broader context of tobacco control.

This manual focuses primarily on national, state and regional quit lines, as opposed to telephone or Internet services provided by clinics, health systems, employers, pharmaceutical companies, or nongovernmental organizations (NGOs). It does not address Internet-based adjunctive services offered by pharmaceutical companies for users of their medications. Although the manual is based on experiences from quit lines around the world, it is primarily intended to help low- and middle-income countries (LMICs) in the early stages of quit-line development. However, many sections will also be of interest to managers of existing quit lines who are keen to improve services, performance, reach or funding.

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Abbreviations

HIV	human immunodeficiency virus
LMICs	low- and middle-income countries
NGO	nongovernmental organization
NRT	nicotine replacement therapy
WHO	World Health Organization
WHO FCTC	WHO Framework Convention on Tobacco Control

Glossary

Behavioural support
Support, other than medication, aimed at helping people to stop using tobacco. It can include all cessation assistance that imparts knowledge about tobacco use and quitting, provides support, and teaches skills and strategies for changing behaviour.

Brief advice
Advice on how to stop using tobacco, usually taking only a few minutes, and given to all tobacco users during the course of a routine consultation or interaction.

Call centre
An organization or a part of an organization that provides a service or conducts business over the telephone.

Cost-effectiveness
A type of economic analysis comparing the relative expenditure (costs) and outcomes (effects) of one or more intervention options.

Counselling
Has different meanings in different countries. In the context of quit lines, "counselling" does not mean deep, extended psychological counselling but rather refers to practical advice and problem-solving coupled with support. It may include the use of some skills, such as cognitive-behavioural and motivational interviewing, but not at the level of a licensed psychologist. Quit-line counsellors are also sometimes referred to as "coaches", "guides", "behavioural support specialists" or "advisers". Counselling is also called "behavioural support".

Decision support
Unbiased assistance provided to people to help them weigh the advantages and disadvantages of various options with the emphasis on understanding the evidence in layman's terms.

De-normalization
Policies and activities aimed at changing existing cultural norms around the acceptability of continued tobacco use and second-hand smoke exposure.

Metrics
Important processes and outcomes that can be measured.

Over-the-counter
Medications that can be purchased without a prescription.

Proactive phone support
The provision of follow-up outbound telephone calls to a quit-line caller, often on a schedule related to their smoking cessation status.

Health-care providers
Health-care workers, including medical doctors and allied health professionals, providing care to patients.

Quit line
A telephone counselling service that can provide both proactive and reactive telephone counselling (see proactive telephone support and reactive telephone support).

Reactive phone support
Providing counselling and other services when a person calls the quit line (as opposed to proactive phone support).

Telephony
The technology systems associated with the electronic transmission of voice, fax or other information between distant parties.

Tobacco user
Anyone who reports the current or occasional use of any tobacco product.

Tobacco addiction/dependence
A cluster of behavioural, cognitive and physiological phenomena that develop after repeated tobacco use and that typically include: a strong desire to use tobacco; difficulties in controlling its use; persisting in its use despite the harmful consequences; giving higher priority to tobacco use than to other activities and obligations; increased tolerance; and sometimes experiencing a physical withdrawal state[1].

Tobacco cessation
The process of stopping the use of any tobacco product, with or without assistance.

Tobacco dependence treatment
The provision of behavioural support or medication, or both, to tobacco users, to help them stop their tobacco use[2].

1 Definition adapted from: International statistical classification of diseases and related health problems, tenth revision (ICD-10). Geneva, World Health Organization, 2007.
2. Also sometimes called cessation support in this document.

Executive summary

Background. For most tobacco users it is difficult to cease using tobacco products on their own and they benefit from help and support to overcome their dependence. Article 14 of the WHO Framework Convention on Tobacco Control (WHO FCTC) mandates all its Parties to take effective measures to promote the cessation of tobacco use and adequate treatment for tobacco dependence. Parties are encouraged to implement the key effective measures recommended by the guidelines for the implementation of Article 14 of the WHO FCTC, including quit lines.

The World Health Organization recommends three types of treatment be included in any tobacco prevention effort: (i) tobacco cessation advice incorporated into primary health-care services; (ii) easily accessible and free quit lines; and (iii) access to low-cost pharmacological therapy.

Quit lines are a practical countrywide step towards offering help to quit, and can also facilitate the adoption of tobacco cessation advice in primary care settings and access to low-cost pharmacological therapy. However, as of 2009, less than a third of countries were operating national toll-free quit lines with live telephone-answering services. Nevertheless, experience shows that when started and operated strategically, they can help move the broader tobacco control agenda forward.

Benefits and rationale for quit lines. Quit lines can provide easily accessible screening, counselling, call backs, mailing materials and referrals to community resources such as tobacco cessation clinics and support groups. Some quit lines also provide Internet and medication support, recorded messages, and automated e-mail and texting responses. There is extensive evidence supporting the effectiveness of quit lines. Callers can expect to increase their chances of quitting by more than 40% as compared to not calling. Richer services, such as more proactive call-back systems and brief courses of medication, increase success rates. Furthermore, quit lines have been shown to be remarkably cost-effective relative to other health-care interventions.

Quit lines provide a central resource for direct services and a portal for community services. They meet with broad acceptance by the public and can serve as a referral resource for health-care professionals. Their availability and promotion can help normalize quitting and increase support for tobacco control. Quit lines require access to a telephone, and are more effective when there are no financial barriers to access.

Worldwide current situation of toll-free national quit-line services. In preparing this manual, the World Health Organization (WHO) conducted a situational analysis to provide a global profile of quit-line services, which included surveying existing quit-line managers in over 50 countries. It was found that 60% of countries operating toll-free national quit lines are in high-income countries, and only four quit lines operate in low-income countries. There was marked variation in reach, type, amount and quality of services.

Quit lines in high-income countries use a combination of reactive and proactive counselling and offer a wider range of services. Low- and middle-income countries mainly use a reactive service model with less population coverage and services. Mass media and printing the quit-line number on cigarette packs are the most common ways of promoting the quit line.

Technical advice for establishing and operating quit-line services.
First of all, it is essential to determine:

- an individual who will become the quit-line expert
- the needs for quit-line services in the population
- the place, role, and goals of the quit line in national tobacco control
- the range of services, likely utilization, and strategies for creating demand
- the sponsors that could fund and oversee the quit line
- minimal standards and a project management plan
- how to ensure that the quit line is adopted, implemented and maintained
- the organization that will deliver the services and the individual who is accountable for ensuring its success.

Quit lines can be provided as part of a broader call-centre service, or as a single-issue service. They can also be provided at national or provincial levels. Services can be delivered directly by the sponsoring agency or by subcontracting to a provider with call-centre infrastructure and expertise. The various arguments in favour of and against these approaches are reviewed.

In order to successfully deliver quit-line services, enrolment and counselling protocols must be identified or created. A mechanism for assuring quality must be set up, and specific logistical questions answered, such as the hours of operation and the telephones and computer systems that will be used. Of particular importance is the development of plans for managing the workflow, including how the office will be staffed, and of a regular, reliable means of creating reports for the sponsoring agency. The potential benefits of creating an advisory board and using "secret shoppers" are highlighted.

Counsellor training is a critical component of quit-line operation. Detailed skill requirements and sample trainings are included in Appendix 6. Practical and theoretical approaches to counselling are reviewed, ranging from basic tips on how to develop coping skills and provide education around the time-limited nature of withdrawal symptoms to increasing confidence and motivation, encouraging quit attempts, and resolving ambivalence.

Outbound follow-up calls increase quit rates but require more effort. Follow-up calls do not need to be as long as initial counselling sessions. The timing of follow-up calls can be clustered around a quit date to prevent relapse, and/or provided later to allow for recycling. The basic framework of counselling works well for most tobacco users regardless of age, race, gender or economic status. Some specific considerations are reviewed covering pregnancy, adolescence, people over 65 years old, mental health, substance abuse and language accessibility.

Integration of medication. There is now extensive experience of integrating cessation medications into quit-line services. This optional addition ranges from counsellors providing information on how different medications work to actually sending over-the-counter medications or pharmacy vouchers for prescription medications through the mail. Very brief "starter" kits of one or two weeks up to full eight-week courses of therapy have been used and studied. In addition to improving cessation rates, the availability of medications can result in a dramatic increase in calls to the quit line.

Funding is one of the biggest challenges quit lines face. The use of quit-line services is limited by how much funding is available for the promotion and delivery of the service. Quit lines should ideally be funded in a manner that does not compete with other tobacco control initiatives but rather expands funding. Many different funding mechanisms have been tried around the world, including the use of new tobacco tax revenue, national or provincial health insurance, new tobacco programme funds, private health insurance and public-private partnerships. The introduction of individual user fees has proven hard to administer and has markedly decreased participation.

Creating demand for quit-line services can be accomplished in a number of ways. Policy changes, such as increases in tobacco price and smoke-free legislation combined with public education campaigns, can markedly increase demand, but require awareness of the existence of the quit line. Mass media campaigns result in an immediate, predictable increase in calls, but can be expensive. General education advertisements "tagged" with the quit-line number result in similar volumes to quit line-specific advertisements. A longer term strategy is to encourage health-care providers, and family and friends to refer patients to the quit line. One of the most dramatic ways to increase calls is by putting the number on cigarette packs.

Integrating quit lines into health system tobacco activity has many advantages. The availability of the quit line can make it easier for busy clinics and hospitals to provide brief advice to tobacco users by providing a reliable easily accessed referral option. Quit lines may prove helpful in organized outreach programmes, such as tuberculosis and HIV, that rely on community health workers. Referrals from health-care providers help ensure a steady base of calls to the quit line that do not require mass media.

Reporting, monitoring, and evaluation. One of the big advantages of quit lines is that calls and outcomes, such as cessation rates, are measurable and reportable to funders and government sponsors. There are many ways to evaluate services ranging from monitoring call volumes and following up on small samples to calling all users six months after services are initiated. Because the elements of quit-line services have been shown to be effective, over-evaluation is not needed. Data elements and specific survey wording are contained in appendices 5 and 9. Potential exists for more formal research addressing unanswered questions relating to quit-line use in developing and transitional countries, such as the use of recorded messages and very brief calls.

Communication. Quit lines are increasingly organizing into larger regional consortia, with the Asia-Pacific region, the European region, the North American region, and Australia and New Zealand now having regular meetings and, in some instances, incorporating and hiring support staff. This development has enabled quit lines to share information on best practices, create minimum datasets and standards, and coordinate research activities.

The most effective quit lines are not isolated services, but are integrated programmes that serve not only the individuals who call but also the broader goal of decreasing the rate of tobacco use amongst the population. They do this by considering how the existence of quit lines can help foster increases in quit attempts and mobilize the broader health-care system and tobacco treatment programmes to help tobacco users quit successfully.

Introduction

The tobacco epidemic currently kills nearly six million people a year worldwide. Of these deaths, just over 600 000 are attributable to second-hand smoke exposure among non-smokers (WHO, 2009a; Oberg et al., 2011) and more than five million to direct tobacco use (both smoking and smokeless) (WHO, 2009a). Unless urgent and sustained action is taken, the epidemic threatens to kill more than eight million people a year by the year 2030 (Mathers & Loncar, 2006). Most of the growth in tobacco mortality will occur in low- and middle-income countries (LMICs).

The World Health Organization Framework Convention on Tobacco Control (WHO FCTC) demonstrates global political will to strengthen tobacco control and save lives. The Convention is a legally binding global treaty that provides the foundation for countries to implement and manage tobacco control programmes to address the growing epidemic of tobacco use. There are more than 170 Parties to the WHO FCTC covering 87% of the world's population.

In 2008, to help countries fulfil their WHO FCTC demand reduction obligations, WHO introduced the MPOWER package of six evidence-based tobacco control measures that have proven to reduce tobacco use and save lives:

Monitoring tobacco use and prevention policies
Protecting people from tobacco smoke
Offering help to quit tobacco use
Warning about the dangers of tobacco
Enforcing bans on tobacco advertising, promotion and sponsorship
Raising taxes on tobacco.

The MPOWER measures provide practical assistance with country-level implementation of effective policies to reduce the demand for tobacco.

Treatment of tobacco use and dependence is mandated in Article 14 of the WHO FCTC. Guidelines for the implementation of Article 14 of the WHO FCTC identify the key, effective measures needed to promote tobacco cessation and incorporate tobacco dependence treatment into national tobacco control programmes and health-care systems. Parties are encouraged to use these guidelines to assist them in fulfilling their obligations under the WHO FCTC and in protecting public health.

The World Health Organization recommends that three types of treatment be included in any tobacco prevention effort: (i) tobacco cessation advice incorporated into primary health-care services; (ii) easily accessible and free quit lines; and (iii) access to free or low-cost pharmacological therapy. These three treatment activities (conducted simultaneously, if possible) are specifically recommended because strong evidence supports their effectiveness: they are practical to implement; and they have the greatest chance of materially impacting the rate of quit attempts and quit success at the population level, when combined with the other policy initiatives in the WHO FCTC that help encourage people to consider quitting.

Currently over 85% of the world's population, the majority living in developing countries (WHO, 2011), does not have access to comprehensive treatment for tobacco dependence. Quit lines have been shown to be an effective tool in increasing the reach of evidence-based treatment services. In fact, guidelines for the implementation of Article 14 of the WHO FCTC recognize that quit lines are a key component of a system to help tobacco users quit and recommend that all Parties to the WHO FCTC should offer quit lines where callers can receive advice from trained cessation specialists (WHO, 2010a).

Quit lines are often more feasible to implement in a relatively rapid and cost-effective way compared to creating a network of face-to-face treatment services accessible by an entire population. They can also be linked to other key tobacco treatment components, by facilitating the adoption of tobacco cessation advice in primary care settings, and by increasing access to free or low-cost pharmacological therapy. However, as of 2009, less than one third of countries had a quit line with a live telephone answering system. Existing quit lines are disproportionately present in developed, high-income countries. There is considerable variation in the proportion of countries that have quit lines compared to the proportion of quitters they serve, the depth and breadth of services offered, and the degree of integration between the quit lines, health-care systems, and tobacco control programmes and policy initiatives.

This manual is a technical resource that will assist countries in implementing the Article 14 guidelines of the WHO FCTC to establish or improve toll-free national quit-line services. The manual:

- identifies the benefits and rationale for establishing toll-free quit-line services;
- presents the current worldwide situation of national quit-line services;
- offers technical advice on establishing and operating toll-free national quit-line services;
- addresses critical issues impacting quit-line services including funding, creating demand, and evaluation;
- provides case examples for different quit-line service models throughout the text.

Given that experiences, resources and situations are so very different from country to country, this manual does not provide a single formula for what a quit line should be, or how to create one. Rather, it presents the information on what is known from evidence and experience, and identifies key decisions that should be made in the planning and implementation process. Certain sections may seem somewhat overwhelming to those just starting a quit line (such as medications, staffing and quality assurance), while others may seem obvious to those who have been running a large quit line for years. Thus, users can select the chapters most relevant to their situation, experience and needs.

It is important to bear in mind that even very large quit lines that now serve hundreds of thousands of people a year started out from modest beginnings, often with just a handful of counsellors using simple phone and paper record systems. Although it is helpful to learn from others' experience and to plan based on your local circumstances and long-term goals, it is also important to get started!

Many organizations and individuals around the world with experience in setting up, operating and evaluating quit lines would be willing to share what they have learned. We encourage readers to contact people who have been involved in quit-line issues and operations directly for further consultation and assistance. The resources list included in this manual will help you locate technical assistance and consultation.

1. Benefits and rationale for establishing quit-line services

1.1 WHAT IS A QUIT LINE?

Quit lines provide a variety of tobacco cessation services predominately via telephones. These usually include:

- initial screening and collection of demographic and smoking history information;
- brief counselling;
- mailed self-help materials;
- referral to community resources to help tobacco users to quit;
- in-depth counselling for some callers, providing practical quitting information, skills building, confidence and motivation enhancement, and social support.

Ideally quit lines should also include:

- proactive call backs for some callers where the quit line calls the participant back at set time intervals.

As communication technology has evolved, quit lines have increasingly supplemented these services with:

- online (Internet) support services, which may include social networking, interactive lessons, text and assessments;
- automated or live e-mail support;
- automated mobile phone texting;
- medication support, including information about medications, help with proper use, and the provision of tobacco cessation medications;
- recorded messages with multiple options based on responses.

Quit lines were developed and tested during the 1980s in Europe and the United States in an effort to overcome a number of challenges to the dissemination of existing cessation treatments:

- group cessation classes were effective, but smokers were reluctant to attend in large numbers, and scheduling and staffing classes efficiently often proved challenging;
- one-on-one health professional counselling was effective, but it was challenging to initiate and maintain practitioner interest in offering routine cessation counselling;
- many evidence-based tobacco treatments were not covered by public health services or health insurances.

Over the past 25 years, multiple large randomized trials (reviewed later in this manual) have been conducted in various settings. These trials demonstrated that telephone-based counselling, especially when proactive call back of quitters was included, increased quit rates in the long-term. Later trials confirmed the benefits of medication support, and preliminary evidence suggests there are some benefits in Internet and mobile phone texting support.

1.2 WHAT ARE THE BENEFITS OF QUIT LINES?

Telephone quit lines have a number of potential benefits to different segments of society. From the perspective of health ministries charged with improving the health of a population by decreasing tobacco use, quit lines provide an efficient means of delivering evidence- based treatment. Quit lines can:

- create a central resource serving as a direct provider of evidence-based services and information;
- serve as a portal for other tobacco treatment services, including community-based face-to-face counselling, medications and Internet-based services;
- potentially reach at least 4-6% of total tobacco users a year in a country;
- be promoted relatively easily and generally meet with broad acceptance by the public;
- serve as a source of training and experience for counselling professionals and paraprofessionals, increasing the pool of tobacco treatment specialists in a country.

From the perspective of individual health-care providers (see also Section 7. *Integrating quit lines into health systems*), quit lines can:

- offer providers an easy, convenient, consistent, evidence-based referral resource to help their patients;
- increase health-care provider willingness to conduct routine brief tobacco interventions with tobacco users (Fiore et al., 2000; An et al., 2006; Bentz, 2007; McAfee, 2007; Fiore et al., 2008);
- increase the number of their patients making quit attempts who use evidence-based approaches such as counselling and cessation medications;
- help ensure patients taking medication receive optimal instructions on use and counselling support, thus increasing effectiveness.

Potential added benefits to broader tobacco control of quit lines can:

- help normalize quitting and stimulate quit attempts even among those who do not call (Ossip-Klein et al., 1991), which is necessary to decrease prevalence (Zhu, 2006);
- increase support for tobacco control initiatives because they are tangible and offer direct help to tobacco users – some health ministries have leveraged the positive support for quit-line services to help obtain or maintain general tobacco control funding (see Section 4. *Funding*);
- be used as "hotlines" to report violations of smoke-free legislation, thus encouraging community participation and supporting other tobacco control initiatives (care needs to be exercised since this targets different audiences);
- ultimately increase the overall cessation rate while reducing relapse.

Finally, from the perspective of the individual tobacco user:

- help is available anywhere, at any time, at no cost to the tobacco user;
- quit lines offer confidential, personal and tailored support motivating and supporting quit attempts;
- quit-line service availability provides tangible evidence that society wants to help them quit, not punish and stigmatize them, thus creating an enabling environment.

1.3 POTENTIAL NEW BENEFITS OF QUIT LINES IN LOW- AND MIDDLE-INCOME COUNTRIES

Although less well studied, quit-lines could benefit countries with less well-developed tobacco control infrastructures or where readiness to quit is lower by:

- providing information, support and skills building for "proxy" callers, i.e. family, friends, co-workers and former smokers interested in helping tobacco users they know to quit (Muramoto, 2010);
- providing information, counsel and resources to health-care providers and community workers on how to help their patients stop smoking – this is often a sideline of a quit-line service, where health-care providers can consult on individual cases, or in the framework of a health system's support resources, but this function has seldom been more actively promoted;
- serving as an information resource about the harms of tobacco and the benefits of quitting, particularly in countries where the quit attempt rate is low;
- serving as a model for other public health services that populations can access remotely (e.g. mental health services, other drug treatment, and tuberculosis/HIV medication adherence).

1.4 EFFECTIVENESS

1.4.1 Counselling

There is a strong evidence base for telephone counselling. After pooling multiple clinical randomized trials, the 2006 Cochrane Review (Stead, Perera & Lancaster, 2006)[3] found a odds ratio of 1.4 (people calling the quit line and receiving counselling were 40% more likely to quit successfully when compared with people receiving less assistance). The United States Public Health Service (Fiore et al., 2008) conducted a similar analysis, finding an even higher odds ratio of 1.6. There was a wide range of effectiveness between different quit-line studies.

Quit-line effectiveness increases as the number of calls increase. Even a single, in-depth call improves the chances of quitting compared to printed materials alone. However, two calls are slightly more effective, and multiple calls are the most effective (i.e. between four and five) (Zhu, 1996; Hollis, 2007; Carreras Castellet, 2007). Multi-call randomized trial data is based on proactive call backs or appointments initiated by the quit line, not reactive follow-up that depends on the initiative of the quitter to re-establish contact.

1.4.2 Medication

Most of the trials establishing effectiveness of medications include large amounts of instruction on proper use and counselling. However, in the "real world", most people take medications to help them quit without any instruction or counselling. There is some concern that when used with no instruction or counselling, medications provide much less benefit. Thus, quit lines may provide a means to help people gain access to medications, use them more appropriately, and receive concurrent counselling.

Strong evidence shows that providing counselling and medication together is more effective than either alone. The United States Public Health Service guideline pooled multiple studies and found that adding quit-line counselling to medication increased the effectiveness of medication by 30% relative to medication alone (Fiore et al., 2008). Evidence also exists showing that the addition of medication to telephone counselling increases effectiveness at different levels of phone-based counselling (i.e. one brief call, two calls and five calls) (Hollis et al., 2007).

3 A Cochrane Review is a systematic review of published evidence regarding a health-care procedure, medication or intervention conducted by an independent international organization.

Medication availability has also been used as a way to promote quit lines. Even without paid media, large increases in call volumes have been seen when medication is available to callers (An et al., 2006; Tinkelman et al., 2007; Deprey et al., 2009).

1.5 COST-EFFECTIVENESS

The cost-effectiveness of tobacco treatment is well established, with actual positive return on investment in worksite settings (Warner et al., 1996), and one of the best cost-effectiveness ratios for any preventive or health-care intervention (Maciosek et al., 2006). In other words, tobacco treatment can save society money by decreasing health-care costs and improving productivity, and is the most cost-effective of all adult clinical interventions for increasing the quality and length of life.

The cost-effectiveness of quit lines has been examined extensively (Fellows et al., 2007). In addition, the cost-effectiveness of incremental additions to baseline services has also been examined, including the addition of proactive counselling calls, medication, and long rather than short courses of medication (Fellows et al., 2007). In general, the addition of proactive calls and medication is cost-effective, often dramatically so when compared to other medical and preventive services (Box 1).

Box 1. Making the case for the cost-effectiveness of quit lines

Carefully arguing the cost-effectiveness of quit lines is a critical step in their establishment, expansion and maintenance. Sometimes, government officials or even tobacco control advocates suggest that money (including quit lines) should not be spent helping smokers quit because policy initiatives such as smoke-free legislation or tax increases are so much cheaper. What is wrong with this argument?

First, only a comprehensive tobacco control strategy can reverse the global tobacco epidemic. The increasing social pressure on tobacco control efforts (for example, smoke-free workplaces and public places, increasing the price of tobacco through higher taxes) can increase the motivation or stimulus for tobacco users to quit. Offering evidence-based tobacco dependence treatment (including quit lines) greatly improves their quit rates and supports the implementation of other population-based tobacco control initiatives. Recent simulation modelling suggests that comprehensive tobacco cessation policy changes, including the implementation of quit-lines, have the strongest effect on lowering tobacco prevalence rapidly (Levy et al., 2010).

Second, it is incorrect to compare tobacco treatment costs with the costs of implementing policy changes. Tobacco dependence is a chronic condition, and its treatment should be compared to the cost of treating the sequelae of on-going tobacco use, i.e. the cost of treating lung cancer, heart disease, asthma, chronic obstructive pulmonary disease (COPD), worsened tuberculosis, etc., as well as the cost of lost productivity from disease and early death. These costs are real and are a growing burden on LMICs. When compared to these costs, tobacco treatment (including quit lines) is the bargain of the 21st century.

In the long-term, how the cost-effectiveness argument for quit lines is framed may have important implications for their support. We recommend trying to avoid an either/or approach regarding other tobacco control programmes, or other tobacco treatment programmes. For example, rather than framing the issue as "quit-line funding versus mass media funding", the focus should be on increasing the size of overall tobacco control funding, with appropriate resources for the quit line. Quit lines have the potential to benefit other aspects of tobacco control, and other forms of tobacco treatment.

1.6 LIMITATIONS

Despite the many advantages described above, quit lines are not a panacea.

- *Quit lines require access to a telephone.* Given the widespread rapid dissemination of mobile phones, this is becoming less of an issue in LMICs, but may still be a barrier in some geographical areas. Mobile phone charges can be a significant barrier to accepting counselling via mobile phones in certain countries where the person receiving the call is also charged. Toll-free numbers can help with this, but individual device fees may still inhibit callers from engaging in counselling. Options for lowering cost barriers should be explored carefully.

- *Cultural or knowledge barriers* may make it harder for tobacco users to call (see Section 6. *Creating a demand for service* for solutions).
  - Is it acceptable or even imaginable to receive counselling assistance via the telephone?
  - Negative perceptions about call centres and telemarketing may interfere. For example, in developed countries, the increased use of call screening devices on phones has decreased the ease of reaching participants for call-back sessions and evaluation.
  - A lack of understanding of the sort of services that are available. Many tobacco users assume quit lines are like drug hotlines or that they are "nag" lines. Often health-care providers share a similar lack of understanding and are initially less inclined to refer to quit lines.
  - Concerns about receiving help from government programmes may prevent some tobacco users from calling for assistance.

- *Potential barriers* may limit the reimbursement of quit lines as a health-care service. Some government and private health insurers may not reimburse for the provision of services delivered over the phone. This may make it more challenging to expand quit lines if equivalent face-to-face services can be paid for as health-care services.

The ability to overcome these barriers may be limited by funding availability, which impacts hours of operation, availability of toll-free numbers, and marketing and promotion capacity. Funding for services and promotion is often far below the potential demand for services (see Section 4. *Funding*). Most tobacco users quit without help, even when help is available. Although we can markedly increase the number of people getting help by removing access barriers and promoting services such as quit lines, it is also important to encourage quit attempts in general and not suggest that it is impossible to quit without help.

2. Worldwide current situation of national quit-line services

Currently, over 85% of the world's population, the majority of whom live in LMICs, do not have access to adequate treatment of tobacco dependence, which includes the provision of easily accessible and toll-free quit lines as one of the three types of treatment recommended by WHO that should be included in any comprehensive tobacco control effort. Despite 53 counties reporting to WHO that they have at least one toll-free national quit line (WHO, 2009b), no global data concerning the current practices of national toll-free quit-line services were collected until 2009, when WHO conducted a situational analysis among those countries to provide a global profile of national toll-free quit-line services, and identify case studies for existing quit-line operation models.

Quit-line managers were identified from a literature search, and the WHO regional offices were contacted to help identify and distribute the questionnaire. This self-reported survey was conducted from 10 June 2009 to the end of September 2009. Responses were received from 22 countries, and alternatively derived data were gathered for the remainder. The main findings of quit-line service models, population coverage, service operations, range of services, staffing, methods of promotion, budget, funding mechanisms and relationships between the quit lines and health systems are summarized as follows (see Appendix 1 for country-specific data).

- Of the 53 countries known to provide toll-free national quit-line services, 32 (60%) were high-income countries, representing over half (54%) of all high-income countries in the world. Only four low-income countries (8% of the group) and 17 middle-income countries (18% of all middle-income countries in the world) reported having a national toll-free quit line. All of the quit lines provided some counselling services and information for smokers wanting to quit, and for family members, friends or health-care providers who wanted to help a smoker quit.

- Of the 38 national quit lines with available data, 23 (61%) reported using a combined proactive and reactive service model. These included 71% of the national toll-free quit lines in high-income countries using the combination proactive-reactive system, compared to 30% of national toll-free quit lines in middle-income countries, and none in low-income countries.

- Of the total 53 countries, 34 (64%) reported having 75-100% population coverage for their quit-line services. These included 25 high-income countries, eight middle-income countries and one low-income country, the majority (88%) of which were located in Europe and the United States. Most of the remaining nine countries (67%) had less than 50% coverage.

- Governments and nongovernmental organizations (NGOs) were the predominant service operators at the global level. Of the 37 countries with available data (34 had a single national quit line, with only Australia, Canada and the United States having multiple quit lines divided by states or provinces), only nine countries were receiving quit-line funding from private companies and/or academic institutions, including the United States, where two thirds (68%) of their 51 state quit lines were operated by private companies and/or universities.

- The average (mean) hours of operation for both live pick up and counselling was over 48 hours per week with a very wide range (from 10 hours per week to 168 hours per week). Approximately, 70% of the reported national quit lines operated a voice mail call-back system or an answering service to receive calls after hours.

- Of the 38 countries with relevant data, almost all (97%) offered telephone counselling; 60% offered referrals to local assistance programmes, 56% provided self-help materials by mail, and 44% offered Internet-based services. Only a few (<10%) provided free or discounted nicotine replacement therapy (NRT).

- Six out of 36 national quit lines had eligibility requirements for proactive counselling and/or NRT, mostly based on readiness to quit or setting a quit date.

- Over three quarters (78%) of 26 national toll-free quit lines reported having counsellors only, without intake operators to deal with general enquiries from callers. All of these quit lines had training programmes for new quit-line counsellors with the time of training ranging from four hours to three months. Out of 16 quit lines with data available, over two thirds (69%) reported that their counsellors were health-care professionals.

- Of the 21 countries with quit lines that had budget information available, 18 had single national quit lines, while three had multiple quit lines covering individual states or provinces (six in Australia, eight in Canada and 51 in the United States). The annual budget for the single quit-line countries ranged from US$ 680 to US$ 1.19 million with the cost per quitter ranging from US$ 0.50 to US$ 433. In the United States, the median budget for each state was US$ 1 million with a US$ 3.33 average (mean) cost per quitter. Canada's median budget was US$ 221 500 per province, with a mean cost of US$ 0.53 per quitter.

- The main methods used by countries to promote their quit-line services were media advertisements (newspapers, television, radio or flyers). Additionally, several countries, including Brazil, New Zealand, South Africa, and all of those in the European Union (EU), had the quit line number printed on cigarette packets (along with health warnings).

- Partnerships between national quit lines and health systems were not specified by most respondents, although nine out of 13 countries who supplied this information reported that their national quit lines had a formal link with health-care providers or organizations.

Overall, at present, national toll-free quit lines are predominantly a "rich country" phenomenon, mostly found in Europe and the United States. Quit lines in high-income countries generally use a combination of both proactive and reactive calling, have high population coverage, and a wide range of services.
In contrast, quit lines in LMICs mainly use a reactive service model with lower population coverage and more limited services. Governments and NGOs are the major funders and operators of national toll-free quit lines at the global level. Mass media advocacy and printing the quit line phone number on cigarette packets are the main promotional methods for quit lines, and trained counsellors and health-care professionals are the primary service providers. Partnerships between quit lines and health systems are underdeveloped, and need to be strengthened for increased reach and effectiveness.

Summary

- More than 50 countries currently have at least one national toll-free quit line with a live person available to provide quit-line cessation services, with access to some (or all) of its population.
- There is marked variation in reach as well as type, amount and quality of services provided by different quit lines.

Despite having successful models in the field, no global model or standards have been established until now to critique current practices, recommend proper quit-line procedures, and evaluate and improve quit-line services or outcomes. Several national and regional quit lines have been identified as case examples in this manual, which can serve as models for national quit-line designers and practitioners. They focus on choosing appropriate service delivery options, and optimizing population coverage and utilization, and partnerships with health-care systems. See Box 2 and the remainder of this report for examples and case studies.

Box 2. Case example: South Africa's Quitline

The prevalence of adult smoking in South Africa has fallen by a third in the past decade, from 32% in 1995 to 22% in 2006: 9% of deaths are caused by smoking (the third leading cause of death), and 25% of tuberculosis mortality is related to smoking; and 80% of households have cell phones.

South Africa's Quitline is mandated by law and run by the National Council Against Smoking (NCAS, an NGO) and partially subsidized by the government. It operates on a reactive system that provides mailed self-help booklets to all callers and brief counselling to those who are in the process of quitting.

The Quitline also serves as an information line. It offers tailored information to family and friends of smokers or health-care providers, and handles complaints concerning the country's tobacco control laws. It operates from 08:00 to 17:00 (seven days a week) with an answering service that takes calls after office hours. When indicated, callers who are in the "throes of quitting" can call a counsellor at any time on a mobile phone. About 12 000 people call the Quitline annually.

Two types of personnel run the programme; one deals with general enquiries and the other provides counselling. Staff are sent for general "lifeline" training for half-a-day per week for six weeks, and are then given specific in-house training on cessation.

The most dramatic call handled was from a woman who said she was standing on the ledge of a building threatening to jump if she could not smoke. The counsellor was able to calm her down and help her realize that she had options and choices that would allow her to control her addiction.

While there is no formal link between the Quitline and the health-care system, the information line serves health-care providers by answering enquiries on helping patients quit smoking. In addition to mass media advertising and advocacy for the Quitline, the phone number is printed on all tobacco packaging.

3. Technical advice for establishing and operating quit-line services

3.1 TEN STEPS IN SETTING UP A NATIONAL QUIT-LINE SERVICE

Similar to an individual quitting smoking, the process of setting up and maintaining a quit- line service is seldom linear and logical. Politics, personalities, and funding fluctuation may rapidly create, remove or change opportunities. However, a number of steps should be kept in mind to help create and maximize opportunities. If a country already has an established quit line, it is still useful and important to periodically and systematically re-examine what is being done and why.

The following are a series of steps recommended when preparing to create and launch a quit line, or when performing a strategic review of an existing quit-line service. Some of the steps are dealt with in detail here, while others are dealt with in later sections (see also Appendix 10 which includes the *Minimum Standards for Australian Quitline Services*).

Step 1. *Identify a quit-line expert* for the country or concerned ministry. If responsibility for mastering the knowledge and issues relating to establishing a science-based quit line is too diffuse, there will be less accountability. Of course, there should also be an effort to widely disseminate knowledge about the quit line.

Step 2. *Assess the needs for quit-line services* in the population (World Bank, 2004), including specific characteristics that may impact the use of quit lines such as:

- prevalence of tobacco use, including types of tobacco use
- languages spoken
- access to a phone
- cultural acceptance of phone-based services
- the number of tobacco users interested in quitting and making quit attempts.

This assessment should include determining if different patterns exist in geographical, economical and cultural groups. Assessing these characteristics is not an exercise to determine *whether* a country needs a quit line: its purpose is to determine *what form* of quit line can best serve the needs of the country at its current stage of tobacco control development.

Step 3. *Determine the place and the role of quit-line services* in the national tobacco control and treatment strategy focusing on two key aspects.

1) The amount of cessation support resources currently available through health-care systems and community-based programmes. Some countries may have many programmes and services for quitters, but very little coordination. In this sort of situation, there may be need for a robust referral capacity within the quit-line service. This may be important for two reasons: it can help secure resources for callers, and ensure that, politically, other tobacco treatment services, which may be concerned that the quit line will supplant them, are not alienated. Other countries may have virtually no resources to help tobacco users quit. In this case, services must be developed with the understanding that callers must rely completely on quit-line services and their own resources.

2) Consider the current state of existing and planned tobacco control policies likely to increase quit attempts, the demand for treatment and potential funding. Examples include smoke-free legislation, mass media de-normalization campaigns, health-systems initiatives and tobacco taxes (Box 3). All of these activities have the potential to increase interest in quit attempts and calls to a quit line. In addition, the existence of a quit line can be used to help achieve these policy objectives. Quit lines can have the biggest impact on quitting and tobacco prevalence if their services and promotion are provided in a manner that complements other tobacco control activities.

Box 3. Normalizing quitting

A country has a very low rate of quit attempts and significant second-hand smoke exposure in public places. The tobacco control unit is planning a major public awareness campaign, including mass media advertisements and posters, about the dangers of tobacco use and second-hand smoke to help de-normalize smoking and normalize quitting.

However, there is concern on the part of some politicians (some of whom smoke and have the power to remove funding for the programme) that government funds should not be used to demonize smokers or make them feel guilty. Putting the quit-line phone number on advertisements used in the campaign can help diminish the sense that the government just wants to blame smokers.

Step 4. *Determine the goals of the quit line*. Depending on the specific circumstances, the reasons for creating or expanding a quit line can vary, and may impact on whatever services and promotional strategies are deployed (Ossip-Klein & McIntosh, 2003).

1) **High reach with minimal counselling**. This goal may be set because there are only a few other services available, quit attempt rates are low, and resources are limited. With this goal, triage processes need to be in place to determine which callers get limited live services, and to ensure that the non-live services, such as recorded messages and printed materials, are provided in a manner that provides callers with a good experience. Even if live calls are very brief, careful attention to call quality is important. If increasing quit attempts is a high priority, promotional campaigns that impact on large numbers of tobacco users are important, and the content of the promotion should encourage quit attempts. The South Africa Quitline is an example of this type of quit line (see Box 2 for details).

2) **High effectiveness (quit rates) with lower reach**. This goal may be set because the quit line is being used as a referral resource by community resources, such as medical clinics, where high-quality quit-line services will enhance the delivery of brief in-person services. With this goal, close attention to counsellor training and protocols will be especially important. An example of high effectiveness with low reach can be found in the case example in Box 4.

3) **High reach and high effectiveness (impact)**. This ideal goal may be realistic where there is substantial funding for promotions and services (Box 5).

Box 4. Example: targeting health-care workers

In a large country with a limited budget for cessation and a high prevalence of tobacco use, most users do not plan on quitting. A majority of health-care workers (including doctors) smoke but have a higher interest in quitting than the general population. Tobacco control advocates view the high-smoking rate among health-care workers, especially doctors, as a barrier to moving other work on tobacco control forward, since the politicians look to the medical community for guidance regarding tobacco control initiatives.

Quit-line developers plan to start with limited promotion and service for most callers, including a menu of recorded calls with information on why they should quit and tips for how to quit successfully. However, the limited service will be augmented with full proactive counselling and aggressively targeted promotion specifically for health-care providers interested in quitting themselves. As the percentage of health-care workers using tobacco decreases, this strategy will be re-examined.

Box 5. Case example: New Zealand Quitline

The New Zealand Quitline is an example of a telephone cessation programme with high reach and high effectiveness, offering free telephone support, other resources and low cost NRT to all New Zealand residents, with a particular focus on Māori smokers. The Quitline is run by Quit Group, a charitable trust funded by the Ministry of Health. Their purpose is to reduce the number of New Zealanders who smoke by providing effective support nationally for more smokers to make more quit attempts. In addition to running the quit line, Quit Group develops and provides other innovative quit-smoking programmes, including television, radio and print campaigns, an interactive web site (with chat and blog functions), and a text messaging service to help smokers trying to quit (Quitline, 2011).

In this country, with a population of just over four million, the quit line was able to register about 44 000 people (5% of all smokers) to make a quit attempt either by telephone (67%) or via the web site (33%) in one year. Callers can request a quit pack containing practical quit smoking advice, talk to an adviser for individualized support, obtain quit cards for subsidized nicotine patches, gum and lozenges (AUD$ 5.00 for four weeks' supply), and sign up for a text messaging service (Txt2Quit). See: *http://www.quit.org.nz/txt2quit/page/txt2quit_5.php.*

Telephone advisers receive two weeks of classroom training followed by a one-on-one coaching period and advanced training of three to six months. From 30 to 45 advisers are available to take calls from 8:00 to 21:30 six days per week.

Step 5. *Determine the range of services* and desired/likely utilization rates (see Section 5. *Range of services*), including whether the quit line wants to increase counselling use alone, increase use of medication, or increase use of counselling and medication together

Step 6. *Determine strategies for creating demand* for the quit line, keeping in mind how different strategies may affect its role and impact (see Section 6. *Creating a demand for service* for further details).

Step 7. *Determine what sponsors could fund and oversee the quit line.*

1) **Develop an estimate** of what funding level range is appropriate to the quit line's intended role in the overall tobacco control programme.
2) **Identify a reliable funding source** (note: existing quit lines with insufficient funding to fully realize their objectives should periodically review the possibilities for additional funding sources that have not been tapped).
3) **Create a start-up and ongoing budget**.

It is very important to understand how much quit-line services will cost to deliver, and how much money is potentially available through various sources to fund them (see Section 4. *Funding*). There may be potential sources of funding that are not immediately apparent. Look beyond the existing tobacco control budget, examining possibilities such as new tax revenue, health-care services reimbursement, and other public health and government programmes.

Step 8. *Determine a project management plan for implementation*. Setting up a robust quit line is a complex undertaking. Long-term success is more likely if a systematic approach is taken in coordinating the various elements required to launch the service. This includes the identification of minimal standards, the critical milestones, interrelationships between elements, clarification of the role of those working on the project, and a timeline. Managing the process of the creation, launch and growth of a quit line is as important to success as the specifics of the services that are planned to be delivered (see Appendix 2 for more information on how project management can be used to simplify quit-line set up and ensure success).

Step 9. *Determine what organization will deliver services*. Approach this creatively and systematically to be sure you have identified the best possible group to deliver the services. Regardless of whether the service operator could be one of several government agencies, NGOs or private companies, consider creating a competitive process to select a quit-line operator and a media/promotions contractor.

1) Consider a competitive bidding process (see Appendix 3 for a sample of the Request for Proposal form).
2) Write contracts with the selected providers for delivery of services.
3) Closely monitor the contracts to ensure adherence to standards and deadlines.

Step 10. *Determine who is accountable for ensuring the success of the quit line*, including both its operational and strategic success in fulfilling its role within larger tobacco control efforts (Box 4).

3.2 QUIT-LINE MODELS AND OPERATIONAL STRUCTURE

Several different approaches to setting up a quit line are explored here, including the advantages and disadvantages. Additional recommendations for quit-line management and operation are also provided.

3.2.1 Models

Quit lines have been created and operated both as a part of a broader service (such as a health-related hotline) and as a single-issue tobacco-specific service.

3.2.1.1 Quit lines as part of a broader service

Some quit lines are embedded in larger call centre environments that are performing other services, for example inside government-run call centres for broader health services or private call centres offering many different types of services to purchasers (Box 6). This model enables quit lines to take advantage of economies of scale and existing infrastructure.

Box 6. Case example: Essentiagroup, the United Kingdom

The Essentiagroup, one of the organizations providing quit-line services in the United Kingdom, provides multiple services from a large call centre in Glasgow, Scotland. In addition to providing services to tobacco users, they also provide health and wellness assistance through contracts with the Central Office of Information, Department of Health and the Scottish Government, as well as non-health social services, such as the Home Heat Helpline, that helps those who are having problems paying their heating bills, and Skills Development Scotland, which puts people in touch with education and training opportunities.

They are able to train people across these different lines of service, making it easier to handle increases and decreases in volumes, and to develop robust training and quality assurance systems. Because of the large volumes of calls, such quit lines can afford larger, more sophisticated telephony and computer systems.

Challenges to this model occur when quit lines are embedded in larger call centres or service organizations where they run some risk of playing a secondary role to the needs of the larger organization or the largest commissioning agency. There may be pressure for the quit line to conform to how business is conducted for other services. For example, if the quit line is embedded in an information and referral centre with very high volumes, very brief time on the phone, and no follow-up, there may be pressure to apply this type of call-handling model to quit-line calls. This risk can be mitigated by ensuring that the senior leadership of the larger organization clearly understand the unique needs and characteristics of quit-line service delivery.

3.2.1.2 Quit lines as a single-issue tobacco-specific service

Due to the challenges associated with embedding quit lines in broader services, some quit lines operate as separate services, focusing entirely on tobacco services. The biggest challenge to this approach, especially initially, is that the infrastructure costs of setting up and operating a call centre are significant (Box 7).

Box 7. Case example: Group Health Cooperative, the United States

Group Health Cooperative, a large integrated health system in the United States, operated a quit line for its members and some states. The quitline relied on other resources also used by other groups inside the health system, such as call centre technology serving a large nursing help line. The larger infrastructure was invaluable during the start-up and growth phase of the quit line. The unit providing quit-line services benefitted significantly from the existence of telephony systems, computer support, contracting and legal services, as well as the clinical personnel and management support and experience in the health system.

However, as the quit-line service grew, they found that it was very challenging to get some of their needs prioritized. For example, it was difficult to convince the larger call centre to change the rules that determined how calls from various numbers were routed, and the type of messages that were given, even though this was critical for the quit line. The other users of the system did not require rapid changes in these rules, and their needs were a higher priority. In addition, the accounting system set up to support health-care clinics did not work well for the types of contracts the quit line supported. These types of factors ultimately led to an amicable administrative separation from Group Health and the establishment of a separate call centre (Free & Clear).

Group Health Cooperative has been a valued customer of Free & Clear since this administrative separation. Both parties have maintained an active partnership in providing the best possible experience to members of Group Health's tobacco cessation services.

3.2.1.3 Country versus state/provincial quit-line service

Most small- and medium-sized countries have created quit lines that function at national level. Others, such as Australia, Canada and the United states, rely on regional, state or provincial quit lines. Some have hybrid models.

The advantages of providing a national service include: (i) only having to create and maintain a single call centre infrastructure; (ii) ensured access to the same services throughout the country; and (iii) ease of coordinating and executing national promotional media campaigns referring to the quit line.

The advantages of providing services at the state/provincial level include: (i) increased ability to customize services to the needs of a specific geographical population; (ii) greater awareness of and relationships with local resources, such as health-care and other state-level programmes; and (iii) greater variation in services which may allow for experimentation.

Some countries, such as the United States, have created hybrid models where each state or province is responsible for its own quit-line services, but the national government assists with some of the costs, puts strong pressure on the states to offer quit-line services, provides a centralized call number, and encourages collaboration between states on quality and research.

The suitability of the model depends on the characteristics of the country considering a quit line.

3.2.2 Quit-line management

3.2.2.1 Outsourcing quit-line services

Government agencies (or other entities) sponsoring a quit line sometimes choose to outsource (subcontract) service provision to an outside service provider. Although this means that the sponsoring/funding agency loses some direct control, potential advantages to outsourcing quit-line services, include:

- sophisticated call centre expertise and infrastructure
- clinical counselling expertise
- service provider assumes some of the financial risk for variable call volumes
- start-up costs may have already been paid
- ease of expansion and contraction.

Situations where having the sponsoring agency operate the quit line directly (Box 8) include:

- if there is an existing call centre capacity within the sponsoring agency, for example, if the funder already runs a call centre for mental-health services;
- if there is existing tobacco treatment expertise within the sponsoring agency;
- if direct control of quit-line operations by the funding agency is an important political or cultural requirement.

Box 8. Example: sponsoring agency operates a quit line

A government agency with a potential population of half a million smokers has received permission to start a quit line with a small start-up grant, but no real budget for ongoing operation. The director of the agency is strongly in support of trying to make it happen, "if we can run it with existing staff and resources." She is hopeful that if they can show it is effective, there may be more funds in a year or two to expand. They already operate a countrywide crisis line for suicide, alcohol and HIV with 10 phone coaches. There is excess capacity in the crisis line, and several people in the agency have already carried out tobacco counselling in a clinic. In these circumstances, the agency decided it made sense to begin by providing the service "in house". They made sure that the phone coaches that would provide quit-line counselling received a week's training on tobacco coaching run by a quit line in a neighbouring country, and located protocols to support the coaching. As the service grows, their decision can be re-visited.

Situations where outsourcing (Box 9) makes sense include:

- if a high volume of calls is anticipated;
- if considerable variability in call volume is anticipated (it is challenging to efficiently staff a quit line with wide fluctuations in call volume);
- if there is no in-agency expertise of operating a call centre, including both technical and human;
- if there is no in-agency expertise on how to deliver counselling;
- if the outsourcing of services is an important political or cultural requirement.

Box 9. Example: outsourcing in the United States

Each state in the United States has a separate state-sponsored and funded quit line. Many of the state quit lines handle dozens of calls a day and, during media campaigns, calls can spike into the hundreds. The quit lines are highly visible politically, and service and clinical quality are critical for their continued funding. Most state health departments now outsource the operation of their quit lines to service providers, which range from state universities to hospital call centres to private quit-line companies to other non-profit agencies. Some service providers serve a single state, and some serve multiple states (McAfee, 2007).

3.2.2.2 Who provides the service?

Quit lines can be operated by a wide variety of providers, including universities, health-care institutions, governmental and philanthropic organizations, as well as private companies. See Table 1 for some of the characteristics of these different providers

Table 1. The case for and against the institutions providing quit-line services

Type of institution	For	Against
Universities	Strong research/evaluation capability, access to counselling expertise	Less incentive to expand service, complex bureaucracies
Health care	Expertise in clinical care, used to helping large numbers	"Medical" model rather than public health
Governmental	Funder directly oversees delivery	Less competition may diminish efficiency
Philanthropic	Fewer constraints on nature of service	Unlikely to have expertise in complex service delivery
Private companies	High service levels, incentive to increase use, flexible	Profit motive may get in the way of public health goals unless incentives are aligned

3.2.3 Operating challenges

There are a number of major challenges to the delivery of quit-line services that have been addressed successfully in very different settings around the world.

a. Enrolment protocols. How do callers sign up? What data should be collected to support the operation as well as any additional data to support evaluation or clinical research?
b. Counselling protocols. How do we decide what to do?
c. Quality of service. How do we ensure that what we want to happen is happening?
d. Hours of operation, office space, technology (telephony and computer requirements).
e. Staffing and planning. How do we make sure we have the right number of people at the right time with the right skills to handle normal call volumes, and how do we handle fluctuating demand efficiently?
f. Recruiting and training.
g. Managing workflow.
h. Reporting.

Each of these challenges are explored in some detail below.

3.2.3.1 Developing, testing and implementing new and revised protocols

Once you have decided to create a quit line, you have to decide what each participant will, ideally, experience: what sort of counselling will be provided; how will the programme be structured (timing, frequency and intensity of counselling); what is the expected outcome of each interaction; and what data should be recorded for each interaction?

Telephone counselling protocols are the expectations and guidelines that structure what will occur on each interaction. They also help structure training and quality assurance efforts.

3.2.3.1.1 What is a protocol?

Protocols spell out what is supposed to happen when a caller reaches the quit line. This can include many different aspects of the call experience.

- How the phone is to be answered?
- What initial questions should be asked?
- What data should be recorded?
- Triage rules around types of service to be offered.
- Counselling elements.
- Other call functions such as referrals, medication, materials, Internet, and study offering.
- How to close a call.
- Rules for follow-up, e.g. whether to offer future calls, timing of calls, method of future connection (appointment, quit-line calls, participant calls, etc.), content of future calls.

Some elements should be very specific, such as the type of data that should be recorded, whilst others should be more general such as the order of counselling elements.

How can a country that is just getting started with a quit line best develop quit-line protocols? The creation of detailed quit-line protocols can be very time consuming, take a great deal of effort, and will evolve over time with experience. The first decision is whether a country wants to develop structured counselling protocols from scratch, or locate and adapt existing standard protocols.

An example of a high-level protocol is included in Appendix 4, with information on how to obtain more detailed information. Many existing quit lines are willing to offer advice on protocol design.

3.2.3.1.2 How to test and revise protocols

Quit lines should establish explicit processes to identify and incorporate new counselling strategies. New ideas can come from: staff based on their experience; participation at scientific conferences; ongoing literature reviews; a rigorous review of internal experience; and consultations with outside experts. Increasingly, regional consortia of quit lines are cooperating by sharing expertise and experience. It is important to explore new ideas to determine whether they fit into the existing framework, and establish how they might improve quit-line operations and be incorporated into training programmes. There are specific criteria that can be used for testing and revising protocols.

- Is there evidence that the new approach will improve quit rates, satisfaction or reach of the quit line?
- Can the new approach be implemented without disrupting quit-line operations?
- Will the new approach make the quit line more costly to operate, or more efficient?
- How does this idea compare with other possible changes?

It is often a good idea to implement new approaches in a staged manner, rather than across the board. For example, a new approach to handling calls or counselling can be tried with a small group of counsellors rather than all of them, keeping close track of how the counsellors feel it is working and observing how it is impacting on the service.

Advisory board

Many quit lines establish an advisory board of experts to help review their protocols and evaluation data, provide suggestions regarding key issues and plans and, based on the evidence and their experience, make recommendations on the quit line's focus in the future. An advisory board can be made up of academics who have worked in tobacco control and treatment or related fields, people with experience of quit lines from other countries, and policy experts (Box 10).

Box 10. Case example: the role of a quit line advisory board

An advisory board can be convened by various organizations. For example, in the United States, large service providers often have advisory boards, many state health departments have advisory boards for their tobacco programmes, and the North American Quitline Consortium (NAQC) has an advisory board.

In general, these advisory boards meet at least once a year for a day. Supplemental teleconferencing meetings are often held, and members may also be expected to provide some brief individual consultation involving, for example, reviewing documents. It is very important to set out clearly the amount of work that future board members will be expected to do. In some cases, board membership is entirely voluntary and, in some cases, board members are paid an honorarium.

Board meetings are most successful when the agenda is carefully planned and focuses on the most important elements that can be learned from the board members, rather than simply presenting what the quit line is doing. Ideally, some materials are sent to the board members for review ahead of time. Agendas should include some presentation of the quit-line's activities, but plenty of time should be allocated for members' opinions.

"Secret shopping"

One under-used method of identifying problems with quit-line services is "secret shopping". This is a method often used by call centres, retail stores and social services.

A secret shopper (or shoppers) calls the quit line with a specific "story" and observes how their case is handled as it unfolds. They take careful notes regarding how the call is handled (sometimes they record the call). Generally, there will be a set of quality indicators that they will specifically watch for and grade, such as customer service experience, rapport building, specific elements of counselling, and appropriate referral and follow-up.

Generally, transparency when conducting secret shopping is advised to avoid ill feelings. This can include a funder of a quit-line service informing the service provider that they will be doing some secret shopping during the year, or a quit-line provider letting its staff know that part of the internal quality assurance monitoring includes secret shoppers.

3.2.3.2 Ensuring service quality

Having a great protocol is only the beginning. Translating a protocol into a fully functioning quit line requires many more steps (see Appendix 10 – *Table 12. Minimum standards for Australian Quitline Services*). One important element of the process is putting in place a plan for assuring and improving the quality of services. This plan should track key clinical and service performance metrics (important measurable processes and outcomes), including both what metrics the quit line will measure, and the setting of performance targets (Box 11).

Box 11. Example: key metrics for a quit line

- Provide quit-line service to at least 3% of smokers per year (note: this requires knowing how many smokers there are in your targeted population).
- At least 90% of calls to the quit line are answered within 30 seconds (requires a telephony system that can provide this report).
- Quit rate at six months of 30% among responders to a follow-up survey.

Consistent under-performance on any metric should trigger a root-cause analysis to identify why the target is not being reached.

Because metrics and statistics can be overwhelming to produce and interpret, it is helpful to identify a limited number of core metrics to monitor, attempt to make their updating as automatic as possible, and be sure that the people in the quit line (and its funding organization) receive and review the metrics on a regular basis (such as monthly or quarterly).

Quality of counselling calls is one of the most important quality components. Specific internal procedures for reviewing calls are included in Appendix 5.

3.2.3.3 Hours of operation, space needs and technology (telephony and computer requirements)

3.2.3.3.1 Hours of operation

There is broad variation in hours of operation of quit lines worldwide, ranging from a few hours a day on weekdays to 24 hours a day, seven days a week, 365 days a year. Most quit lines do not operate with 24 hours a day, seven days a week live access unless they are embedded in a larger call centre that already offers this level of service. There are very few tobacco users who want or need help at 3:00 in the morning. However, the more time counselling services are available, the more convenient it is for callers and the stronger the perception that the quit line is attempting to meet the needs of callers (although offering broader hours of operation also increases costs).

Recommendations

- Reasonable operating hours should be identified based on when tobacco users are most likely to call (typically morning and evening hours).
- Identify these hours of operation on printed materials.
- During periods when calls are not answered live, recorded message should be provided indicating when live counselling is available. Recorded messages should be available at all times. Consider allowing callers to leave their name and number for call back, but be sure your staff actually calls back in a timely manner.
- Once patterns of high call volume are clear, the quit line should be kept open during peak times.
- The quit line should be staffed for at least five days a week for at least eight hours a day; ideally more.
- Consideration should be given to staffing that overlaps with most common work/home times – i.e. from 8:00 to 19:00.

In Australia, the approach is the use of a call-trafficking service for most states. A national commercial call centre answers all calls, then forwards them to either the state-based provider for counselling, or sends out a quit kit. This has proven useful during periods of high call volume and for after-hours message taking.

3.2.3.3.2 Space needs

The service should operate in a safe and secure location, which meets relevant occupational health and safety standards.

The call centre environment should be set up to:

- ensure counsellors can talk and listen to callers without excess noise
- provide for confidentiality of written and computer records
- allow for growth in the number of staff.

3.2.3.3.3 Telephony requirements

Quit lines that are handling a significant volume of calls require different types of call- centre technology to function efficiently. The following functions are important.

- A private branch exchange (PBX). This includes a communications server that can be connected to hundreds of telephones simultaneously. Quit lines that are part of a large organization with an existing phone system can usually be integrated into the larger system (CDC, 2004).

- Call queuing and routing. The phone system has to be able to handle a large number of simultaneous calls, including following rules on how calls from different areas or different numbers will be prioritized and routed. Some of these and other similar functions are handled by an automatic call distributor, which can be programmed to follow complex rules on who receives which types of calls.
- Phone lines capable of handling high volumes of calls. There are different types of phone lines with different capabilities. For a quit line with large volumes, high-speed lines such as T1 lines may also enable much lower long-distance rates (Anderson & Zhu, 2000).
- Real-time monitoring. Software can display what is happening in the call centre, such as how many callers are on hold and how many counsellors are on the phone. This enables staffing decisions and routing determinations to ensure service quality.
- Reporting capability. Software can create reports that track important elements both at the level of the call centre and the individual counsellor. For example, productivity metrics for individual counsellors can be tracked, such as time on live calls and number of calls. Statistics, such as abandonment rates, can also be generated at the call centre.
- Call monitoring. The ability to monitor calls for quality review as well as to support counsellors in crisis situations.

3.2.3.3.4 Computer system requirements

Unless the quit line is very small, it will benefit from a computer system to assist with the intake and counselling process, as well as data collection and report generation. Many quit lines create a form of "user interface" where the intake and counselling staff are cued as to what questions to ask, and given some support for providing the counselling intervention. The computer system can then run analyses and generate automated reports using special reporting software. Unfortunately, there is no currently available "shareware" application available that performs these services specifically for new quit lines. Most quit lines use common basic software programs such as Microsoft SQL Server to create their systems, but have invested in programming to create custom solutions to their quit lines requirements.

Quit lines hold large amounts of information about individuals. As quit lines are set up, policies on the computerized storage of participants' data and on staff training should be carefully developed to ensure that participants' right to privacy is maintained.

3.3 STAFFING AND CONTRACT OVERSIGHT

3.3.1 Staffing

In many instances, the agency that is sponsoring and funding the quit line will outsource the delivery of services. In this case, details of operations, training and staffing may be the responsibility of the operator, with the sponsoring agency primarily responsible for setting goals, creating the contract, picking the operator, and monitoring processes and outcomes. However, even if you are the person in a government agency that is contracting out the services, it is important that you have some familiarity with how a high-quality quit-line service is staffed, in order to oversee the quality of the service provided. Staffing considerations are outlined below.

- Clearly defining and documenting duties, roles, rights and responsibilities of staff.
- Size of staff is dependent upon number of lines available, hours of operation, anticipated demand based on promotion and referrals, and size of smoking population: a new quit line can have as few as two staff members (intake-counsellors) when first created. Some quit lines serving larger countries or multiple regions employ hundreds of people. There are basic tools available that can be downloaded free from the Internet that help calculate staffing requirements based on certain basic assumptions (see Erlang C calculators at: *http://www.erlang.com/calculator/erlc/*).
- A developed quit line may need a variety of staff expertise (Anderson & Zhu, 2000).
  - A receptionist/administrative aid.
  - Intake staff. If tobacco quit-line services are part of a broader hotline, intake staff can be shared between the different lines. Some quit lines ask counsellors to perform the intake function, which can work well under certain circumstances, but is challenging because of the extra amount of time they must spend with each caller if volumes are high or variable.
  - Trained counsellors. Specific counsellors trained in smoking cessation skills.
  - Supervisory staff and a network manager to monitor and supervise counsellors.
  - A head of the quit line (operations manager).
- Larger quit lines or quit lines with ambitious agendas that aim to increase reach, quality or research may also have:
  - clinical advisers (i.e. psychologist/physicians) to train/enhance the skill base of the quit line;
  - an evaluation manager to oversee data management, analysis and report creation;
  - client services managers to work with the institutions that are contracted to provide services;
  - a call quality manager;
  - a training manager.
- Criteria for employment (recruitment). Selection and recruitment policies, and procedures for each category of staff should be developed. Close attention should be paid to the qualifications of the counsellors.
  - Current tobacco users should be excluded. It is too complicated for someone who is still smoking to counsel others reliably and consistently about how to quit. Most existing quit lines require counsellors to have been tobacco-free for at least six months to two years.
  - A history of counselling experience or natural counselling skills is an important asset. The employment interview can include a "mock" interview so that the person making the hiring decision has direct experience of the applicant's skills.
  - A candidate's capability to do the required data entry while counselling should be determined.

Some quit lines use volunteers or college interns who are paid a minimal stipend to help provide counselling or other services. College students who want to acquire counselling experience, retirees and successful quitters may volunteer. Incorporating some volunteer or intern assistance may help lower the cost of delivering the quit-line service. However, care should be exercised to ensure volunteers are committed to providing high-quality services. A minimum commitment of time per week or month, and a minimum length of service, such as six months or a year, should be required to justify the initial commitment the quit line must make to adequately train and supervise volunteers. They can also be assigned to less complex tasks, such as registering callers or making brief call backs.

3.3.2 Counsellor training

Training of counsellors is a critical component of quit-line operation. The structure and length of training is dependent upon the nature of the role of the counsellors, past experience, and how much support (such as online prompting) is available. Worldwide, training of new counsellors varies from one week to six weeks. Unless counsellors have significant prior analogous experience, or their role is going to be circumscribed (i.e. very brief supportive advice rather than true counselling), training should be at least two weeks. Counsellor training should be both informational and experiential. For example, trainees can listen to calls and role play with each other. Orientation to record-keeping requirements, caller confidentiality procedures and standards, and other operational aspects should be incorporated into the training.

New trainees should be closely supervised for a while after formal training. This should include doing initial calls with live supervision, followed by the review of recorded calls (if available) and record keeping.

At the highest level, training should address (CDC, 2004; World Bank, 2004):

- psychology, epidemiology and biology of tobacco use
- general principles of counselling
- effective counselling techniques for motivation and behaviour change
- quitting strategies
- challenging counselling scenarios
- multicultural counselling
- effective case management practices, including use of protocols
- health issues related to tobacco use and cessation
- knowledge of medication aids.

Detailed information about training approaches is included in Appendix 6, including a sample training course planner and outline as well as adult education principles.

3.4 MEDICATION

The third WHO recommendation on offering help to quit tobacco use is "access to low-cost pharmacological therapy". Quit lines have the potential to assist with this recommendation and benefit from the incorporation of medications into their protocols. However, the use of medication should be weighed carefully with issues of cost, safety and policy.

Many quit lines in Europe and the United States, as well as in Australia and New Zealand, provide some level of medication support for quit-line callers. Most quit lines at least provide detailed information about how the medications work, the arguments for and against the various types of medications, potential side effects and how to manage them, as well as details on where they can be obtained. A few quit lines provide a full course of medication to all interested callers, with as many as 80% of callers receiving it. Because of cost concerns, many quit lines only provide shorter courses (i.e. two-week "starter kits") of over-the-counter medications, encouraging users to purchase more medication (or obtain it from the health system, if covered). Medication is either sent directly to callers via the mail, or eligible callers are sent pharmacy vouchers that can then be exchanged for free medication at a local pharmacy.

Some quit lines only provide full courses of medication to populations of particular interest to public health, such as the poor or those without access to health insurance. Because of the expense and concerns over wastage, many quit lines only provide medication to those planning to quit in the next 30 days. Some also only provide medication during brief time-limited "campaigns", i.e. for one to three months, primarily to increase quit attempts and calls (Box 12). For those quit lines who consider providing a full course of medication (e.g. eight weeks of nicotine patches), some thought should be given to whether to provide the full course of medication at once or to provide the first four weeks and then link the second four weeks to the completion of a later counselling call.

The use of medication associated with a quit line may be impractical or inappropriate, especially in some developing or transitional countries, for a number of reasons:

- medication may be more expensive compared to counselling, given the lower labour costs in developing/transitional countries
- medications may not be available in all countries
- even if available, regulations may prohibit any form of distribution linked to a quit line.
- medication use may be less appropriate culturally.

However, there are a number of additional benefits to the integration of medication use into the quit-line setting that are worth considering.

- Knowledge of the availability of free medication through a quit line, even in small quantities, has proven to be a dramatic promotional tool (see Section 6.2 *Promotion of quit line services*) and can be cost-effective.
- The availability of medication can increase a health-care provider's interest in referring patients to a quit line.
- Strong evidence indicates that medication provided through a quit line, both over-the-counter and prescription, increase quit rates compared to counselling alone (Hollis et al., 2007; Swan et al., 2003; Cummings et al., 2006).
- Further strong evidence suggests that the provision of brief instruction in proper use, assistance with side-effect management, adherence encouragement, and concurrent behavioural support provided by quit-line counsellors increases quit rates compared to medication alone (Fiore et al., 2008). This could be important given that most cessation medication is used in settings with much less education and support than is provided in the trials proving their effectiveness.

Frequently Asked Questions (FAQs) about medication use in quit lines.

- Is it legal? Countries vary dramatically in terms of what is allowed regarding the provision of medication. Its feasibility will depend on the status of the stop-smoking medications (i.e. whether they require a prescription or not) and the laws and regulations regarding shipping through the mail, across geographical boundaries, etc.
- Is it safe? When used with carefully constructed protocols and with medical back up. Hundreds of thousands of people have received stop-smoking medications safely through quit lines.

- What are the dangers? Nicotine replacement therapy is widely accepted as being very safe and is available over-the-counter in many countries. However, protocols need to address areas of concern, such as pregnancy, recent heart attack, and history of severe allergic reaction. Prescription medications are more complex to administer. If offered, they must be provided with medical oversight consistent with a countries' regulatory requirements, and ongoing support is recommended to assess for infrequent but potentially serious side effects. There are various ways this can be accomplished, usually by requiring quit-line callers to obtain a prescription before receiving a voucher or medication.
- Will people really use it? What about wastage and resale? With proper decision support and guidance by well-trained phone counsellors, most people use the medication provided. Counsellors can be trained to review simple solutions in cases where callers discontinue medication due to minor side effects. There is no evidence of the widespread re-sale of the medications sent by quit lines. However, systems should be in place to guard against systematic re-sale (such as cross-checking for multiple orders sent to the same address).

3.4.1 Training implications for counsellors

All quit-line counsellors should receive training in evidence-based pharmacotherapy options. Counsellors should be able to provide basic decision support by describing how each medication available in a country works, the arguments for and against the use of each medication, how to use each medication correctly, and be able to solve minor side effects. Callers who have serious medical conditions can be referred back to their health-care providers to decide whether there are significant risks associated with using a particular medication (see Section 3.3.2 Counsellor training).

3.4.2 Counsellor support

Treatment protocols including decision support for cessation medications should be tightly scripted to ensure caller safety and to reduce risks to the quit line. The protocol can identify medical conditions and medications that may prevent the quit line from providing a particular medication. Instructions for use and potential side effects should be made available to counsellors for quality control.

Box 12. Case example: free nicotine replacement therapy campaign in the State of Oregon, the United States

In 2005, the State of Oregon in the United States ran a three-month campaign offering NRT (patches or gum) to any caller to the quit line. There was no paid media, but the local press covered the event. The quit line also encouraged word-of-mouth promotion by including "tell a friend" cards in the mailings to callers. Callers who had health insurance could receive two weeks' free NRT, delivered via the mail. Callers without insurance were selected randomly and received either two weeks or eight weeks' treatment. All callers receiving two weeks' NRT were encouraged to purchase more (which included their being sent a paper bank to deposit their savings from not buying cigarettes). The results were impressive. There was a 15-fold increase in calls to the quit line during the three-month campaign, and call levels remained elevated for months afterwards. A significant improvement in quit rates was seen when pre-campaign quit rates were compared to campaign quit rates. A cost-effectiveness analysis found that the availability of NRT was a very cost-effective way to promote quit-line calls (Fellows et al., 2007). In the uninsured, those receiving eight weeks of NRT were more likely to quit than those receiving two weeks (McAfee et al., 2008).

4. Funding

A key step in establishing a national free quit-line service is to identify a reliable funding source and secure sufficient financing to support the quit line's intended role in the overall tobacco control programme. Every country's experience is different, but every quit line has struggled to obtain and sustain adequate funding.

Most national or provincial quit lines are funded either entirely by the government or by a combination of governmental and nongovernmental funding.

Governmental funding for quit lines can come from a number of different sources:
a. ministry of health's general public health funds
b. ministry of health's funds for tobacco control
c. national or provincial health insurance funds
d. funds raised through tobacco taxes (often channelled through one of the above).

Less-common nongovernmental funding can include:
a. medical foundations
b. trusts
c. national lottery boards
d. NGOs
e. pharmaceutical companies
f. private companies
g. employers
h. national and private health insurance systems
i. individual donations
j. private-public partnerships
k. academic institutions
l. individual payments for a portion of the services.

4.1 PUBLIC-PRIVATE PARTNERSHIPS

There are increasingly sophisticated public – private partnerships extending the depth and breadth of funding and services offered by quit lines. Some government-sponsored quit lines have partnered with health systems that provide or cover phone-based counselling and medication so that the quit line can refer people to other services, or provide the service and bill the system (CDC, 2004). As described in Section 7. *Integrating quit lines into health systems*, health systems have also proven to be a powerful source of referrals, which can reduce promotional costs.

4.2 USER FUNDING

Requiring the tobacco user to pay, even partially, for counselling, regardless of the setting, has generally proven to be a major impediment to utilization, even in high-income countries (Curry et al., 1998). This is likely to be even more the case for quit lines in low-income countries. There has been modest success with sharing the cost of cessation medications, where quitters have been willing to pay a portion of the cost, or to purchase refills after an initial "starter kit". However, even if callers to a quit line are willing to pay a small amount for services, collection can be a major technical challenge requiring a higher level of call centre sophistication. This can be achieved in countries where telephone credit card transactions are frequent. But they are complex to administer unless a call centre that already has the technology and systems in place to manage them operates the quit line. For medications, another option is for the quit line to provide a voucher that can be redeemed at a pharmacy for a reduced price. For counselling, another option is a pay-per-minute arrangement such as is done for some other types of information services. However, there is little doubt that anything that requires out-of-pocket costs to the quitter will be a major impediment to use, even when basic phone charges are included.

4.3 CREATING A BUDGET

Annual budgets for quit lines range from several thousand to millions of US dollars. In order to determine a budget, you will need to estimate how many calls the quit line will handle, what types of services will be provided (i.e. single calls, multiple call backs, medication support, printed mailed materials, etc.), and the likely cost of each service. There are two categories of costs involved in providing quit-line services.

Start-up costs:

1. planning and project management
2. purchase of telephony and computer infrastructure (unless the service is embedded in an existing call centre, or contracted out)
3. creation or purchase/modification of counselling protocols
4. hiring and training staff.

Ongoing costs:

1. fixed costs (present regardless of call volume)
   (a) space rental
   (b) dministrative services
2. variable costs (may increase/decrease depending on volume)
   (a) telephone charges
   (b) promotion (media, outreach, brochures, posters)
3. mixed costs (may be fixed or variable depending on set-up)
   (a) counselling staff salaries or vendor fees for call management.

For a new quit line, a rule of thumb is to allocate at least one US dollar for quit-line operations for every US dollar spent on promotion. Over time, the amount needed for promotion should normally decrease markedly, as word of mouth, community and health-care referrals increase. Most quit lines can expect to spend between 65% and 80% of their operational budgets on intake and counselling.

Ideally, funding for quit-line services should increase with demand. If the quit line has to operate with a flat budget regardless of volume, this discourages the quit line and the agencies promoting it from attempting to increase utilization. It also means that, as utilization increases, the level of service inevitably decreases. Some quit lines have had services for some or all callers reimbursed under national or private health insurances. However, most quit lines, especially initially, receive fixed funding.

Funding bodies may link financing to incentives that lead to the achievement of defined strategic objectives. For example, if a strategic objective is to increase the use of proactive call services to the quit line, then paying a service provider based on the number of calls completed makes sense. If, on the other hand, the focus is on managing services within a fixed budget to serve the greatest number of people, then paying a service provider a set monthly fee may be more appropriate, thus requiring them to triage calls to lesser or greater levels of service depending on call volumes.

5. Range of services

It is important for a quit line to identify the range of services it will offer to callers, who will have a wide array of expectations and needs. However, resources are almost always limited. There are very few quit lines with sufficient funding to fully deliver the care they consider is most effective for all potential users. Most quit lines end up delivering a set of services that is a compromise between what they would ideally like to provide and what they can provide based on their budgets.

In order to establish the range of services to be offered by your quit line, review the determinations made in "Step 4 Determine the goals of the quit line" (Section 3.1 *Ten steps in setting up a national quit-line service*). What did your assessment of the needs in the population reveal? What are the goals for the quit line, considering how it will fit within existing and planned tobacco control efforts and existing cessation services? Specifically, how important is broad reach into the population of tobacco users versus ensuring the highest possible quit rate for callers? The next critical step is to determine both your initial and potential available budget.

This will help determine the range and focus of evidence-based quit-line services.

Most existing quit lines provide at least the following core services outline below.

5.1 TELEPHONE COUNSELLING

Counselling is at the heart of quit line services and is usually the most expensive component. There is considerable variation in the number of calls provided, as well as the amount of time spent on individual calls. At a minimum, a single counselling session should be provided free-of-charge. Randomized trials that produced a difference between a single call and printed materials generally provided 25 to 45 minutes of counselling. Proactive follow-up calls increase effectiveness. Follow-up calls can be shorter than the initial counselling call (10–20 minutes). In circumstances where reach to promote quit attempts is more critical than maximizing quit-rate effectiveness, even shorter calls may be appropriate. For example, during very high-intensity campaigns with high-call volumes, calls can be truncated to focus more on the provision of information and encouraging a quit attempt. However, this approach is less well studied.

The best way to understand the power of a quit line is to visit a successful one and listen to calls. Many visitors are initially skeptical about the ability of a counsellor talking on the phone to help someone trying to change a complex addictive behaviour. However, once they have listened to a few calls, most people grasp the power of this approach.

They say things like "Wow, I had no idea you could connect with people so quickly, get them to talk about their challenges, and help them come up with a plan and solutions." What are the principles that enable phone counselling to work?

This section presents some background based on the type of counselling provided by many quit lines, which includes randomized trials establishing their effectiveness. One important caveat is that there is a lot we do not know about the elements of counselling that are critical to success. There have only been a handful of trials comparing one counselling technique to another, and most of these have been equivocal in their results. For example, in the United States, a recent trial in the New York State quit line compared two different counselling approaches: gain-framed (focusing on the benefits of quitting) versus standard messaging. The gain-framed approach resulted in better initial quit rates, but the difference had disappeared by the three-month follow-up (Toll et al., 2010). However, it appears that generic contact alone is not enough. A quit line in the United Kingdom attempted to duplicate results from one of the original quit-line trials conducted in the State of California, in the United States, but provided no continuity between calls and minimal focus (Gilbert, 2006). This trial did not produce an improvement in quit rates.

5.1.1 Practical and theoretical approaches

There are two ways that quit-line counselling practices have been developed: (i) by looking at what has been shown to work empirically in tobacco treatment (regardless of setting); and (ii) by deriving intervention content based on several theories of how people change their behaviour.

5.1.1.1 Practical approaches

One of the most extensive reviews of the evidence base for what works in cessation counselling was conducted by the US Public Health Service for their report Clinical Practice Guideline: Treating Tobacco Use and Dependence: 2008 Update in which multiple topics ranging from specific counselling techniques and medications to system changes are addressed. A meta-analysis that condensed many trials found the practical counselling and support elements in tables 2 and 3 below improved quit outcomes.

Table 2. Common elements of practical counselling (problem solving/skills training)

Practical counselling (problem solving/skills training) treatment component	Examples
Recognize danger situations – identify events, internal states or activities that increase the risk of smoking or relapse	• Negative affect and stress • Being around other tobacco users • Drinking alcohol • Experiencing urges • Smoking cues and availability of cigarettes
Develop coping skills – identify and practice coping or problem- solving skills Typically, these skills are intended to cope with danger situations	• Learning to anticipate and avoid temptation and trigger situations • Learning cognitive strategies that will reduce negative moods • Accomplishing lifestyle changes that reduce stress, improve quality of life, and reduce exposure to smoking cues • Learning cognitive and behavioural activities to cope with smoking urges (e.g. distracting attention, changing routines)
Provide basic information about smoking and successful quitting	• The fact that any smoking (even a single puff) increases the likelihood of a full relapse • Withdrawal symptoms typically peak within 1-2 weeks after quitting but may persist for months. These symptoms include negative mood, urges to smoke, and difficulty concentrating • The addictive nature of smoking

Table 3. Common elements of intra-treatment supportive inventions

Supportive treatment component	Examples
Encourage the patient in the quit attempt	• Note that effective tobacco dependence 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
Communicate caring and concern	• Ask how patient feels about quitting • Directly express concern and willingness to help as often as needed • Ask about the patient's fears and ambivalence regarding quitting
Encourage the patient to talk about the quitting process	Ask about: • reasons the patient wants to quit • concerns or worries about quitting • success the patient has achieved • difficulties encountered while quitting.

Most quit lines work to ensure that these elements are included in the practical counselling provided over the phone.

5.1.1.2 Theoretical approaches

The original quit-line counselling interventions were developed keeping in mind a number of common psychological theories for behaviour change, including "social cognitive theory" (evolved from "social learning theory" with the emphasis on the psychosocial determinants of health behaviour and it is still sometimes called "social learning theory"), the "transtheoretical model" and "motivational interviewing".

Briefly, social cognitive theory emphasizes that tobacco use, even though it involves an addiction, is a learned behaviour that can be unlearned. It has reciprocal interaction with personal factors (personal behavioural capabilities, self-efficacy) and environmental factors (the opinions, thoughts, behaviour, advice and support of the people surrounding an individual). In terms of intervention, it emphasizes increasing self-efficacy and self-reinforcement, competency in self-regulation and coping skills. In the context of quit-line counselling, it emphasizes creating a well-thought-out quitting and relapse prevention plan, the role of understanding and potentially modifying the environment, particularly social relations, to support quitting. Motivational interviewing is a theory-based counselling technique, which focuses on helping clients resolve ambivalence and empowering them to choose to change. The transtheoretical model emphasizes the fact that how we work with a person to support quitting should vary depending on where they are in the quitting process ("stages of change"). Strict adherence to the "stages of change" aspect of the transtheoretical model (which relies heavily on the specifics of when the person is planning to quit) has waned, as evidence suggests it is not predictive of success or failure.

For the theoretically-inclined, references, further descriptions, and tools for some of these theories are included in Section 11. *Resources* and in Appendix 7.

The use of these theoretical approaches when developing protocols and training courses for quit-line counsellors must be tempered by the reality of the quit-line environment. Many quit lines hire paraprofessionals rather than licensed psychologists to provide counselling. The time available to work with callers is more limited than in the types of therapeutic environments for which these theories were developed. However, paraprofessionals

can be trained and supported to provide key elements of these approaches and, when combined with practical advice, problem solving, skills building and social support, callers improve their chances of quitting.

In general, calls should incorporate the following key elements:
• develop rapport with the caller
• increase confidence and motivation
• provide and encourage social support for quitting
• help callers resolve ambiguous thoughts and feelings
• increase caller's sense of self-efficacy
• provide a sense of accountability
• information about the nature of tobacco as an addiction
• education about what to expect and what we know works when quitting.

Other critical aspects of the counselling experience include focusing on:
• encouraging quit attempts
• helping avoid relapse
• helping to "recycle" if they do relapse
• revision of plans based on experience.

The following questions regarding counselling need to be answered by a quit line.
• Will the quit line be reactive-only, or include some proactive (outbound) calls?
• How long will the various calls be?
• If there will be follow-up outbound calls, what will the timing be, and how will they be made?
• What will the counselling content of the various calls be?
• Are there any special population needs that might affect counselling?
• Should the same counsellor talk with a caller for proactive call backs?

5.1.2 Reactive versus proactive

One of the benefits of the quit line focusing on reactive (inbound) call response, especially initially, is that inbound calls can be easier to manage from a call centre perspective. More effort and systems are required to schedule, staff and connect with people on outbound calls. In developed countries, this has become even more challenging as people more routinely screen their calls without answering them, thus requiring the quit line to make more call backs in order to connect. However, proactive outbound call backs unquestionably improve quit rates if provided with structure and focus. Some quit lines end up triaging the provision of proactive calls due to resource restraints, such as by only providing them to callers planning to quit (although this approach has not been tested), or based on public health priorities (such as pregnant women, those with chronic conditions, or the poor).

5.1.3 Length of calls

Most of the randomized trials carried out on quit lines have provided 25–50 minutes of counselling at the initial call, and 10–20 minutes at follow-up calls when provided. A trial conducted by the American Cancer Society found that providing longer follow-up calls did not improve quit outcomes. The number of follow-up calls is more important than extending the amount of contact time per call.

In some settings, much shorter calls are provided routinely, which is often due to resource limitations. However, if calls are averaging only a few minutes, it is important to keep in mind that it is not clear how much value is added. If this type of approach is used, the focus during the brief encounters should be on stimulating and encouraging quit attempts. For example, in situations where people are receiving medication as part of their quit-line service, some quit lines choose to give less counselling, on the basis that the people are receiving a substantial benefit from the free medicine. However, other quit lines take the view that the provision of medication is a significant investment and guaranteeing that people use it correctly, and receive instruction and support whilst quitting ensures that it is not wasted.

5.1.4 Timing of outbound calls

There are several different elements in the quitting process that counselling can support:

- encouraging a quit attempt in the ambivalent
- helping a caller prepare for a planned quit attempt
- helping a caller manage urges, cravings, and negative emotions and thoughts during the early stages of a quit attempt
- providing anticipatory guidance, accountability and reinforcement as the quit unfolds
- dealing with lapses (brief episodes of tobacco use)
- detecting and dealing with relapses by encouraging recycling into another quit attempt.

Timing of outbound calls is based partly on which elements of the quitting process are emphasized. The most common approach currently is to follow "relapse-sensitive" call timing, which emphasizes two to five days. This timing approach is predicated on the fact that the chances of relapsing are highest immediately after a quit attempt (see Table 4).

Table 4. A sample proactive relapse-sensitive call schedule

Call type	Intake/assessment	Pre-quit call	Quit date	Post-quit date call	Quit date follow-up call	On-going call(s)
Timing	Initial intake and counselling call – ideally 1-3 weeks before quit but dependent upon caller	1-5 days before quit attempt		1-3 days after quit date	5-10 days after quit date	Variable 1-3 weeks since last call
Challenge	Usually initiated by caller Most planning to quit, but some already quit, others without a clear plan	Callers' actual quit date often varies from plan		Hard to schedule		Connect rate drops off
Call elements	Collect demographics, smoking and quit history Review programme and what works Explore barriers, strengths, motivation Develop plan Bolster confidence	Preparing for quit Coping strategies Medication use Social support		High relapse risk Urge coping Medication review	Review quit status Challenge motivation Discuss medication and quit plan	Establish new image as a non-smoker Recycle if relapsed

(Additional details of call elements are reviewed in Appendix 4.)

Relapse-sensitive call-back scheduling has many advantages, both theoretical and practical. It provides help when the person is most likely to need it. However, although it strongly supports a specific quit attempt, it will not support future quit attempts if someone relapses near the end of the call schedule, and it cannot encourage them after the call schedule is complete.

An alternate call schedule (recycle-sensitive) spaces out some of the calls over several months or longer to provide long-term accountability and encouragement to make additional quit attempts if there has been a relapse. This method has also been used in randomized trials with demonstrated benefit (Orleans et al., 1991).

There has never been a direct comparison between these two approaches.

A hybrid approach uses relapse-sensitive call timing initially, but also includes the option of initiating another round of relapse-sensitive calls if the person has relapsed towards the end of the initial call cycle, as well as including a follow-up call at six months (often coordinated with evaluation) during which people who have relapsed are offered re-enrolment.

There are several other challenges regarding call timing.

- If your quit line has different personnel performing the initial screening and intake, and the counselling, how will the "hands-off" take place? Some quit lines separate the two functions, collecting basic information and enrolling the person for counselling and then setting up a call back for the initial counselling. There are several rationales for this: first, it provides some scheduling control for the longer task of counselling; and second, if materials are sent out, it gives the caller time to receive and review them. However, most quit lines have found that it can be quite challenging to re-connect with a person, especially if they have not had a real counselling experience. Therefore, the goal should usually be to provide the initial counselling session immediately.

- How should the quit line re-connect with the caller for proactive call backs? Various methods are used and all have advantages and disadvantages.
  - Set a specific appointment date and time, and ask the caller to call back then. When they do not call (and many tend not to), the quit line then tries to call them.
  - Set a specific appointment and call at that time. Often the person will not be available, and additional unscheduled call backs are needed to make contact.
  - The quit line phones the caller back during a "best time" window that the caller identifies, i.e. "We will call you back a day or two after your quit date between 18:00 and 19:00." This has the advantage of providing more flexibility for staffing when the quit line is busy. However, the participant may not be as prepared for the call.

Regardless of how the call back is handled, the quit line should establish clear procedures for how many call-back attempts will be made (at least three), when a message is left, and what happens when a caller is not reached after a cycle of attempts. Simply telling a caller to call back is NOT a form of proactive call back. In general, less than 10% of quit-line callers will call back if the arrangement is left as a vague invitation. Randomized trials proving that proactive call backs improved quit outcomes all involved some form of outbound calling.

5.1.5 Special population needs that might affect counselling

The basic framework and elements of counselling appear to work for most smokers, regardless of age, race, gender or economic status. However, there are some factors to keep in mind for different populations that may improve the experience. It is critical that counsellors receive training on how to be sensitive and empathetic to the circumstances of callers from different backgrounds.

There are a number of specific factors that may benefit from a different counselling approach.

- **Women**. Women seem to have more difficulty in quitting than men, and more difficulty in remaining abstinent after quitting due to biopsychosocial factors, such as fear of weight gain, social support needs, identity issues and depression (WHO, 2007; WHO, 2010b). Telephone counselling may be a particularly appealing intervention for young adult women who stay at home and who work while raising children because it does not require them to leave home. A study of 1992–2006 data from the California Smokers Helpline showed that, except in 1993, significantly more callers aged18-24 were women than men (WHO, 2010b). However, at the moment, there is little research supporting the idea of a different counselling approach for women.

- **Pregnancy**. Because of the urgency of quitting as soon as possible, counsellors should be more forceful about setting a quit date as soon as possible. Setting shorter intervals between calls is important if the caller has not quit. Counsellors should be sure that the woman understands the seriousness of her continued smoking to the health of the fetus, and the immediate benefits of stopping. Decision support on the use medication during pregnancy is complex, and should be handled differently from routine decision support on medication given to the general population. A majority of pregnant women who quit relapse after they have given birth, so it is important to also bolster an intrinsic desire to stop smoking altogether for her health's sake and that of her family's. Consideration can be given to providing booster calls after birth, but this has not been systematically studied.

- **Adolescents**. There is no good evidence of the effectiveness of treatment in adolescents (either by quit lines or other means). It is difficult to recruit them to call a quit line except via mass media.

- **Over 65**. It is often assumed that older people do not want to quit tobacco and, even if they do, that they cannot succeed. However, older people will call, and quit at rates as good or higher than those of the general population.

- **Mental health and substance abuse disorders**. The prevalence of smoking is often much higher in these populations and quitting is more challenging. However, it appears that the desire to quit among those with mental health concerns, and drug and alcohol problems is similar to that of other tobacco users. In addition, medication and behavioural support increases their chances of successfully quitting. There is no evidence that quitting tobacco makes it harder to quit other drugs, although there is some evidence that it actually makes it easier to avoid relapse. Quit lines are currently grappling with whether special protocols should be introduced for these populations. However, it is unclear whether callers with mental health or substance abuse disorders would benefit more if they received a different counselling protocol. It is very important that quit lines do not limit access to their services to those with these conditions, and that they work with mental health and substance-abuse providers to help ensure quitting tobacco is viewed as important.

Creating special protocols for specific subgroups is time-consuming and makes training and the delivery of services more complex. In general, quit lines should focus on providing outstanding customer services and empathetic evidence-based counselling that focuses on a person's learning style. Important characteristics identified in specific groups should be addressed during training.

5.1.6 Language accessibility

The inability to provide services in a caller's native language can be a critical barrier to quit-line access. However, offering services in multiple languages increases the complexity of a quit line. In countries with multiple languages, the quit line should determine how to make its services available to as many callers as possible, in a manner that does not over-burden the call centre. For example, some European quit lines have a pool of German counsellors for countries with minority German speakers. Some quit lines use telephone company translation services, but these are often awkward. In addition to the need to provide easily accessible services in the language of the caller, specific attention to cultural differences can help improve satisfaction, as illustrated in the following case example (Box 13).

Box 13. Case example: California Smokers Helpline with Asian-language phone numbers

The California Smokers Helpline found that providing Asian-language quit lines with separate phone numbers, promotion and intake increased participation to the level of the general population (Zhu et al., 2010). These quit lines also tailored the intervention culturally. Some themes are particularly important to callers to their Asian-language lines.

Establishing the credibility and expertise of the counsellor. This is achieved by meeting callers' expectations of tangible help. Counsellors tailor the intervention to the individual, but are generally more prescriptive than facilitative, as this meets the common expectation.

Educating on cessation. Being prescriptive includes teaching clients about quitting processes (e.g. identifying a strong reason to quit, planning, normalizing multiple attempts, reviewing possible withdrawal symptoms) and concrete quitting strategies (e.g. behavioural substitutes, cognitive restructuring, garnering support, pharmacotherapy).

De-bunking health myths about smoking. Misconceptions about tobacco use and health can get in the way of quitting. For example, some clients believe that smoking actually prevents disease and helps maintain the proper "hot & cold" balance in the body.

Emphasizing the importance of the family as a reason for quitting, and as a mechanism for support. A large percentage of callers to the lines are family members of smokers looking for a way to help. Quitting can be seen as serving the greater good of the family, which is motivating for smokers in a culture where collectivism is honoured above individualism.

Managing social norms. Social pressure to use tobacco is particularly acute for Asian males. Smokers have to determine how to handle an offer of cigarettes in work settings, at social events and during celebrations, without being viewed as disrespectful.

Being sensitive to the shame. Callers often experience embarrassment about their inability to quit, and also feel this may reflect poorly on the family. Normalizing relapses helps allay feelings of shame among clients and family members.

Distinguishing between confidence and willpower. Some Asian-language callers have a fatalistic view of quitting smoking. They either believe they have enough willpower to quit or not. Counsellors help clients shift this view to one of control. Planning helps build confidence, which can overcome perceived deficits in willpower, and establish the credibility and expertise of the counsellor.

5.1.7 Should the same counsellor contact a caller for proactive call backs?

The answer to this question is inclusive. Many quit lines make a great effort to ensure the same counsellor talks to the participant at call backs. However, some quit lines focus more on ensuring continuity by having a strong charting system, teaching rapid rapport-building skills, and ensuring connections.

Same counsellor. This approach is more traditional in face-to-face mental health counselling and many health-care services. The assumption is that there is more of a bond established between the counsellor and caller, and that the counsellor may be able to be more efficient since they may remember the prior encounters. The disadvantage of this approach is that it may be more inefficient in that more time may be spent negotiating schedules and making manual call attempts. In addition, limiting call backs to a single counsellor may potentially interfere with connecting if they fall behind, are sick or unable to meet a caller's schedule needs. Some of these disadvantages can be overcome, as in health-care settings, by having back-up options such as taking a team approach or having "floater" counsellors who make calls if the main counsellor is unavailable.

Variable counsellor. Although this approach seems counter-intuitive because it is seldom used in face-to-face health-care or mental-health settings, it has a number of advantages. By focusing on completing call backs with available staff, the call completion rate may be increased. By not requiring the same counsellor to call back, it is possible to take advantage of traditional call centre staffing methods and increase efficiency. For example, automated outbound dialing systems can be used that decrease counsellors' "dead time" when making unsuccessful attempts. Because the number of calls is low (usually less than five) and the counselling focused on a specific topic, it is possible that exposure to more than one person can broaden the sense of social support as well as provide additional perspectives on quit strategies. Some of the disadvantages of this approach are that continuity and the creation of a specific counsellor/caller bond is weakened. There may be some decrease in job satisfaction for counsellors since the positive benefit of their intervention is less certain without follow-up. These disadvantages can be overcome by working hard to ensure the records from each call include information on rapport building, so as to impart a sense that the participant is working with a team rather than having discrete isolated counselling events.

Regardless of which approach is taken, connecting for more calls increases success, as does establishing a sense of continuity (Box 14).

Appendices 6 and 7 provide more details on the training of counsellors and the content of counselling calls.

Box 14. Case example: Argentina

In Argentina, one third of adults aged 18-65 smoke, with a higher prevalence among men (38.4%) and no differences in prevalence related to level of education. More than half want to quit.

In 2004, the Argentinian quit line was launched with four counsellors, open from 09:00 to 22:00 during the week, and two counsellors over the weekend, open from 10:00 to 16:00. As the quit-line services were promoted through several media campaigns, the demand for services increased. Since then, the quit line has expanded to meet increased demand. As of 2010, the quit line had five counsellors per shift, every day of the week, from 06:00 to 24:00.

The quit line is manned by counsellors with Bachelor's degrees in psychology, counsellors trained in tobacco addiction, students of health or biological sciences, or other professionals. Ongoing training and supervision is conducted weekly or monthly, focusing on a cognitive-behavioural approach.

Tobacco users have their stage of change and level of nicotine dependence assessed. Motivational and cognitive-behavioural counselling is available, as well as referrals to more than 300 cessation resources and self-help materials.

In addition to supporting tobacco users to quit, including "Quit and Win" contests, services provide information and materials for health professionals, legislators, and the general public, including information on making the environment tobacco free.

In the first year of operation, over 22 000 people called, but only 9000 were answered, with over 13 000 calls lost. By the third and fourth years of operation, lost calls decreased to less than 10%. Calls from across the country came from individuals of all ages. The largest percentage of callers was from young adults, females and those who smoke less than a pack a day.

The largest call volumes resulted from a media campaign in 2006-2007, which directly marketed the quit-line number.

5.2 SELF-HELP MATERIALS

There is minimal evidence that self-help materials by themselves increase the chances of quitting. However, they may increase satisfaction, and can provide reinforcement for follow-up calls. In general, quit lines should avoid spending large amounts of money on the printing and distribution of materials, as simple materials are equally effective.

5.3 REFERRAL TO LOCAL IN-PERSON CESSATION SUPPORT SERVICES

Most quit lines keep a database of local resources such as group cessation support classes and face-to-face counsellors interested in helping people quit. Follow-up studies have found, however, that few callers actually take advantage of these types of referrals. Nevertheless, making an effort to involve local resources can be important for community relations.

5.4 ADDITIONAL SERVICES TO CONSIDER

5.4.1 Internet-based services

Some quit lines also provide Internet-based services ranging from static content to interactive, tailored sites with social network support. There is less experimental evidence to support effectiveness than there is for phone calls, but they have the potential to reach large numbers of tobacco users at comparatively little cost (Anderson & Zhu, 2007). Very few interactive web sites are available in multiple languages. Internet-based support can also be used as an adjunct to phone calls or as a substitute for printed materials. Integrated phone-web programmes are beginning to be offered where caller's data entered via the Internet are available to the counsellor and vice versa, but this type of system requires more complex programming and training. There is no evidence that such a system improves effectiveness (Swan et al., 2010).

5.4.2 Cessation medication support

Quit lines provide cessation medication support, ranging from information on how to use it, to active referral, to provision of free or discounted medication via vouchers or direct mail. Many early-stage quit lines, especially in low- and middle-income countries where resources are further constrained, may choose to forego provision of medication because of the added complexity and expense (see Section 3.4 *Medication*).

It is very important that people involved in planning a quit line revisit priorities and assess progress regularly. Changing tobacco control priorities, funding or new evidence may mean that the range of services offered should be re-prioritized. Existing quit lines should avoid providing non-evidence-based treatment services such as acupuncture, hypnosis, herbal remedies, and non-proven medications/procedures.

6. Creating a demand for service

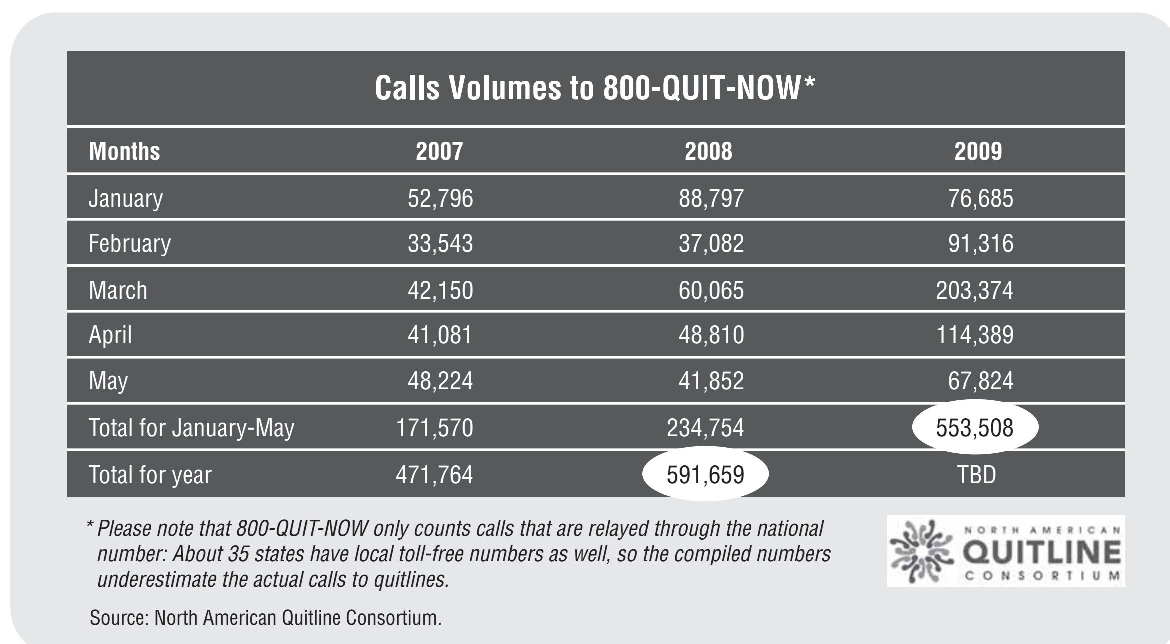
6.1 POLICY CHANGES CAN INCREASE THE DEMAND FOR QUIT LINES

The implementation of population-wide tobacco control interventions (raising taxes on tobacco, smoke-free legislation, product regulation, warning citizens about the dangers of tobacco) can boost quit attempts and potentially increase the demand for quit-line services (Wilson et al., 2005; Chan et al., 2009; Miller et al., 2009; Koch, 2009). Also, the implementation of WHO FCTC demand reduction measures has the potential to increase quit-line calls, which, together with careful planning, maximizes the benefits (Sheffer et al., 2010).

Raising taxes on tobacco makes it more expensive and prompts some users to attempt to quit. However, if people do not know the quit line exists, it may not be well utilized when a tobacco tax increase is introduced.

When the United States instituted a US$ 0.62 increase in the federal cigarette tax in early 2009, there was a 2–3-fold increase in calls to the quit line during the first few months compared to previous years (Figure 1).

Figure 1. Increase in calls to quit line following rise in federal cigarette tax, the United States, January-May, 2007-2009



Calls Volumes to 800-QUIT-NOW*

Months	2007	2008	2009
January	52,796	88,797	76,685
February	33,543	37,082	91,316
March	42,150	60,065	203,374
April	41,081	48,810	114,389
May	48,224	41,852	67,824
Total for January-May	171,570	234,754	553,508
Total for year	471,764	591,659	TBD

** Please note that 800-QUIT-NOW only counts calls that are relayed through the national number: About 35 states have local toll-free numbers as well, so the compiled numbers underestimate the actual calls to quitlines.*

Source: North American Quitline Consortium.

The application of smoke-free legislation makes smoking less convenient for smokers and can similarly drive them to try to quit and to seek treatment if they are unable to quit on their own. As with taxation, government agencies implementing smoke-free policies are increasingly including quit-line awareness as part of the implementation plan.

Implementation of Article 11 of the WHO FCTC (Packaging and labelling of tobacco products) has significant potential for increasing calls to quit lines (McAfee, 2007). This Article includes the use of pictorial health warnings, and the guidelines for implementation of Article 11 recommend including a toll-free telephone quit-line number on tobacco packaging (WHO, 2008). This approach has been adopted in a number of countries with remarkable effect (Boxes 15 and 16).

Box 15. Case example: Brazil

Brazil was the first country in Latin America to launch a nationwide quit line (*Disque Pare de Fumar*) in 2001. The quit line is part of a general health call centre supported by the Ministry of Health designed to provide smoking cessation support and connect Brazilians to public health services. The Brazilian National Cancer Institute (INCA) designed the quit line and trains the counsellors.

Brazil was also the first large country to act on the WHO FCTC recommendation to put their quit-line number on the back of all cigarette packs, with graphic pictorial health warnings. When Brazil put the number on cigarette packets, the quit line experienced unprecedented call volumes. This volume was dampened initially because the phone service did not have the capacity to answer the high number of calls. Therefore, a set of automatic recorded messages was made available, dramatically increasing the call volume. During the first three years, the quit line received over two million calls a year, with a peak of six million the first year, more than all other quit lines in the world combined. However, today, due to resource constraints, more than 95% of callers receive brief recorded messages, and those receiving counselling average around 2.5 minutes, with no follow-up.

Calls to the quit line can be made free-of-charge from any telephone, including mobile phones, in Brazil.

Box 16. Case example: the Netherlands

When the Netherlands placed the phone number of the quit line on packets of cigarettes, the volume of calls increased, but at a more modest level. Call rates initially were 6-fold greater, stabilizing at 3.5-fold greater. The lower rate resulted in part because the number was only placed on every 14th pack. The Netherlands also noted a change in the timing of calls, with more calls in the evening, and a broader range of callers, including less-motivated poorer callers and some people calling to complain about the pictorial warnings (Willemsen, Simons & Zeeman, 2002).

Thus, there are many opportunities for quit lines to take advantage of large tobacco control policy initiatives. However, demand will only result in calls if efforts are made to link the population-wide interventions with people's knowledge of quit-line services.

Some tobacco control leaders may be resistant to the inclusion of quit-line awareness-raising activities as part of the larger campaigns for smoke-free policies, increased taxes and harm education. However, such activities can be of benefit to these policy initiatives by creating a more sympathetic picture of their intentions. Particularly in countries where a large proportion of the population, including policy-makers, uses tobacco, the quit line adds an incentive to the unpalatable measures, such as increased taxation.

6.2 PROMOTION OF QUIT-LINE SERVICES

Most quit lines strive to maintain a balance between promotion and utilization. With some significant promotion over the course of a year, between 1% and 6% of adult smokers will call a well-functioning quit line. However, a rate of more than 6% or higher requires a significant and sustained effort (for example, 6% has been achieved in New Zealand and in the State of Maine, the United States).

Effective promotion should generate adequate, efficient call rates, at a cost proportionate to service delivery costs although such promotion should not stimulate so much demand that the resources of the system are overwhelmed. The only potential exception to this approach is if there is an deliberate strategy to create an overwhelming demand in order to impress upon politicians the need for additional funding. This is, however, a risky strategy, since it is likely to result in unhappy quit-line callers. Often policy-makers underestimate the potential reach of quit lines because they equate historical use with potential use. Most quit lines become adept at creating demand that matches the capacity of the quit line to provide the service and the availability of the budget to fund it. If it looks like demand will outstrip operational capacity or budget, quit lines may cut back, for example, on media campaigns.

Quit-line marketing and promotion can also create positive community awareness and perception of quit-line services. Of particular importance is the fact that quit-line promotion can also help normalize quitting and stimulate quit attempts, even if those exposed to the promotion do not call the quit line (Anderson & Zhu, 2007). Creating awareness of services has proven to be a challenge even in high-income countries. Without effective promotion, quit lines are virtually invisible, which is a waste of an excellent resource.

6.2.1 Specific promotional strategies

6.2.1.1 Mass media (television, radio and print)

One of the great benefits of mass media is that it can be used to fulfill two functions at once. For example, a mass media campaign aimed at de-normalizing tobacco use can also be tagged with the quit-line phone number. This will increase calls to the quit line, and may also increase the acceptability of the messaging in the de-normalization campaign (Burns, 2000). Although advertisements can focus specifically on encouraging people to call the quit line, it is not necessary to limit quit-line promotion to this type of advertisement. This broader approach of changing public awareness through exposure to advertisements can decrease the money spent solely on promoting the quit line.

In general, it is preferable to use advertisements that are designed to encourage quitting, even if the focus is on getting people to call the quit line. These advertisements can demystify and normalize the process of calling a quit line, such as by depicting the empathetic interaction between caller and counsellor, and they can point out some of the key success factors for quitting, such as the elimination of all tobacco products (Box 17).

Box 17. Case example: twofold advantages of advertising

In the United States, the State of California ran a campaign aimed at de-normalizing second-hand smoke that included the quit-line number on advertisements. By including the number, they told a more complete story: encouraging quitting by explaining second-hand smoke issues and offering smokers help. The call volumes to the quit line from this campaign were actually better than those generated by more generic health/quit-line advertisements designed to promote the quit line (Anderson & Zhu, 2000).

Australia ran a series of advertisements with graphic depictions of the effect of smoking on people's body parts to de-normalize smoking, tagged with the quit-line number.

Mass media is most effective at creating rapid, short-term demand (NAQC, 2009a). Call volumes can often be predicted with reasonable accuracy based on the amount and type of media placement. However, awareness fades rapidly, with call volumes dropping off within a few days of exposure.

It is important that quit-line service providers be informed in as much detail as possible about mass media, especially television, scheduling. This allows for staffing adjustments.

There are two forms of mass media promotion: paid and earned. Paid media refers to any form of media that is purchased, while earned media is any publicity for the quit line run by media outlets as part of their news coverage.

6.2.1.2 Paid media

Extensive work has been carried out on the creation and placement of paid mass media for tobacco control, including examining the impact of specific approaches to media placement and promotion on quit-line call volumes. Often a media contractor handling promotion is frequently also working on broader tobacco control marketing. An extensive set of advertisements has been created around the world, and some of these are available in the public domain. Since the creative process can be quite expensive, quit lines should review existing advertisements before starting from scratch. Sometimes existing advertisements can be tailored and translated to be culturally appropriate. The World Lung Foundation collected a number of effective tobacco control mass media advertisements in different languages for adaptation and use in LMICs, which are available on their web site (*http://67.199.72.89/mmr/english/index.html*). The web site can also be used as a resource to support concept development for new campaigns.

Placement of advertisements is a science and an art that complements the needs of the quit line. For example, some countries run advertisements via "flighting", whereby placement is staggered between media markets. This enables the quit line to avoid the spikes in calls that would occur if the entire country were saturated with advertisements at the same time.

Because of the expense associated with paid media, it is critical that specific advertisements be created or obtained and placed in the context of the larger goals of the tobacco control media campaign. Most campaigns are run using the framework of social marketing. There are many important elements to social marketing. One example is to carefully identify the target audiences for a quit-line campaign. The primary audience is usually the tobacco user who might call the quit line. However, there may be very important secondary audiences such as:

- other people who might influence the tobacco user to call such as family and friends;
- health-care providers who can refer tobacco users and provide brief advice to all;
- politicians who may increase or decrease funding for tobacco control;
- tobacco users who would not call the quit line but may be inspired to quit on their own.

However, it is important that specific attention be paid to ensuring that marketing is actually succeeding in generating calls to the quit line and this can be facilitated by monitoring daily call volumes against mass media exposure.

6.2.1.3 Earned media

Earned media refers to stories about the quit line that are run on television or radio, in newspapers or magazines, or on web sites about the quit line, but are not paid for by the quit line. These stories can increase call volumes as much as or more than paid media. Although such stories are not directly financed, getting positive, accurate, helpful media coverage requires effort and resource investment on the part of the quit line. Sometimes, the sponsoring agency or quit-line service provider (if they are part of a larger organization) will have public relations departments that can help generate publicity. Sometimes, a quit line may decide to take out a contract with a public relations firm as part of its promotional budget specifically to generate earned media. Sometimes, the same firm will help with both paid and earned media.

Earned media requires a "hook" to attract press interested. The launch of a quit line is a good time to host an event, such as a press conference with a television or movie personality or politician. New additions to quit-line services, such as a campaign providing free medication or reports on the use and results of a quit line can be

the focus of press outreach. Public policy events, such as the implementation of smoke-free laws or new tobacco taxes, are also earned media events. In addition, a quit line can foster relationships with reporters who may run an in-depth story on the quit line, including human-interest angles, such as quit-line caller interviews.

6.2.1.4 Non-media advertisements and materials

In addition to television, radio and print media, there are many ways to advertise the quit line. These include the placement of posters and flyers in public buildings such as worksites, hospitals and shops. Signs on buses and billboards help establish a long-lasting awareness of the existence of the quit line. If the target population uses the Internet, web-based advertising can also be effective and relatively inexpensive. It is important that the quit line create materials with identifiable branding and clear, concise, compelling messaging that can be used by community groups to advertise the existence of the quit line.

6.2.1.5 Health-care worker referral

Health-care workers are in a unique position to refer people to the quit line. Once mobilized, they can provide a steady stream of quit-line callers, at very low cost. In addition, awareness of the existence of the quit line can help remove a major barrier to health-care providers advising tobacco users to quit. However, reaching health-care workers and influencing them to refer patients requires a sustained promotional and outreach campaign (see Section 7. *Integrating quit lines into health systems*).

6.2.1.6 "Quit & Win" contests

Contests where prizes are awarded for quitting, or for participating in the quit line, have been used in a number of countries, states and provinces. They are set up to motivate smokers to make a quit attempt and then to remain abstinent for a period of time (usually at least a month). They provide some form of incentive for successful quitters, such as a cash prize or a holiday. Historically, they often did not include evidence-based quitting assistance, but more recently many include encouragement to register with a quit line, or may require registration for eligibility (NAQC, 2009a). Usually winners are required to provide proof of abstinence, such as a negative cotinine test (a blood test that is a marker for recent smoking).

6.2.1.7 "Viral" marketing

Referrals to the quit line from family and friends as well as former quit-line users can be a valuable source of information and referrals to quit lines. Some of this will occur naturally as the quit line's reputation spreads. However, there are ways the quit line can increase the speed of informal referral. For example, media campaigns can encourage family members to refer, and quit-line users can be encouraged to refer other tobacco users, such as by including referral cards in mailed materials.

6.2.1.8 Free medication

Offering free medication through a quit line can be used as a cost-effective promotional strategy, as well as boosting quit rates, especially if short courses of over-the-counter nicotine replacement such as patches or gum are used (Fellows et al., 2007; Tinkelman et al., 2007). It is possible to increase quit-line volumes by 10-fold or more simply by making brief courses of medication available (Box 18). Often it is not necessary to use paid media to inform tobacco users of the availability, as the press will report it as a story, and then the word will spread. If anything, there can be a problem of having more calls than can be handled. For example, in the United States, New York City saw a marked increase in call volumes with a free patch offer in 2004, with almost 400 000 callers. As noted earlier, this approach would only be practical in countries where at least one medication is available over-the-counter, and where regulations allow for some form of fulfillment, either via direct mail or a coupon redeemable at a pharmacy. Whether such a promotional strategy makes sense also depends upon the relative costs of medication versus counselling. In addition, it is important for the quit line to be clear what its strategic goals are, and to avoid becoming a simple order processor for medications (see Section 3.4. *Medication*).

Box 18. Case example: Oregon Tobacco Quit Line, in the United States, offers free medication

6.2.1.9 Active recruitment strategies

Increasingly, some quit lines are exploring more proactive forms of recruitment, especially for populations of special interest (Tzelepis et al., 2009). Examples include direct mail to homes (O'connor et al., 2008). This type of campaign is unlikely to result in more than 1-2% of those receiving the mailing calling the quit line, but may still be cost-effective. In order to gain much higher rates of acceptance, outbound recruitment calling can be carried out to offer services to populations of interest. Even when the recipient of the call has never heard of quit-line services, a very high rate of acceptance can occur, between 50% and 80% (Britt et al., 1994). This is essentially a form of social telemarketing (Box 19).

Box 19. Examples of telemarketing

Some health-care systems are asking quit lines to call patients with smoking-related diseases to invite them to join the proactive phone programme. Examples include diabetics, and patients with lung and heart diseases. This approach has also been used for pregnant women. In developing countries this could include integrating quit-line promotion with HIV and tuberculosis outreach programmes.

6.3 OVERCOMING SPECIFIC BARRIERS TO QUIT-LINE USE

As a quit line prepares to promote its services, it is very important to consider what the barriers to calling are likely to be, and to address them during the campaign. Simple market research, such as testing of messages in small focus groups, may be necessary to determine what sorts of messaging may overcome these barriers.

Tobacco users may find it hard to imagine calling a quit line for help. Some users may be concerned that calling a quit line means that they are "crazy" or weak-willed. Careful attention should be paid to the words used to describe the quit line so that words that may not resonate with tobacco users are avoided. Different words such as "counsellor", "coach", "specialist" or "adviser" have different meanings in different cultures. Some Asian-language quit lines have focused on providing assistance to "proxy callers" (i.e. family of tobacco users), on how to help a tobacco user quit because this has proven more culturally acceptable than direct help to the tobacco user. Awareness campaigns can help overcome this by portraying ordinary people who have called and received assistance.

Tobacco users may have negative perceptions specifically about call centres and telemarketing. They may expect to be put on hold, to have to listen to recorded messages, to only get brief and hurried help from an inexperienced and unsympathetic anti-smoker, to get passed around from one person to another, and to have no continuity of service if they call back. The most important way quit lines can overcome these perceptions is by providing very strong customer service, and including participant testimonials about it in marketing materials.

Tobacco users may not understand what services are available. Some quit lines have created mass media advertisements that "demystify" the quit line, showing what happens to a caller, to overcome this lack of knowledge. Printed material can include specific information about what services are available, emphasizing what makes quit-lines services special (face-to-face counselling, evidence-based, no nagging, follow-up, help getting available medication, etc.).

Tobacco users may be afraid or suspicious of a government programme. Emphasize that services are confidential and free.

6.4 CREATING A BRAND AND POSITIVE ATTRACTION

Promoting the quit line is not just about overcoming barriers, it is about getting people to think about the quit line positively. It is about working to understand and project empathy towards the incredible difficulty tobacco users face when quitting. It is about identifying what is unique about the quit-line service in your country, and telling a compelling positive story via imagery, testimonials and narrative.

The tobacco industry does a masterful job of telling lies about what it means to use tobacco. They paint pictures that appeal to people's deepest desires: to be free, beautiful, popular, sexy, powerful and relaxed. In promoting the quit line, part of our job is to paint a picture about how fantastic it will be to quit, and how the quit line can help.

7. Integrating quit lines into health systems

Why should quit-line planners, promoters and service providers consider how their quit line could be integrated into health-care delivery systems in their country? The brief answer is that each can help the other achieve its strategic role in decreasing the population's use of tobacco.

The World Health Organization has determined that incorporating tobacco cessation advice into primary health-care services is, along with easily accessible quit lines and free or low-cost medication, a key strategy in ensuring that countries offer help to those who want to quit using tobacco (the "O" in the MPOWER package) and in implementing Article 14 of the WHO FCTC. The long-term vision is that health systems and quit lines work together to ensure that tobacco users have easy access to a network of cessation services, including routine advice on quitting smoking in primary care clinical encounters, with referrals to quit lines and other specialist services combining counselling and medication.

Primary health-care providers have two vital roles when approaching patients who use tobacco.

- Increase patient motivation to quit. This is especially crucial in countries where the proportion of tobacco users attempting to quit each year is low. Trials in multiple countries have shown that if health-care providers routinely identify the status of tobacco use and give brief advice on quitting with minimal assistance, more people attempt to quit. Basically, if people are not motivated to quit, or do not see it as an important issue, they will not be interested in calling a quit line.
- Help motivated patients to quit successfully. This second role can be particularly challenging given the complexity of nicotine addiction as well as the lack of time, resources and tobacco treatment training in health-care settings. One increasingly popular option in fulfilling this role is to connect motivated patients with resources (such as a quit line) to help them be more successful in their quit attempts.

Health-care providers can play a direct role in driving calls to a quit line by referring their motivated patients to the quit line. There are two ways that this has been done.

- Patient-driven referral. Encouraging patients to call and giving them the quit-line number (often on a card or a brochure).
  - The advantage of this approach is that it is relatively simple and requires minimal provider or staff training. Clinics benefit from a brief tobacco intervention to refer patients, or referral can occur simply by making the phone number available.
  - The disadvantage is that it requires the patient to remember the quit-line number and make the initial call to begin services. Also this approach makes it difficult to give feedback to providers about referrals.
- Provider-driven referral. This is often done by fax, where the health-care providers, or their staff, send the name of the interested patient directly to the quit line with their phone number; the quit line then calls the patient directly.
  - The advantages of this approach are that referral does not require the patient to initiate the first call to the quit line, and the procedure may be more in line with other systems' providers, which are already set up for specialty referrals. In addition, providers may receive feedback about whether or not the quit line successfully connected with the patient. Providers can use this feedback to offer follow-up and continue tobacco cessation interventions and discussions with patients.

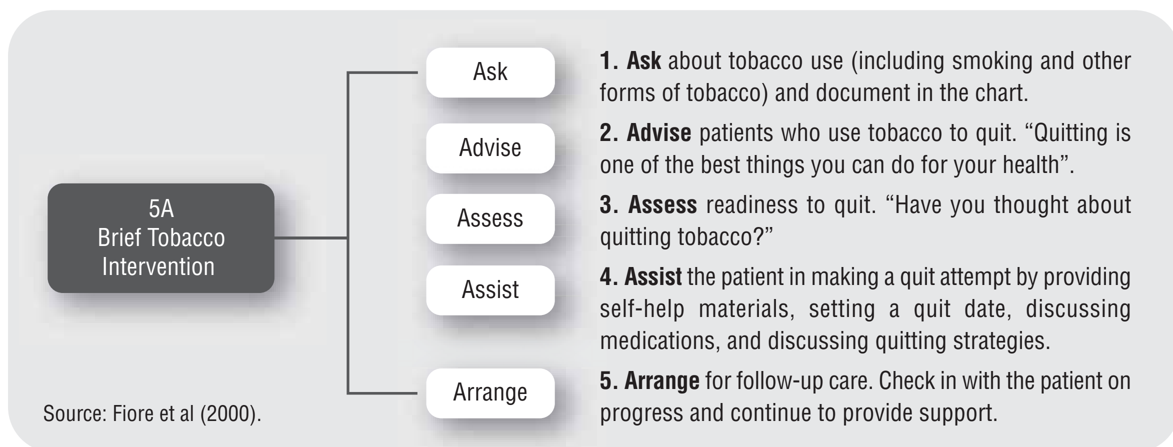
– The disadvantages are that this type of system requires more work to set up, implement, and sustain. Work often involves training providers and staff, setting up or processing referral forms, and developing a referral procedure or system. In developed countries, often only about 60% of those referred are reached and, of these, 50–75% will enroll for services (NAQC, 2009a). However, quit lines that invest a significant amount of effort in health-care provider outreach and education, helping them learn the types of patient to refer, can significantly improve these numbers (Carlini et al., 2009).

7.1 HOW QUIT LINES CAN HELP HEALTH SYSTEMS

Many health-care systems have struggled to improve their services to tobacco users. Even when individual health-care providers are highly motivated to provide better care to patients, the barriers to routinely carry out such care can be quite challenging. One of the biggest challenges in implementing the recommendation is that health-care providers should offer assistance and follow-up to tobacco users who want to quit (Fiore et al., 2008).

Traditional brief intervention techniques, such as the "5As", require a clinic or office to participate in all aspects of helping a tobacco user to make an attempt to quit – from essential health system tasks, such as asking about and documenting tobacco use status to taking time to assist the tobacco user in the quitting process, including making a quitting plan, setting a quit date and discussing strategies to break the addiction process as well as providing follow-up. Figure 2 outlines these steps.

Figure 2. 5A Brief tobacco intervention

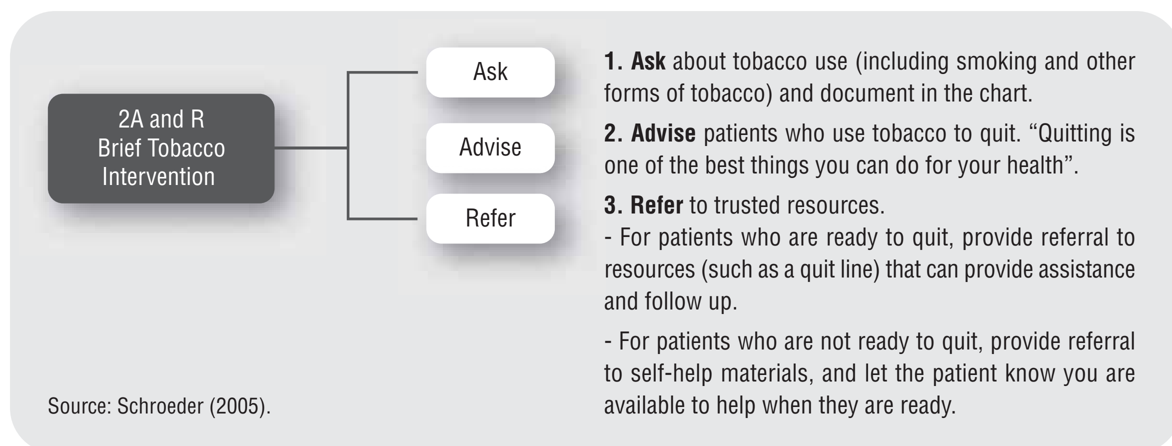


Source: Fiore et al (2000).

Since tobacco dependence is a common condition, even if health-care providers do not need to start from "Assess" and end with "Arrange" every time with every patient, the provision of assistance can be time-consuming, require counselling skills with which providers are unfamiliar and resources that are not available in clinics and hospitals. Due to the chronic, reoccurring nature of tobacco addiction, sometimes providers do not perceive their intervention efforts to be worthwhile or rewarded. Evidence indicates that provider assistance can more than double the odds that a patient will be successful in quitting (Fiore et al., 2000). Yet, given these time and resource constraints, a minority of health systems and individual providers do assist tobacco users in making quit attempts (Schroeder, 2005) when tobacco status is not routinely collected.

However, quit lines can provide a reliable, easily accessible alternative for doctors, nurses and dentists who may otherwise not have the time or resources to address tobacco dependence intensively. By providing more in-depth assistance and follow-up, quit lines can free up health-care providers to focus on identifying and motivating tobacco users to quit. This revised intervention model has been called the "2As and R" – Ask, Advise, Refer (Schroeder, 2005). This model includes the steps from the original 5A model, but they are distributed so that the health system refers to a resource (such as a quit line), which assists in the more intensive tobacco treatment counselling. Although patients can also be referred to in-person group classes or tobacco cessation clinics, these resources are much harder to make reliably available across an entire country. The 2A and R model is outlined below in Figure 3.

Figure 3. 2A and R brief tobacco intervention



Source: Schroeder (2005).

Brief interventions that utilize the quit line are not only useful in primary care arenas. A number of other health-care specialists and health settings can benefit from the use of a quit-line intervention.

- **Dental or oral health and hygiene settings**. Dentists, hygienists and other oral health professionals can use brief intervention techniques with referral to a quit line. Interventions can occur in conjunction with education about the side effects of tobacco use on oral health. Tobacco screening and referral systems may be similar to those of primary care clinics.
- **Hospital discharge.** Patients can be referred to quit lines post-discharge from hospital (NAQC, 2008). In cases where a hospital has a smoke-free policy and cessation medications are offered to help inpatients who smoke to comply, calls to a quit line can even be made from a hospital room to begin or continue the quitting process.
- **Emergency or urgent care settings.** Time is even more compressed during these encounters, so having a referral resource, such as a quit line available, is critical in adopting protocols for the identification of tobacco status and brief advice.
- **Specialty and surgical care.** Almost every medical specialty is impacted by tobacco use. Where the impact is most profound, such as in cardiology and pulmonary departments, information about the availability of a quit line may be welcome. There is increasing information about the beneficial impact of quitting during surgical recovery and wound healing.

- **Integration into public health and chronic disease care management** (NAQC, 2008). It is particularly important in some low- and middle-income countries to integrate quit-line referral into other major public health case-finding/management programmes, such as HIV/tuberculosis, which rely heavily on community health workers. This is crucial given the role that smoking plays in exacerbating these conditions. In countries where the health-care system utilizes chronic care or disease management approaches with databases and centralized telephone follow-up for people with conditions profoundly impacted by tobacco use, such as diabetes, chronic obstructive pulmonary disease, heart disease and asthma, quit-line referral can be relatively easily accomplished by the nurse or other health-care worker whilst talking to the patient about their chronic disease.

7.2 HOW HEALTH SYSTEMS CAN HELP QUIT LINES

The relationship between a quit line and a health system is mutually beneficial (PCHT, 2003). Health systems and providers can offer vital support to quit lines in a number of areas, some of which are described below.

Referrals from health-care providers are much less expensive than reoccurring mass media expenses. For example, in some states in the United States with active referral programmes, 40-60% of callers to quit lines are referred by health-care professionals. However, this type of arrangement may be enhanced by a number of specific programme characteristics.

- Ongoing service reliability. If the types of services callers receive change frequently, health-care providers may not trust the service and stop referring.
- Outreach to health-care providers about the quit line, combined with training on how to help their patients quit.
- Referral programmes (including fax-referrals) that allow health-care providers and systems to reliably refer their patients and receive some limited feedback about whether or not the patient used the service.

Health-care systems can serve as resources for quit-line callers who need support in health-related areas beyond tobacco treatment (Borland & Segan, 2006). For example, callers with significant mental health disorders may, in addition to receiving standard cessation support, be referred back to their mental health or primary care provider for assistance. Similarly, callers with diabetes, asthma, heart disease, or other chronic health diagnoses would be referred back to their primary care providers. By being cross-listed with quit lines as referral resources to help deal with a caller's health-related problems, health-care systems can provide patients with continuity of care and assist quit lines in offering support for co-occurring conditions.

Quit-line counsellors should also be fully aware of and have available accurate referral information on various types of crisis situations, such as suicidal callers, or callers with medical emergencies such as heart attack symptoms.

Health-care providers can complement services that quit lines offer by providing additional cessation follow-up and support, in-person counselling if desired, and prescriptions for cessation medications not available through the quit line. Many quit lines have created complex relationships with health-care providers to improve access to and quality of care for those interested in, for example, pharmacotherapy (see Section 3.4 *Medication*).

In some populations that use tobacco, health-care provider follow-up support and counselling is not only encouraged but advised. These populations may include individuals with co-occuring mental health and/or substance abuse diagnoses. In these cases, providers can benefit by using a quit line as an adjunct to the care that they continue to provide to the patient.

Getting health-care systems and providers to systematically identify tobacco users and refer them to quit lines requires considerable attention and experience (see Appendix 8).

Finally, there are several new and advanced uses of quit lines that may have particular relevance in developing and transitional countries.

- Serve as a resource to help train health-care providers to conduct brief tobacco interventions and utilize the quit line as a trusted referral resource (Borland & Segan, 2006).
- Assist health-care systems to develop sustainable protocols for continued use of the quit line.
- Cost sharing between quit lines and health systems has the potential to reach more tobacco users (PCHT, 2003), as noted in Section 4.1 *Public-private partnerships*.
- Include non-traditional health-care workers in efforts to promote and integrate quit lines, as a large proportion of tobacco users may not see a doctor (McAfee, 2007).

An central issue here is that, if a quit line works with health-care systems or health-care providers to encourage quit-line referrals, providing consistency of quit-line services becomes more important so that health-care providers can reliably inform their patients what to expect.

Although the long-term benefits of working with health-care systems and providers are considerable, both parties must invest substantial time and effort to generate significant numbers of referrals and, ultimately, decrease people's use of tobacco. While most quit lines rely on mass media or other techniques to generate immediate or initial referrals, by developing working relationships with the health-care community, quit lines can increase their sustainability.

8. Monitoring performance and evaluating impact

One of the reasons that quit lines have been so successful is that they have been able to provide precise information about their services and the results they achieve. What should a quit line measure, how should it report these results, and what sorts of questions may benefit from research?

8.1 REPORTING

It is very important to think about what information is going to be summarized and provided regularly to the quit-line sponsor and other interested parties. If you are providing the funding for a quit line, what information will you want provided monthly, quarterly, or yearly? What will you want for your own understanding of how the quit line is performing, and what will you want to be able to report to other higher sponsors or interested parties, such as legislators or the press? At a minimum, most funders need to know:

- how many calls were received over time
- what services did callers receive.

This information can usually be captured from the telephony system. The amount of additional information that is available depends on how much is routinely captured during the course of the interaction between the caller and the quit line. Most quit lines collect at least basic data on their callers' demographics – tobacco use status, age, gender and, sometimes, race or ethnicity. However, some providing only very brief services collect no information about callers on an ongoing basis.

Reports on quit-line services should be carefully prepared with attention to detail and a visually appealing presentation. Since most of what sponsors know about the quit line will come from reading the reports, so having reliable, easily understood reports is critical to continued support.

8.2 EVALUATION

In addition to the basic elements above, many quit lines evaluate their services more formally, either on an ongoing basis or periodically.

8.2.1 Why evaluate quit lines?

Evaluating a quit line can provide many benefits to quit-line funders, service providers and other key stakeholders. Data collected from an evaluation of a quit line can be used to provide critical information about the acceptance, use and effectiveness of a quit line. This information can be used to inform efforts to improve or alter services or promotion. For example, an evaluation may reveal that a quit line is not reaching a population of specific interest, or that quit rates declined after a change in programme.

In addition, evaluation data can be used to help "sell" the quit line to key decision-makers. For example, positive evaluation results (e.g. high use, satisfaction or quit rates) can be used to demonstrate to funders that the quit line is valued by the community, viewed satisfactorily by users, and produces outcomes that improve the health of smokers (Box 20). Furthermore, this type of data can help persuade funders to approve programmes or provide additional funding to sustain quit-line services.

Box 20. Case examples: African-American quit-line users

In the United States, many public health officials were worried that quit lines were not an effective way of reaching African-Americans and that those who did call would not be helped or satisfied. They were recommending that African-Americans not be referred to quit lines, and that alternative strategies be developed to reach them. However, evaluation data on the demographics of callers, satisfaction, and quit rates showed that African-Americans had called quit lines almost twice as frequently as other groups, based on their smoking rates. This increased call rate was happening even without targeted advertising. In addition, their quit rates and satisfaction rates were no different than other quit-line callers (Zhu et al., 2011).

8.2.2 Over-evaluating quit lines

Although formally evaluating a quit line can provide many benefits, evaluation can require significant resources. Therefore, the extent of initial and ongoing evaluation as well as the specific information desired, should be carefully considered.

- The elements of quit-line services shown to be effective, as reviewed elsewhere, are well established. If these elements are delivered, detailed evaluation to determine if the quit line "works" may not be practical or necessary, just as a new malaria drug does not need to be re-tested in every country.
- Repeatedly measuring the same outcomes (i.e. quit rates and satisfaction) may not contribute helpful information if the services have not changed.
- Wherever appropriate and possible, make use of data already collected as part of service delivery, to enhance evaluation efficiency.

A more detailed exploration of evaluation issues, including data collection methods and reporting outcomes, is included in Appendix 9.

8.3 WHAT ABOUT RESEARCH?

The incredible success of quit lines is due in some measure to the meticulous work done over the past two decades to establish that they actually do work. Multiple innovations to the original quit lines, such as proactive calling and medication, have been carefully tested to ensure they add value.

As quit lines continue to spread out from high-income countries into low- and middle- income countries, it is critical that this same spirit of enquiry continues. There are many unanswered questions about how best to apply quit lines in any setting (Anderson & Zhu, 2007), as well as regarding specific possibilities in developing and transitional countries. Examples of the more critical ones are listed below.

- How effective are less-expensive options such as utilizing recorded messages, automated texting, the Internet, and brief informational calls?
- Is additional cultural tailoring of promotional approaches or interventional content beneficial in any settings?
- Can quit lines be used to train health-care workers, other paraprofessionals, and family and friends to intervene more effectively with tobacco users to encourage quit attempts?
- How can quit lines be integrated into other major public health initiatives in developing countries, such as tuberculosis?
- What are the most effective ways to finance quit-line services?

Research in quit-line settings can potentially be conducted rapidly and inexpensively relative to other types of research, since thousands of people are receiving structured treatment (Box 21). In order to encourage more research in developing countries, further collaboration needs to be fostered between academic centres, government funders of quit lines, and quit-line service providers, with better research funding mechanisms.

Box 21. Case example: the United States, research into quit-line effectiveness

Most state quit lines in the United States have routinely collected quit status and satisfaction every six months, as recommended by North American Quitline Consortium (NAQC, 2009b). The National Institutes of Health (NIH) has helped fund multiple large studies of quit lines. However, a number of these quit lines have gone further, using state funds (often from tobacco taxes) to support sophisticated research. For example, the states of California and New York have consistently allocated evaluation resources to their quit-line providers (the University of California in San Diego, and Roswell Park Cancer Institute in Buffalo) to conduct randomized and observational trials, including landmark randomized trials establishing quit-line effectiveness in California, and a series of observational trials on the integration of NRT in New York. Some additional states have also partnered with their service providers to conduct research trials. For example, Oregon financed a randomized trial of nicotine patch effectiveness in the uninsured, and Oklahoma financed a large randomized trial of added calls addressing weight concerns. Free & Clear's research department conducted both of these trials in collaboration with local researchers.

9. Communication and support between quit lines

As individual countries, states and provincial quit lines began increasing in number, size and complexity in Europe and the United States, they began communicating with each other, both formally and informally. This led to larger meetings, and eventually to the formation of formal organizations with charters, staff and infrastructure. The networks and consortia have sponsored regular in-person and virtual meetings to share best practices, and have created tools such as minimum datasets and standards, and research agendas (see Section 11. *Resources* for information about specific services and activities).

The North American Quitline Consortium was formed in 2004, with support from governmental (Centers for Disease Control and Prevention and National Institutes of Health) and philanthropic organizations (American Cancer Society and American Legacy Foundation). In 2006, it incorporated formally as a non-profit corporation with a Board of Directors, which included quit-line sponsors, service providers, researchers and other experts.

The European Network of Quitlines (ENQ) was formed in 2005 and has 29 member countries. It helped set up the European Smoking Cessation Helplines Evaluation Project (ESCHER), a research network and created a best practices guide.

Additional information about both NAQC and ENQ, including information on resources for early-stage quit-lines, is located in Section 11. *Resources*.

Regional coordination is also taking place in other areas. For example, there have been two multi-day meetings of Asia-Pacific quit-lines in Taiwan, China, where best practices were shared and scientific evidence reviewed. The first one was held in 2007. The second meeting was held in 2010, and a more formal Asia-Pacific network of quit lines was formed. It is planned to hold an annual meeting of the network. The next meeting is to be held in 2011 in the Democratic People's Republic of Korea. Australia has a National Quitline Managers group, and a joint Australia and New Zealand Quit Group has regular contact via teleconferences to exchange information and develop minimum standards.

10. Conclusion

Although this manual and appendices contain a wealth of information, potential quit-line managers should not be overwhelmed by the work involved in creating and improving a quit line. Even very large quit lines that serve hundreds of thousands of people a year started out from modest beginnings, often with just a handful of counsellors using phones and paper record systems. Although it is helpful to learn from others' experience and to plan based on your local circumstances and long-term goals, it is also important to get started! (See Appendix 10 for a brief get-started checklist.)

There are many organizations and individuals around the world with a depth and breadth of experience in setting up, operating and evaluating quit lines who would be glad to share what they have learned. If needed, the resource list included in this manual can help you locate technical assistance and consultation.

The most effective quit lines are not isolated services, but rather integrated programmes that serve not only the individuals who call but the broader goal of decreasing tobacco use at the population level. They do this by considering how the existence of the quit line can help foster increases in quit attempts and mobilize the broader health-care system and tobacco treatment programmes to help tobacco users quit successfully.

11. Resources

11.1 General quit lines
North American Quitline Consortium (NAQC)
Web site: *http://www.NAQuitline.org*

The NAQC web site is a rich source of information on state and provincial quit lines as well as on strategies that are being used to help smokers quit in Canada and the United States.

Web pages most useful to the global community are described below:

About Quitlines: *http://www.naquitline.org/?page=aboutquitlines* provides information on quit lines in Canada and the United States. The information is compiled from NAQC's annual survey of quit lines and dates back to 2004. A map provides an overview of quit-line services in each of the 64 state and province quit lines.

Quality improvement: *http://www.naquitline.org/?page=qi* of interest to those operating or overseeing quit lines. It describes NAQC's efforts to encourage the standardization of data collection methods and analysis across quit lines and the adoption of best practices. Browse this section to review papers on:
- a framework for quality improvement
- NAQC's recommended standard for measuring quit rates
- NAQC's recommended standard for measuring reach
- recommendations on how to increase reach
- a review of the evidence and the practice of integrating medications in quit lines.

Research and Data Sets: *http://www.naquitline.org/?page=researchdatasets* focuses on NAQC's annual survey of quit lines (dating back to 2004) and the Minimal Data Set (MDS). The annual survey describes the funding levels, types of services and utilization of quit lines. The MDS provides core standard intake and follow-up questions that are used by all quit lines in North America.

The subsection on the annual survey of quit lines includes questions for each survey, data tables, PowerPoint presentations and frequently asked questions. The Minimal Data Set subsection catalogues technical documents, including intake and follow-up questions for quit lines, an MDS implementation guide, checklist and frequently asked questions.

Publications and Resources: *http://www.naquitline.org/?page=pubres* is perhaps the most useful section of the web site. Browse this section to find:

- member communications such as NAQC's e-newsletter, e-bulletins on important topics and alerts to quit-line operators about upcoming promotions;
- in-depth issue papers on quit rates, reach, medications and other important topics;
- case studies on quit lines;
- articles and reports;
- fact sheets and other short documents;
- policy play book on how quit lines are promoting their services when tobacco taxes increase and when new laws on secondhand smoke are implemented;
- Internet-based tools and resources on training and cessation.

European Network of Quitlines (ENQ)

Web site: *http://www.enqonline.org*

The ENQ web site includes information about its history and current membership, as well as a number of other helpful resources.

Resources page: *http://www.enqonline.org/public/resources/index.php* with links to best practice guides.

- *The European Network of Quitlines Guide to Best Practice*, which aims to promote best practice in quit-line development, delivery and research across Europe in order to provide the very best service to smokers and maximize impact on smoking behaviour.
  The Social Exclusion Resource Pack, which aims to promote best practice in the development of effective strategies to reach and support socially excluded communities who are not accessing mainstream smoking cessation services.
- *Guidelines to Best Practice for Smoking Cessation Websites, which is* available via the Articles page *http://www.enqonline.org/public/articles/viewarticle.php?id=18*

Articles page: *http://www.enqonline.org/public/articles/index.php* with reports, conference presentations, training seminars and research studies about the ENQ, including:

- *The 2008 ESCHER (European Smoking Cessation Helplines* Evaluation Research) *Report*, documenting the results of a study comparing reach and effectiveness of 8 European Union country quit lines;
- A study on the *Impact of Quitline Telephone Numbers on Cigarette Packets*;
- ENQ Presentations from the 2007-2009 *European Conference on Tobacco or Health (ECTOH)* and *European Network of Quitlines (ENQ) Conference*;
- proceedings and materials from seminars and training programmes in tobacco-related inequality in health, capacity building and other subjects of interest.

Members page: *http://www.enqonline.org/public/members/index.php* with list of the 29 ENQ member countries and links to the main phone number and other contact information for each quit line.

Includes a feature whereby, from each country's contact web page, health-care providers or friends of smokers can click to have an e-mail with that country's quit-line phone number sent to their patients or others they want to help quit.

Centers for Disease Control and Prevention Telephone Quitlines
Web site: *http://www.cdc.gov/tobacco/quit_smoking/cessation/quitlines/*

A Resource for Development, Implementation, and Evaluation. Atlanta, GA, U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004.

(This is a 2005 resource guide for quit lines developed by the U.S. Centers for Disease Control, downloadable from the web site. It covers everything from promotion to contracting with vendors to staffing and quality/evaluation.)

11.2 General tobacco treatment

Treatobacco
Web site: *http://www.treatobacco.net*

Treatobacco.net is run by the Society for Research on Nicotine and Tobacco in partnership with the International Union Against Cancer and the InterAmerican Heart Foundation (IAHF). The core content is currently available in 11 languages: Arabic, Chinese, Czech, English, French, German, Italian, Japanese, Portuguese, Russian and Spanish.

11.3 Research and evaluation

North American Quitline Consortium (NAQC)
Web site: *http://www.naquitline.org/*

The Minimal Data Set for Evaluating Quitline: *http://www.naquitline.org/?page=mds*

11.4 Promotion

Centers for Disease Control and Prevention

Web site: *http://www.cdc.gov/tobacco/index.htm*

General web site on Smoking and Tobacco Use. Media Campaign Resource Center: *http://www.cdc.gov/tobacco/media_communications/* includes competitions and incentives for smoking cessation.

For social marketing review, see the CDC guide *Chapter 9. Promoting quitlines*: *http://www.cdc.gov/tobacco/quit_smoking/cessation/quitlines/*

American Legacy Foundation

Web site: *http://www.becomeanex.org*

Created to support smokers' quitting by creating a "brand" where smokers think about being an "ex-smoker" as something positive, rather than negative.

A position paper *Increasing reach of tobacco cessation quitlines – a review paper of the literature and promising practices*: *http://www.naquitline.org/resource/resmgr/issue_papers/naqc_issuepaper_increasingre.pdf*

11.5 Health care

Fax referral online training

Web site: *http://www.faxreferral.org*

Provides more information about fax referral processes for health-care providers to a quit line.

The Smoking Cessation Leadership Center (SCLC)

Web site: *http://smokingcessationleadership.ucsf.edu/index.htm*

Aims to increase smoking cessation rates and increase the number of health professionals who help smokers quit, by creating partnerships with a variety of groups and organizations, including quit lines. One of the central tenets of the SCLC is to make it as easy as possible for health-care providers to address tobacco dependence in their practices using the Ask, Advise and Refer paradigm.

30 Seconds To Save A Life: *http://smokingcessationleadership.ucsf.edu/30seconds.htm*

Encourages and provides support and materials for clinicians and their staff to identify smoking patients, advise them to quit, and refer them to a quit line. Resources include free or low-cost tools that can be ordered from the web site.

Rx for Change Continuing Education Programs
Web site: http://rxforchange.ucsf.edu/

The Smoking Cessation Leadership Center also sponsors and has materials for free continuing medical education (CME) and continuing education (CE) programs, including PowerPoint slides, audience handouts and correspondence video segments for training students, clinicians, and allied health professionals.

11.6 Operations and project management

Westbay Engineers Limited
Web site: *http://www.erlang.com/*

Calculator for staffing needs based on call volumes *http://www.erlang.com/calculator/erlc/*

Project Management Institute
Web site: http://www.pmi.org/

American Management Association (AMA)
Web site: *http://www.amanet.org/*

Project management seminars:
http://www.amanet.org/training/seminars/project-management-training.aspx

11.7 Theory at a glance

National Cancer Institute, National Institutes of Health
Web site: *http://www.cancer.gov/*
Theory at a glance: a guide for health promotion practice, at the individual, group, and community level:
http://www.cancer.gov/cancertopics/cancerlibrary/theory.pdf

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Appendices

APPENDIX 1. CONSORTIA, NETWORKS AND WORLDWIDE SITUATION

The European Network of Quitlines (ENQ) is an initiative aimed at maximizing collaboration between all European Union member countries in tobacco control and smoking cessation. The main aims and objectives of the ENQ are to:

- promote and support European quit lines as a public health intervention that is clinically and cost effective in helping European smokers in quitting successfully;
- share expertise and experience, disseminate evidence base and share best practice;
- raise the quality of services throughout Europe by establishing standards;
- assist those wishing to establish new quit lines;
- build upon the Network's success of the first three years and extend the development and promotion of quality standards throughout the European Network of Quitlines;
- evaluate the effectiveness of the quit lines operating throughout Europe, to assess which factors influence success, and to find out what kind of assistance is sought (and received) by what kinds of smokers;
- establish the evidence base for the clinical and cost-effectiveness of quit lines as an essential component of a comprehensive tobacco control programme.

The North American Quitline Consortium (NAQC) seeks to unite quit-line stakeholders – funders, service providers, researchers and national organizations – in Canada and the United States to improve access to and the quality of quit-line services for residents of the region. These efforts are intended to decrease the toll of tobacco-related diseases and deaths in North America.

The Consortium's mission is to serve as a learning organization that:

- maximizes the access, use and effectiveness of quit lines in North America;
- offers a forum to link those interested in quit-line operations; and
- provides leadership and a unified voice to promote quit lines.

It focuses on the shared vision and common agenda of all stakeholders, which often transcend their national origins. The organization is practice-driven, evidence-based and results-focused. The North American Quitline Consortium plays a critical role in the dissemination of information on better practices and also encourages the implementation of better practices by quit lines. The Consortium members provide content expertise and are engaged in all phases of NAQC's programme activities.

Infrastructure: NAQC has a Board of Directors elected by its members and an advisory board. Operations are led by a Chief Executive Officer (CEO) who oversees a small staff also coordinating volunteer activity.

Major initiatives include: the creation of a minimum dataset, an annual survey, a comprehensive public and member web site, policy advocacy, webinar series and an annual meeting.

Table 5. Global summary of quit-line practices by country, 2010

Country	WHO survey complete	Proactive+ reactive calling	Coverage 75-100% populace	Free or low cost NRT[a]	Funding source(s)		Health system linkage
					Government	NGOs	
1. Argentina	**YES**	Reactive	**YES**	No	–	–	–
2. Armenia	–	–	–	–	–	–	–
3. Australia	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**[b]
4. Austria	**YES**	**YES**	**YES**	–	**YES**	**YES**	**YES**[b]
5. Bahrain	**YES**	Reactive	–	–	–	–	No
6. Barbados	–	–	**YES**	–	–	–	–
7. Belgium	**YES**	**YES**	**YES**	No	**YES**	**YES**	**YES**[b]
8. Brazil	**YES**	Reactive	**YES**	No	**YES**	No	**YES**
9. Bulgaria	–	–	**YES**	–	–	–	–
10. Canada	–	**YES**	**YES**	No	–	–	–
11. Cuba	**YES**	Reactive	No	No	–	–	**YES**[b]
12. Cyprus	–	**YES**	–	No	–	**YES**	–
13. Czech Republic	**YES**	Reactive	–	No	**YES**	**YES**	–
14. Denmark	**YES**	Reactive	**YES**	No	**YES**	**YES**	No
15. Estonia	–	–	**YES**	–	–	–	–
16. Finland	–	Reactive	**YES**	No	**YES**	**YES**	–
17. France	**YES**	**YES**	**YES**	No	**YES**	–	**YES**[b]
18. Georgia	**YES**	Reactive	–	No	–	–	**YES**[b]
19. Germany	–	**YES**	**YES**	No	–	**YES**	–
20. Haiti	–	–	–	–	–	–	–
21. Honduras	–	–	**YES**	–	–	–	–
22. Hungary	–	Reactive	**YES**	No	**YES**	–	–
23. Iceland	–	**YES**	**YES**	No	**YES**	**YES**	–
24. Iran	**YES**	**YES**	No	No	–	–	–
25. Ireland	–	**YES**	**YES**	No	**YES**	–	–
26. Israel	–	–	**YES**	–	–	–	–
27. Italy	**YES**	**YES**	**YES**	No	**YES**	–	No
28. Kazakhstan	–	–	–	–	–	–	–
29. Kyrgyzstan	–	–	**YES**	–	–	–	–
30. Lao People's Democratic Republic	–	–	No	–	–	–	–

Country	WHO survey complete	Proactive+ reactive calling	Coverage 75-100% populace	Free or low cost NRT[a]	Funding source(s)		Health system linkage
					Government	NGOs	
31. Malta	**YES**	Reactive	**YES**	No	**YES**	–	–
32. Mexico	–	–	**YES**	–	–	–	–
33. Micronesia, the Federated States of	–	–	No	–	–	–	–
34. Netherlands	–	**YES**	**YES**	No	**YES**	**YES**	–
35. New Zealand	–	**YES**	**YES**	**YES**	**YES**	**YES**	–
36. Norway	–	**YES**	**YES**	No	**YES**	–	–
37. Poland	**YES**	**YES**	**YES**	No	**YES**	–	–
38. Portugal	–	Reactive	–	No	–	**YES**	–
39. Republic of Korea	**YES**	**YES**	**YES**	No	**YES**	–	**YES**
40. Romania	**YES**	**YES**	**YES**	No	**YES**	–	–
41. Saudi Arabia	–	–	No	–	–	–	–
42. Senegal	–	–	No	–	–	–	–
43. Singapore	**YES**	**YES**	**YES**	No	–	–	–
44. Slovakia	–	Reactive	–	No	**YES**	**YES**	–
45. Slovenia	**YES**	Reactive	**YES**	No	–	**YES**	–
46. South Africa	**YES**	Reactive	No	No	**YES**	**YES**	No
47. Spain	**YES**	**YES**	No	**YES**[c]	**YES**	No	**YES**
48. Sweden	–	**YES**	**YES**	No	**YES**	–	–
49. Switzerland	–	Reactive	**YES**	No	**YES**	–	–
50. United Arab Emirates	**YES**	**YES**	No	**YES**	–	–	–
51. United Kingdom	–	**YES**	**YES**	No	**YES**	**YES**	**YES**[b]
52. United States	–	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**[b]
53. Uruguay	–	–	**YES**	–	–	–	–
Total YES	**21**	**23**	**34**	**5**	**25**	**17**	**11**

– not available (available data were based on self-reports and have not been independently verified).

a NRT, nicotine replacement therapy.

b All European Union Quitline Network (EQN) members have required rotating health warnings on cigarette packaging, one of which includes the Quitline phone number.

c Some regions and groups.

APPENDIX 2. USING PROJECT MANAGEMENT TO LAUNCH OR IMPROVE A QUIT LINE

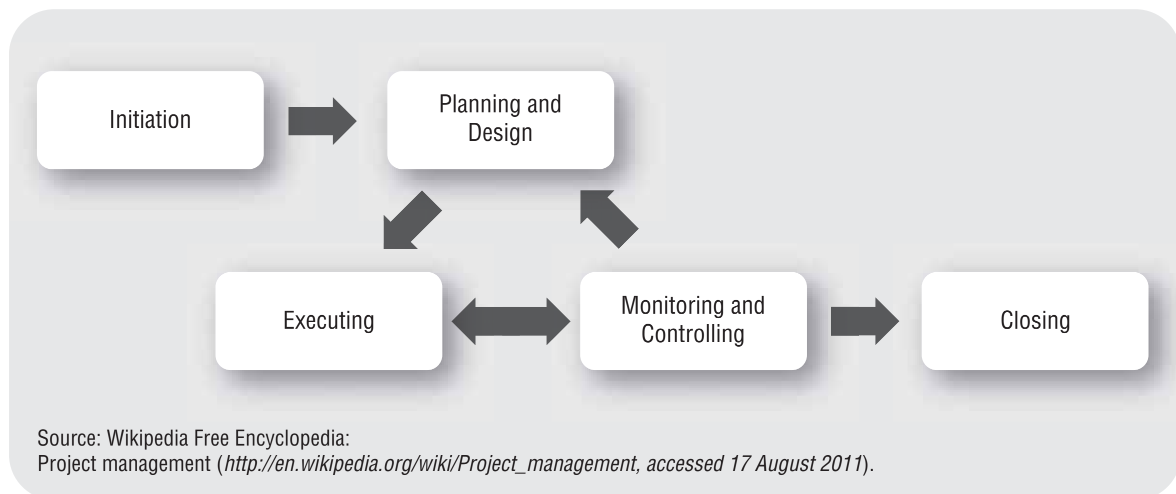
As already noted, even with the best protocols and plans, launching a quit line is a complex undertaking. One tool that is used to great success to ensure that all the different elements come together is project management. This approach can be used both for launching a quit line and also to manage new additions or changes to services.

What is a project?

A project is a unique and temporary endeavour that can create a product, provide a service, or bring about a result.

A project has a specified start and end date. The life-cycle of a project is characterized by five phases: initiation, planning and design, executing, monitoring and controlling, and closing. Initiation is the first step where a concept/deliverable is defined, which starts the project (Figure 4). Planning and design conceptualizes the tasks required to supply the project deliverable(s). Executing is the stage that actuates the tasks outlined in the planning stage. Monitoring and controlling assesses the quality of the project's tasks and executed deliverable(s). Finally, closing marks the completion of project and the successful release of the project's deliverables.

Figure 4. Project life-cycle



Source: Wikipedia Free Encyclopedia:
Project management (*http://en.wikipedia.org/wiki/Project_management, accessed 17 August 2011*).

What is project management?

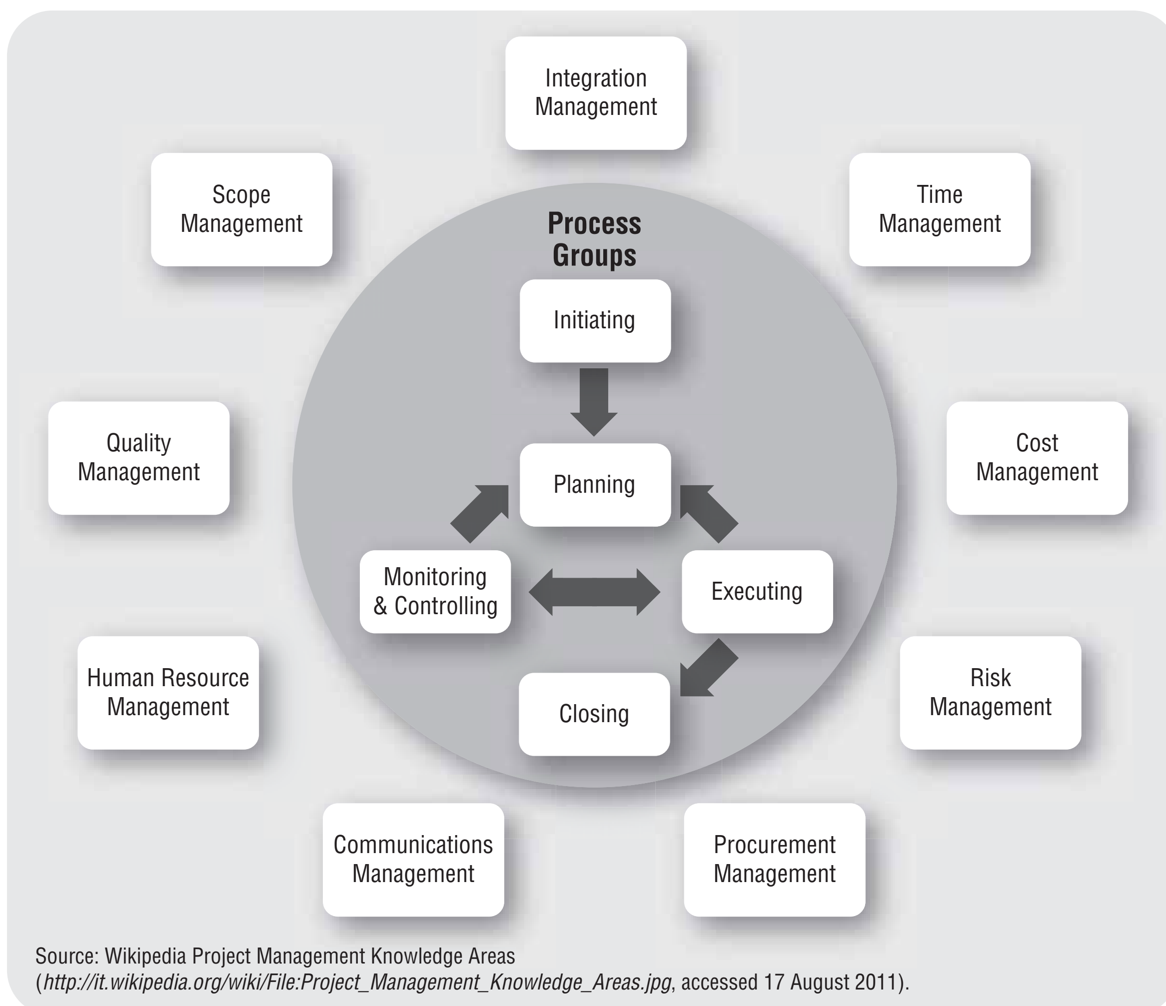
Project management applies a set of skills, tools and methods to a project life-cycle.

Using processes and techniques from nine knowledge areas, project management ensures a higher likelihood that a project will produce the expected quality deliverables, on time and within budget, whether the project is large or small in size and complexity (Figure 5).

- Integration management: focuses on setting up a viable project plan, project charter, as well as scope statement. Integration management also monitors and controls the plan, so the impact on other knowledge areas can be determined if the project plan changes.

- Scope management: deals with the planning, creation, protection and fulfillment of the project scope. Scope management also manages how, when or if the scope may change.
- Time management: addresses how project activities fit in the project schedule. Time management also calculates timelines for project milestones throughout the duration of project.
- Cost management: this area of knowledge addresses budget, and the estimating and controlling of costs.
- Quality management: each project must be assessed for a standard of quality to ensure all deliverables are met, and focuses on the quality of planning, assurance and control.
- Human resources management: addresses staff acquisition and team development.
- Communications management: deals with the details of how information and updates are communicated, and the frequency in which they are communicated. Communication is particularly crucial for project stakeholders who are sponsoring the project, but may not be involved in the day-to-day activities.
- Risk management: plans for risks, analyses the possibilities, and monitors and controls risks that may come up.
- Procurement management: this knowledge area focuses on a project's needs and the services provided by various sources; and covers processes in selecting and acquiring vendors, and contract negotiations.

Figure 5. Project management knowledge areas



Source: Wikipedia Project Management Knowledge Areas (*http://it.wikipedia.org/wiki/File:Project_Management_Knowledge_Areas.jpg*, accessed 17 August 2011).

Project management also monitors day-to-day activities, manages and monitors quality targets and goals, and disseminates information to the project team. Project management leads the way in motivating, communicating and problem solving – ideally driven by a group or team with a good understanding of the project's environment (physical, cultural and political), general management knowledge, as well as interpersonal skills to solve problems, negotiate and provide effective communication.

Visit the following web sites for more information on project management

Project Management Institute: *http://www.pmi.org/Pages/default.aspx*

American Management Association (AMA):
http://www.amanet.org/training/seminars/project-management-training.aspx

Project Management Definition on Wikipedia: *http://en.wikipedia.org/wiki/Project_management*

APPENDIX 3. ABBREVIATED SAMPLE OF A REQUEST FOR PROPOSAL (RFP) FOR A QUIT LINE

1. Name of quit line (country, state, province, etc.) and organizations who released the RFP.
2. Purpose of the Request for Proposal (RFP):
   a. "The purpose of this request for application (RFA) is to enter into a grant agreement with a qualified firm to provide tobacco use screening, assessment, support materials, NRT patches, referrals to community-based cessation programs, and a proactive counselling tobacco treatment service statewide through a toll-free, tobacco cessation quit line."
3. Background information:
   a. "since [date] the [entity] has funded a comprehensive tobacco control and prevention program including proactive, country-wide telephone based...", or, "The [entity} recognizes that tobacco use is a preventable cause of death and diseas...etc.";
   b. overview of partners including media vendors, evaluators, partnerships and expectations for the quit line vendor to work closely with these entities.
4. Funding available: specify whether funding is per year or per contract period (i.e. two yrs):
   a. break this into number of people to be served with counselling services and medication;
   b. describe how payment will be made to the vendor (i.e. monthly) and any contingencies associated with payment, such as that quit line must meet certain mandatory service levels.
5. Length of grant agreement (e.g. from 2 July 2010 to 30 June 2012).
6. Opportunity for bidders to submit questions. Answers provided one week after bidder questions due.
7. Scope of services:
   a. service delivery protocols:
      i. who is eligible to receive services from the quit line (all tobacco users or just smokers; only users themselves or individuals calling on behalf of the tobacco user (e.g. family members);
      ii. number of counselling sessions and whether these are reactive (incoming calls) or proactive (outgoing calls to tobacco users);
      iii. medication decision support protocols (discuss medication only; provide medication);
      iv. whether medical oversight is necessary and credentials required;
      v. cultural competency requirements, and services required for special or priority populations such as different call protocols/schedules for priority populations.
   b. Technology system requirements:
      i. telephonic system with call management system allowing for tracking of calls and service levels;
      ii. computer systems;
      iii. data security and contingency plans.
   c. Hours of operation (days, hours per day, holidays on which the quit line can close; etc.);
   d. anticipated quit-line call volumes (per year, month or week);
   e. description of how high-call volumes are handled with an example;
   f. staffing requirements:
      i. qualifications by job type (i.e. counsellors, supervisors; etc.);
   g. language capability: if other languages are required, can they be translated by contracted translators or does the quit line have to hire counsellors fluent in other languages;
   h. whether web-based services for tobacco users are required;

i. service level requirements:
    i. service level (speed at which calls are answered and abandoned), metrics for returning phone messages, length of counselling calls, fulfillment requirements for any mailed medications and/or printed materials, etc.;
j. referrals to community resources;
k. participant printed materials:
i. language, literacy levels, special populations, etc.;
l. promotion of quit line (does the vendor have any responsibility to promote the quit line, share in promotion, or will this be handled by the contracting entity);
m. data collection and reporting requirements;
n. quit and satisfaction evaluation (required by vendor or work with third party);
o. quality monitoring by quit-line vendor;
p. expectations for communication with funding entity.

8. Proposal requirements and company qualifications:
    a. references (letters and/or contact information);
    b. affiliations;
    c. no relationship with the tobacco industry;
    d. compliance with evidence-based treatment practices.
9. Proposal response format:
    a. number of pages, font size, double spaced;
    b. contact person at quit-line, address, phone and fax numbers, e-mail, etc.;
    c. executive summary section;
    d. detailed response section;
    e. proposed budget (detailed);
    f. provide specific numbers and format to use in pricing section.
10. Proposal submission due date and time; contact person at contracting entity.
11. Description of who will be working at the quit line on a day-to-day basis and how that individual interacts within the whole organization (client services).
12. Oral presentations / opportunity for on-site visits allowing contracting entity to meet the people with whom they are contracting.
13. Example of at least one recorded intervention.
14. Terms and conditions available in Word format allowing for legal review and proposal of alternative terms (expedites process when a contract is awarded).
15. Preferred billing methodology (per unit, per completed call, flat rate), including budget scenario with assumptions allowing contracting entity to compare vendors equally.
16. Flexibility in RFP to allow for additional services to be added should vendors have new products to propose.
17. Flexibility in RFP to allow for budget increases without having to bid to increase budget amount.
18. Order of precedence with regard to RFP, proposal and negotiated terms once awarded:
    a. agreed upon scope of work should be first, then response, then RFP as often service being delivered may be different to that described in RFP once the state understands the level of service the vendor can provide.

APPENDIX 4. EXAMPLE OF A CALL PROTOCOL

Below is an outline of a call protocol used in the United Kingdom for the "Together Plus" intervention (a proactive multi-call protocol) (Table 6, Figure 6).
Contact Andy McEwen at *andy.mcewen@ucl.ac.uk* for full protocol documents.

Overview

Common to most forms of behavioural support, the content of these calls will include elements that: **build the therapeutic relationship, boost motivation** and produce **practical advice**. In addition, some of the calls will involve the collection of data and the issuance of nicotine patches vouchers.

Advisers will be partially guided on the content of the intervention by screen prompts but the nature of each call should aim to be as client led as possible. The training of advisers in the Together Plus intervention will equip them to deliver these interventions and will build upon existing support and supervision structures to assist them in developing their skills.

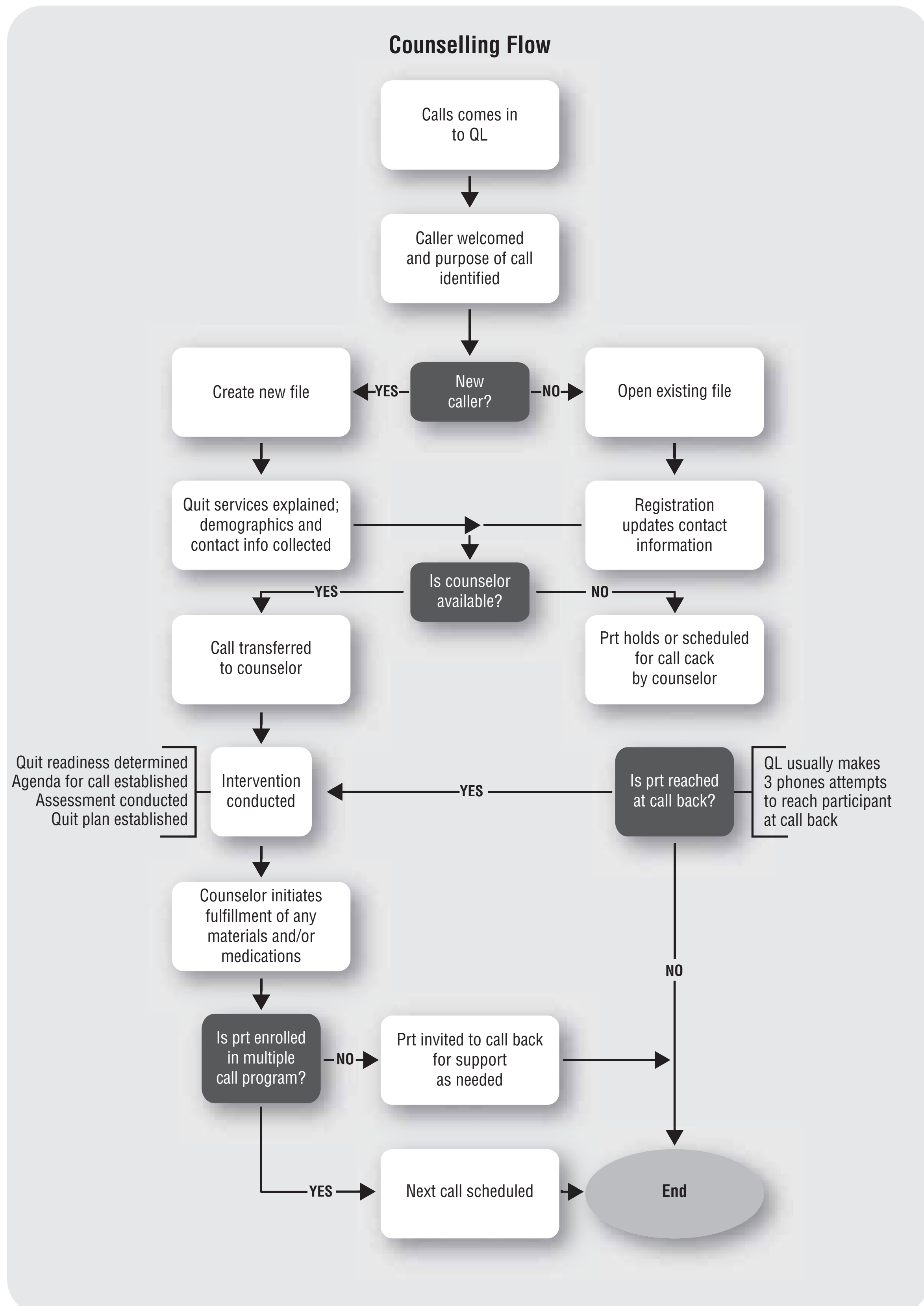
Table 6. Outline of call protocol for Together Plus, the United Kingdom

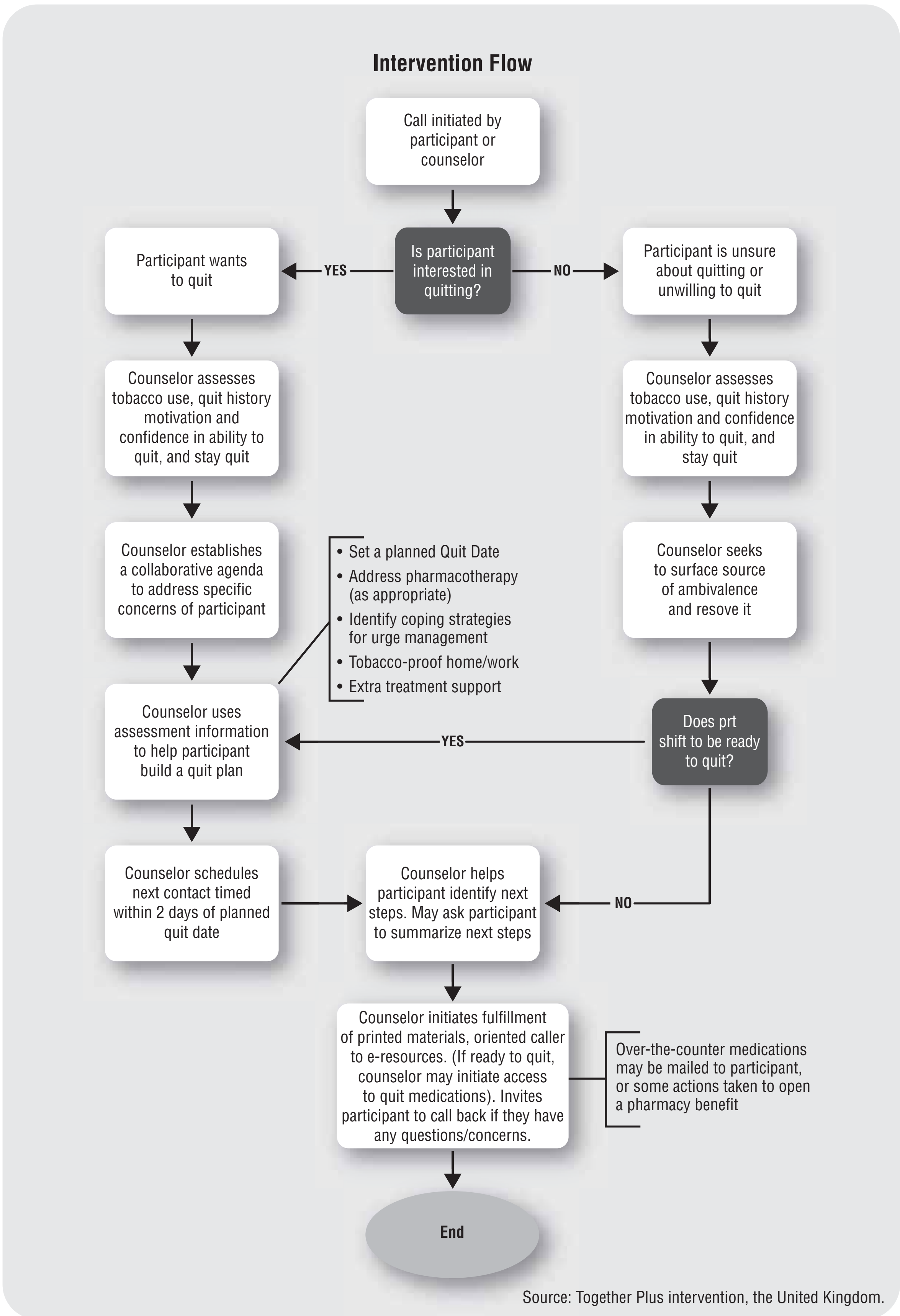
Call number	Timing of call	Content of call
1	**Enrolment call**	1. Programme introduction 2. Confirm eligibility, including quit date 3. Informed consent 4. Baseline data collection 5. Randomization and explanation of programme structure 6. Discuss medication (*note: this may include issuing NRT where eligible*) 7. Summary and agree on date of next call Adviser to enter call notes
1a	**Pre-quit call (1a)** Two weeks before quit date (*note: this call only occurs for those who set a quit date over three weeks from enrolment*)	1. Reminder of programme structure 2. Confirm intention to quit, including quit date (*note: this may involve re-setting quit date*) 3. Discuss medication 4. Summary and agree date of next call Adviser to enter call notes
2	**Pre-quit call** Two days before quit date	1. Welcome to programme and review of what it will involve 2. Confirm quit date 3. Assess client's past and present circumstances/smoking 4. Enhance motivation 5. Boost self-confidence 6. Discuss medication 7. Preparation planning and summary Adviser to enter call notes

Call number	Timing of call	Content of call
3	**Quit date**	1. Confirm quit/readiness to quit and supply of medication 2. Discuss withdrawal symptoms 3. Preparation planning 4. Enhance motivation* 5. Boost self-confidence* 6. Summary Adviser to enter call notes
4	**Three-day call**	1. Assess client's progress 2. Discuss withdrawal symptoms 3. Examine high risk situations, slips or relapse 4. Review coping strategies 5. Discuss medication use and supply 6. Enhance motivation and boost self-confidence* 7. Summary Adviser to enter call notes
5	**Seven-day call**	1. Assess client's progress 2. Discuss withdrawal symptoms 3. Examine high risk situations, slips or relapse 4. Review coping strategies 5. Discuss medication use and supply 6. Enhance motivation and boost self-confidence* 7. Summary Adviser to enter call notes
6	**14-day call**	1. Assess client's progress 2. Discuss withdrawal symptoms 3. Examine high risk situations, slips or relapse 4. Review coping strategies 5. Discuss medication use and supply 6. Enhance motivation and boost self-confidence* 7. Summary Adviser to enter call notes
7	**21-day call**	1. Assess client's progress 2. Discuss withdrawal symptoms 3. Examine high risk situations, slips or relapse 4. Review coping strategies and long-term plans 5. Discuss medication use and supply 6. Enhance motivation and boost self-confidence* 7. Strengthen ex-smoker identity 8. Summary 9. Inform of other support available Adviser to enter call notes

* Enhancing motivation and boosting self-confidence are underlying aims throughout all calls.

Figure 6. Sample call flow protocol (with intake and counsellor separate)





Source: Together Plus intervention, the United Kingdom.

APPENDIX 5. QUALITY MONITORING

Creating an effective programme to monitor quality can be broken down into four steps:

1. set expectations – determine behaviours you want your employees to demonstrate;
2. create evaluation tools – organize expectations into functional call review categories;
3. establish an evaluation process – determine how frequently to review and if calibration is needed;
4. utilize technology to record calls and create a database for call evaluations.

Each of these steps will be explored in some detail. Examples will focus on individual counselling quality, but the same principles can be applied to other programme elements such as call centre metrics (i.e. average speed to answer, live response rate and abandonment rate). These metrics may be easier to measure because your telephone system provides you with automated data. You will want to set quality targets at the system-level as well as the individual-level. The general approach around improving quality is to focus on how to improve the various systems that impact quality, such as training, computer and telephone support, supervision and workflow.

1. Set expectations

Defining what meets expectations gives you the ability to reward employees for demonstrating behaviours consistent with what you want to see in your programme. Defining behaviours that are below expectations can help you identify employees who are not well suited for the job. By defining the areas that need improvement, you allow employees to improve and succeed.

First, clearly define baseline expectations for staff. Decide which behaviours and skills you want demonstrated in every call. Your training programme should prepare employees to reach this skill level. *These can be listed as "meeting expectations" on a call evaluation tool.*

Next, determine which behaviours or skills are unacceptable. *These can be listed as "below expectations" on your call evaluation tool.*

Finally, determine intermediate skills that fall between unacceptable and meeting expectations. *These will be listed as "needs improvement" on your call evaluation tool.*

2. Create evaluation tools

The evaluation tool is a performance assessment of the employee's skill level, and is a way of measuring skills and behaviours demonstrated during the call against your baseline expectations (Table 7).

Table 7. Example of how baseline expectations/behaviours can be broken down

Meeting expectations	Below expectations	Needs improvement
Employee says “please” and “thank you”.	Employee is rude.	Employee does not say “please” or “thank you”, but is not rude.

Organize your list of baseline expectations/behaviours into related categories.

For example, if one baseline behaviour is that the employee says, “Thank you for calling today”, and another baseline behaviour is that the employee says, “This call will take about 15 minutes”, these can be organized into one category called “Call Introduction” (Table 8).

Table 8. Example of how a “Call Introduction” category can be broken down into expectations

Category	Meeting expectations	Below expectations	Needs improvement
Call Introduction	Says “thank you for calling today” and states amount of time call will take.	Does not say “thank you for calling today” and does not state amount of time call will take.	Says “thank you for calling today” but does not state amount of time call will take.

After you have created your evaluation tool, determine a scoring system and set performance standards. One way to evaluate employees is a pass/fail scoring system. This type of scoring system can help you determine the employees who are meeting expectations and those who are falling below expectations. Another way to evaluate employees is to develop a point-based system. For example, scoring “below expectations” might give 0 points for that category, while scoring “needs improvement” gives 1 point, and scoring “meets expectations” gives 2 points. This type of scoring system gives you a way of assigning an overall score to the evaluation based on a percentage of points earned compared to points possible, and can help you determine where employees fall on a continuum. For example, it may be helpful to your programme to know how many employees are scoring 0-50%, 51-75% and 76-100% each month.

3. Establish a process

First, you need to decide who will be responsible for quality monitoring. Options include the supervisory staff, a position focusing specifically on quality, or someone in another area. There are simplicity benefits to having monitoring carried out by supervisors but, as your quit line grows, there are benefits to separating quality monitoring from direct supervision. You also need to determine how frequently to evaluate calls. You want to have quality monitoring occur frequently enough to be able to identify concerns early and not have to rely on a single call for a given counsellor if you want to be able to give feedback to individual counsellors. However, too frequent monitoring can add significant costs without adding much value. Determine whether you want employees to be able to predict when a call evaluation will happen, or not. You can also bring transparency to the process by making the evaluation tools available to staff for review and reference; performance standards should not be hidden.

Calibration

If you will have more than one person evaluating calls, it is a good idea to establish a process so that all evaluators are calibrated. This means ensuring that evaluators are scoring calls similarly. This can be accomplished by periodically evaluating calls as a group. If the group evaluates categories the same way, this means that the group is well calibrated. If the group evaluates categories and/or behaviours differently, the group will need to determine why and come to agreement regarding what the standard should be. Having closely calibrated evaluators will increase staff acceptance of the process.

4. Utilize technology

You can take advantage of software to record and store calls. As you consider using technology options on the market, consider if you want to record all calls or just a random selection of calls. Recording all calls allows the ability to review every interaction with callers, but also requires a large data storage solution. Another consideration is if you want to be able to see the employee's screen at the time the recording is made. Capturing the movements employees make on their computer screens as they interact with callers can provide valuable information that can aid in coaching messages and in troubleshooting technical problems. Often, call recording technology can also provide a central location for entering and storing call evaluations for all employees. This allows the ability to analyse quality trends and potential training needs.

If your circumstances do not allow for call recording, quality monitoring can be done simply by listening in on live calls.

APPENDIX 6. TRAINING SUPPORT TOOLS

Examples of training background materials for telephonic tobacco cessation specialist

Goal

Provide an education programme for tobacco cessation counsellors. Training will introduce and reinforce skills needed for job performance.

Training for tobacco cessation specialists should include brief intervention techniques, principles of intensive treatment models and basic motivational interviewing techniques. It should prepare specialists to respond to callers in a non-judgemental way with an understanding of each person's readiness to quit tobacco (Table 9).

Topics

- Nicotine dependence
- Tobacco-use demographic
- Chronic disease and tobacco use
- Clinical assessment, medication use
- Counselling techniques
- Proven quitting strategies
- Privacy practices, ethics
- Crisis protocols
- Tobacco use among special populations (e.g. pregnant women, youth, people with chronic diseases and smokeless tobacco users)
- Customer service, professionalism
- Software application skills.

Expected outcome

At the end of the course, you will be able to:

- describe the epidemiology of tobacco use and the pathophysiology of tobacco-related disease;
- describe and demonstrate how to apply information to educate and motivate patients to quit;
- describe how to adapt intervention for members of special populations (e.g. pregnant women, yourself, people with chronic diseases and smokeless tobacco users);
- describe the evidence base for different forms of tobacco treatment;
- describe the 5A model and the 2A and R model components and how the model integrates various treatment components between quit lines and health care;
- describe and apply the principles and practical aspects of intensive tobacco treatment behavioural counselling, including the creation of a quit plan that addresses setting a quit date, the development of coping skills for triggers/urges to smoke, tobacco-proofing the environment, and the use of social support and low-cost medications;
- describe and apply basic motivational interviewing techniques to encourage smokers who are not ready to quit;
- describe elements of an initial assessment to obtain accurate patient data on their tobacco status and factors in their medical and social situation likely to influence treatment;

- describe the role of low-cost medications in tobacco treatment, what medications are available, and how to screen and instruct patients in their use;
- demonstrate proficiency in delivering a tobacco cessation intervention to participants, including the provision of follow-up;
- demonstrate proficiency at simultaneous, accurate data entry and chart review;
- describe larger issues relating to helping tobacco users quit including societal policies, such as clean indoor air, tobacco price and access to treatment services, that could create barriers to success.

Training programme structure

Table 9. Examples of training types and skill requirements

Training type	Requirements
New employee training: cessation specialist, registration staff, and supervisors	New tobacco cessation specialists, registration staff and supervisors are expected to be proficient in all the skill and knowledge areas necessary to provide safe, effective and efficient services to participants prior to assuming their duties.
Continuing education	Continuing education courses that will reinforce and enhance skills needed for job performance.
Job aids	Job aids (paper and/or electronic) posted to support work at point of service).
On-screen support	Talking points built into the database to prompt dialogue for specific populations. Embedded in documentation screen.
Coaching	One-on-one personalized performance training as needed.

Mexico Tobacco Quitline: 2007 Telephone Counseling Training

Sponsored by the **North American Quitline Consortium** – Gary Tedeschi, lead

Context

A four-day introductory training including two days of practise for counselors. All had strong psychology backgrounds and were already providing brief phone counseling/referrals for substance use/abuse

Learning objectives

- Identify factors that affect smoking uptake, maintenance, and cessation
- Articulate principles of quit-line counseling for smoking cessation
- Apply key topics for smoking cessation intervention including readiness assessment, motivational interviewing, pharmacotherapy, and relapse prevention
- Demonstrate skills required for quit-line smoking cessation counseling
- Identify critical questions/topics to include in a quit-line smoking cessation intervention
- Practice and implement counseling protocol for smoking cessation.

Telephone counseling training outline

Day 1

- The Psychology of Smoking Cessation
  - Why do people smoke?
  - Process of quitting
  - Process of relapse
- How to Increase Cessation
  - Increase the quit attempt rate
  - Increase the probability of survival of quit attempts
- Role of the Telephone Counseling for Smoking Cessation
  - Basic tenets
  - Evidence of effectiveness
- Smoking Cessation for Mexican Callers
  - Key consideration for designing an intervention
    - Number of sessions
    - Frequency of sessions
    - Content of sessions
- Counseling Considerations
  - Helping style
  - Counseling protocol
- Helping Style
  - Directive vs. supportive
  - Expert vs. facilitator
  - Ascribed credibility vs. achieved credibility
  - Motivational interviewing
- Motivational Interviewing
  - Overview
  - Goals
  - Principles
  - Self-motivational statements
  - Eliciting self-motivational statements
  - Example
- Counseling Intervention Content
  - Initial session
  - Follow-up sessions
- Initial Session
  - Treatment overview & rationale
  - Motivation
  - Smoking history
  - Quitting history
  - Physical dependency considerations
  - Pharmacotherapy
  - Environmental considerations
  - Familial & social support
  - Self-efficacy
  - Self-image
  - Problem solving & planning (cognitive-behavioral)
  - Session summary
  - Setting a quit date
  - Tapering considerations
  - Addressing follow-up calls (clients call in for follow-up)
- Demonstration

Day 2

- Quit Day Session
  - Quitting status
  - Withdrawal assessment
  - Pharmacotherapy review
  - Challenging situations
  - Slips & relapse
  - Support
  - Future plan
- Follow-up Session (3-day)
  - All topics from quit day call
- Follow-up Session (1 week)
  - All topics from quit day call
  - Motivation
  - Benefits/costs
- Follow-up Session (2 weeks)
  - All topics from quit day call
  - Self-image
  - Health

- Follow-up Session (1 month/final)
  - All topics from quit day call
  - Top three triggers over time
  - Reflections on the process
- Recycling Sessions (> 1 month from initial call/attempt)
  - Reassessment
    - Motivation
    - Planning
- Demonstration
- Role Playing

Days 3 & 4

- Intervention Implementation
  - Role playing
  - Call shadowing
  - Call monitoring
- Special Topics
  - Role of the family
  - Home ban
  - Social norms
  - Pharmacotherapy
  - Physical health issues
  - Psychiatric health issues
  - Special populations (teen, pregnant smokers)
  - Risk assessment
  - Emergency procedures
  - Referral
- Wrap-up

Applying adult education principles

When developing and delivering training programs assume adults are:

- autonomous and self-directed.
- goal-oriented
- relevancy-oriented
- practical.

Tools to involve all trainees in activities

- **Objectives**: ensure learning objectives are relevant.
- **Organization of content**: learning is easier when content and procedures or skills to be learned are organized into meaningful sequences. Learners will understand and remember meaning.
- **Emotions**: learning that involves the emotions and personal feelings, as well as the intellect.
- **Participation**: on order for learning to take place, a person must internalize the information; seeing or hearing is not enough.
- **Feedback**: learning is increased when individuals are periodically informed of progress.
- **Reinforcement**: it is important for learners to receive reinforcement.

An effective lesson includes the following components.

- **Preparation**: preparing your learners to learn: guarantee foundation for the rest of lesson.
- **Presentation**: providing the content the learners need to understand concepts and practice skills.
- **Practice and application**: complete understanding has taken place only when the learner is able to apply or transfer the learning to new problems or situations.
- **Evaluation**: best way to predict whether the learners can perform the task that they have been taught. Testing can be informal or formal.

The trainer's preparation and interaction with the trainees has a big influence on the classroom interaction. There are a variety of instructional methods that can be used during a lesson. The choice of method depends on learning objectives, expected learning outcomes, and classroom conditions (i.e. size).

Learning objectives are the blueprint for ensuring that you are teaching what needs to be taught. The learning objectives describe the outcome, rather than the method. A learning objective should be worded so that observers can clearly measure whether or not the objective has been achieved.

Outcome or skill checks are the tests that tell you whether or not the learning objectives have been met. The skill checks match the objectives in the performance and conditions of the skill.

Teaching Methods

- Lecture
- Discussion
- Socratic questioning
- Independent work
- Brainstorm
- Demonstration
- Collaborative learning
- Small group or working in pairs
- Role plays
- Story telling
- Case study
- Simulations
- Games

APPENDIX 7. SUPPLEMENTARY COUNSELLING MATERIALS

1. Counselling technique: the brief intervention model of motivational interviewing

Motivational interviewing can provide a structure for the phone intervention. It is especially useful for ambivalent callers who are either ambivalent about quitting or even if they want to quit, or about an element of behaviour change that is important for success. Developed by Miller & Rollnick (1991), the effective brief intervention:

- focuses on an area in which the caller is most motivated to make a change
- results in a goal or plan the caller feels they can achieve
- includes a plan for following up with the behaviour change.

The call follows these steps:

1. assess the caller's willingness to commit to making a behaviour change
2. identify positive changes that the caller has accomplished
3. identify areas in which behaviour change is needed to successfully quit
4. identify the area in which the caller is most interested in making a change in order to quit
5. assist the caller in setting a goal
6. identify and problem-solve barriers to achieving the goal
7. identify resources and support needed
8. identify how the caller will follow up with his/her goal.

The above process can be used for any form of behaviour change. In the quit-line setting, because most callers are already motivated to quit, it is important to include other steps such as those contained in the "common elements" tables 2 and 3 in Section 5. *Range of services*.

There are key elements to the brief motivational interventions identified by the acronym FRAMES (Table 10).

Table 10. Key elements of the brief motivational intervention

F	**Feedback** – providing the participant with feedback specific to his risk behaviour and personal situation.
R	**Responsibility** – emphasizing the participant's personal responsibility for making a behaviour change.
A	**Advice** – providing a clear message about the need for change in the participant's behaviour.
M	**Menu** – offering an array of options from which the participant can choose in making a change.
E	**Empathy** – interacting with the participant in a non-judgemental fashion and using reflective listening to support accurate understanding of the participant's
S	**Self-efficacy** – offering and supporting a sense of hope and optimism that change is possible.

Building **self-efficacy** is a strategy that specialists can use to motivate change. The self-efficacy theory states that people are more likely to change their behaviour when they believe they are capable of making the change. People develop self-efficacy from four main sources:

- mastery experience
- observation of others' performance
- verbal/social persuasion
- emotional and physiological arousal.

Therefore, building self-efficacy includes:

- encouraging actual practise of quitting (quitting for one or two days);
- sharing brief examples of successes made by other callers to help build confidence;
- asking about previous quit attempts, other healthy behaviour changes, and encouraging and convincing them success is result of self ("Wow, you've already showed your commitment to trying to stop smoking several times. That's great! More importantly you're willing to try again.");
- teaching relaxation techniques to minimize stress and elevate mood.

2. Principles of motivational interviewing

Miller & Rollnick (1991), who developed the concept of motivational interviewing, identify five principles (DEARS) that are important to the successful use of this intervention technique.

Develop discrepancy

When you develop discrepancy, you help the participant to recognize a conflict between their behaviour and values. Participants adopt new behaviours when they discover that a change is needed to realign their behaviour and values.

Example, "On one hand you tell me that you are having some trouble with coughing and shortness of breath because of smoking and that maintaining good health so you can live to see your grandchildren grow up is important to you. However, you also say that you feel like the cigarettes are your friend. Help me understand how these two things fit together."

Express empathy

Expressing empathy is basic skill for the counsellor. Empathy is having the ability to identify and understand another person's feelings.

Example: "I hear you say that you want to stop smoking because you feel like you are setting a bad example for your children. That must be difficult. Tell me more about that."

Avoid argumentation

Arguing with a participant is counterproductive to facilitating change and is a signal that the specialist has met resistance. Resistance can be the result of not understanding something the participant is trying to convey or moving the participant too quickly through the behaviour change process. It can also result from the specialist's use of a "label" in describing the participant, e.g. "addicted". When resistance or argumentative behaviour is present, the role of the specialist is to switch strategies.

Example: "We seem to be arguing. Let's stop and back up a bit. There must be something that is important to you that I'm not getting or understanding."

Roll with resistance

Resistance, on the participant's part, can be expressed as refusing to answer a question or giving short, clipped answers, interrupting, denying or ignoring the specialist. When resistance occurs, do not treat the participant as a "force to be overcome", but rather, that the specialist has created a problem. The techniques used in overcoming resistance include reframing and redirecting the participant's perspective, while realizing that the answers to the participant's problem lie within him.

Examples: "We've talked about some options to help you quit, but my sense is that these are not helpful for you right now. Are there things we have talked about today that seem like steps you can take?" or "Are there some other things we could talk about today that would be helpful?"

Support self-efficacy

Self-efficacy refers to the participant's confidence in his or her ability to make behaviour changes, such as becoming tobacco free. People are successful when they are motivated, have the skills, and believe carrying out actions will result in the desired behaviour change.

The counsellor builds self-efficacy through verbalizing the belief that change is possible and that change can occur through a variety of approaches. There is no one right way.

A motivational interviewing caveat

Some elements of motivational interviewing may feel a bit awkward for counsellors and require practice. Some cultures, which are more accustomed to directive counselling, may be put off by such techniques, if not accompanied by specific recommendations.

3. Counselling technique for resolving confidence barriers: the brief intervention model of cognitive behavioural therapy

Cognitive behavioural therapy is based on an extensive theoretical model (Beck et al., 1979; Beck, 1991) that has proven to be effective in treating a wide range of health problems, such as addiction, eating disorders, depression, anxiety, chronic pain, and hypertension (Marlatt & Gordon, 1985; Gloaguen et al., 1998; Hay et al., 2004; Hollon et al., 2005; Butler et al., 2006).

In the context of tobacco treatment, cognitive behavioural therapy is used when tobacco participants indicate a confidence barrier in quitting or staying quit. In this capacity, the coach and participant work as a team to uncover unhelpful behaviours or thought patterns that may be reinforcing the tobacco addiction.

Example: "I hear that you smoke most of your cigarettes when you're driving and after meals, and this occurs automatically." (Behavioural trigger).

Example: "It sounds like you're under a lot of stress, and that smoking seems to reduce it." (Behavioural re-inforcer.)

Example: "I hear that you think that if you quit, you won't be able to handle the stress." (Cognitive prediction.)

Example: "I hear that because you have tried to quit in the past and failed, you think the odds of succeeding this time are very low." (Cognitive attribution.)

As coaches and participants explore these cognitive behavioural challenges, they identify the core barrier that is interfering most with tobacco cessation and prevention. Once this barrier is identified, a tailored action plan is recommended that includes strategies to disrupt this barrier and reinforce tobacco free choices.

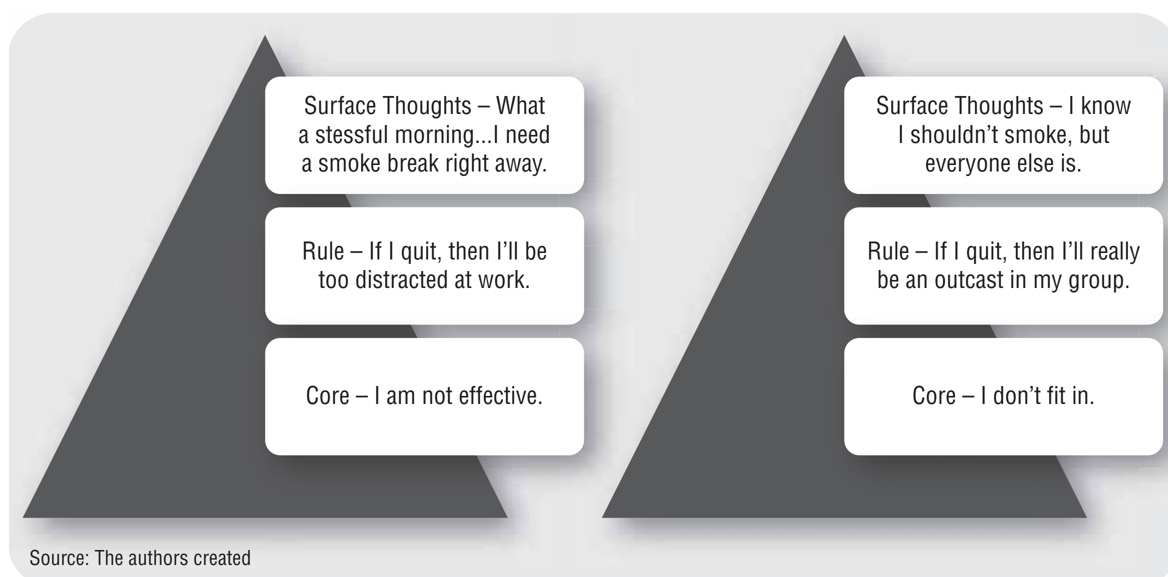
Cognition

Cognition refers to the thought patterns through which we perceive and organize our life experiences. We develop cognitive patterns automatically as we grow up, which help us to understand our experiences. Our cognition helps us to deal with challenging life experiences such as loss, gain, danger and injustice.

When individuals become addicted to a substance that produces powerful immediate benefits, this experience can become linked with core ways we think and feel, focused on increasing gain and avoiding loss. Using tobacco can reinforce the sense that we are doing well because of its rapid relief of withdrawal symptoms and activation of pleasure centres in the brain. On the other hand, thinking about or trying to quit may cause complex negative physical feelings and thoughts that feel too threatening to manage (Figure 7).

When individuals do entertain the idea of quitting and begin to take action (such as calling a quit line), they may open a window that allows them to see below their surface thoughts to unconscious rules and core beliefs. Counsellors can then help strengthen alternative and positive beliefs about "self" when not using tobacco.

Figure 7. Illustration of negative physical feelings and thoughts caused by quitting tobacco



Source: The authors created

Successful treatments for cognitive schemas that support tobacco use involve illuminating the surface thoughts and rules (predictions) via tracking exercises when using and abstaining from tobacco. Once the participant becomes aware of their thoughts and rules that support tobacco use, experiments can be encouraged that challenge their validity and utility of holding on to their predictions. For example, a person with a rule that says they will be distracted if they do not smoke could try taking a "walking break" instead of a smoking break, and try thinking "what I need is a break, not a smoke".

Once they have quit, participants have a golden opportunity to track and strengthen positive beliefs about self and use this information to compete against negative thoughts and predictions used previously to rationalize their tobacco use.

APPENDIX 8. DEVELOPING AND FOSTERING A RELATIONSHIP WITH HEALTH SYSTEMS

The availability of a quit line is viewed as a positive benefit to health-care providers and their patients, and can encourage provider screening and advice to tobacco users. However, health-care providers are unlikely to refer to the resource unless they have basic training to understand the services their patients will receive. Individual providers and health-care systems can benefit from training that provides the following:

- an outline of the characteristics of quit-line services;
- an overview of how to conduct a brief intervention with patients to refer to the quit line;
- examples of sustainable systems that can be set up to support the ongoing use of the quit line as a cessation resource, as well as provision of brief advice.

While not all health-care systems will develop a sustainable infrastructure to support their ongoing use of the quit line as a resource, those that invest the time and effort to do so will address tobacco dependence with patients on a more routine basis (Fiore et al., 2008). Box 20 provides an example of what a sustainable infrastructure for quit-line referral might look like.

Box 20. Case example: community health centre clinic system in Washington State, the United States

Clinic X is a health centre system with six clinics serving low-insured and uninsured populations in Washington State, United States. The clinic has developed a protocol for addressing tobacco use in patients. The protocol divides up the steps in the brief intervention so different providers are responsible for different steps. Provider job descriptions include responsibility for their specific step. For example, when checking in the patients, the medical assistant asks them whether or not they use tobacco. The chart is flagged so the provider will see the status. Charts have been revised so there is a specific section where tobacco use status can be documented. There is also a section where the provider can note any referral to treatment resources. When beginning the appointment with the patient, the provider spends a minute to briefly discuss tobacco use and treatment options.

Provider to patient X: "I see from your chart that you smoke. Are you smoking every day?"

Patient X: "Yes – I've been really stressed out about whether or not I am going to be able to keep my job and it just helps to relax me."

Provider: "Well, quitting is one of the best things you can do for your health. Have you thought about quitting or ever tried to quit?"

Patient X: "I'd love to be able to quit. These cigarettes cost me a lot of money. I quit once…but it was only for a few days. It's just so hard…"

Provider: "That's great that you were able to quit once. Did you have any support when you were trying to quit before?"

Patient X: "No – I just decided not to smoke anymore. But obviously it didn't work."

Provider: "Well getting help can increase your chances of being successful. If you are interested, I can recommend a free resource that has helped a number of my other patients quit. It is a phone-based helpline with coaches who can help you set up a plan and talk to you about how to get through the urges you might feel when you quit. Are you interested?"

Patient X: "Well, I really don't need someone else to nag me…"

Provider: "I guarantee you they won't nag. They are there to help. My patients that have called said they appreciated the help setting a quit date, going over their past attempts, and brainstorming how to get through their challenges."

Patient X: "In that case, sure – it sounds better than what I did before."

Provider: "It sounds like you have a lot of good reasons to quit. Here's a brochure with the information for the quit line. Let's follow up and see how it works for you at your next appointment." (Provider continues with primary appointment.)

APPENDIX 9. EVALUATION CONSIDERATIONS

Below is a brief description of issues to consider when conducting an evaluation of a quit line.

1. Determine the purpose of the evaluation. What are the critical questions to be answered? Who is the audience? Is the evaluation primarily for the purposes of improving quality, demonstrating effectiveness, or answering an important question about what approach works best? It is important to avoid a "shotgun" approach to evaluation. How you gather data should be focused and specific, in order to avoid over-burdening callers with questions or expending scarce resources. Useful disciplines to encourage focus include drawing a mock graph, chart, or table that would be "filled in" with the data from the evaluation, and asking, "What will we do differently depending on the answers we get?" If questions are included that are unlikely to result in reportable or actionable information, consider dropping them.

2. Determine the type of evaluation to be conducted to answer the questions of concern. Different types of evaluations serve different purposes. The most typical include process and outcome evaluations. Process evaluations gather operational data to assess whether or not the quit line is functioning as expected. Outcome evaluations typically gather data from users to evaluate participant's ratings of services (i.e. satisfaction, perceived helpfulness) and changes in health behaviours expected as a result of receiving services (i.e. making a quit attempt, quitting tobacco use).

3. Determine sources of data. Different types of data need to be examined or collected depending upon the type of evaluation being conducted and questions to be answered. Sources of data include information that may be gathered:
   a. during registration (e.g. participant demographic data such as age, gender, ethnicity);
   b. based on services used;
   c. during follow-up surveys (e.g. participant's ratings of satisfaction, self-reported quit outcomes).

Data also can be combined. For example, call volumes can be examined in relation to a promotional campaign or changes in services being provided through the quit line. Likewise, satisfaction and quit outcomes can be examined in relation to participant demographics or service utilization levels.

4. Data collection methods. Data can be gathered during different aspects of services (e.g. registration, counselling). There is one exception: final outcome evaluation data. In this case, it is ideal to collect data during a follow-up period not associated with the delivery of services. There are several options for how to collect this data. Data may be collected with surveys administered by mail, telephone or online. There are resources and costs associated with each method as well as the advantages and disadvantages. Table 11 briefly summarizes these issues.

Table 11. Resources and costs associated with each data collection method, and advantages and disadvantages

Method	Resource requirements	Advantages	Disadvantages
Mail	• Requires funding for postage • Requires resources for tracking surveys received by mail and data entry	• May be less expensive than telephone surveys	• Lower response rates compared to telephone surveys
Telephone	• Requires access to a telephone • Requires funding and resources to administer surveys by phone and enter data	• Higher response rates compared to mail and web surveys	• More expensive than mail or web surveys
Online/ web-based surveys	• Requires access to a computer and e-mail or the Internet	• May be more cost effective than telephone or mailed surveys	• Requires software to administer surveys online • Lower response rates compared to telephone surveys
Automated phone surveys	• Requires purchase of software • Requires resources to programme and maintain software	• Efficient way to collect data immediately after a phone call	• Software is expensive and complex to administer • Question phrasing may need to change to improve administration

5. Selecting participants. Data may be collected on all participants receiving services or on a random sample of participants receiving services from the quit line.

6. Timing of data collection. The North American Quitline Consortium recommends collecting outcome data seven months after someone calls a quit line. However, there are some situations for which it may make sense to collect them at different time periods. For instance, a quit line may want to collect data earlier if it has launched a new programme or a programme modification. Satisfaction data about specific services received are more accurate if they are collected shortly after the receipt of services. Collecting and analysing data earlier also provides information earlier so that programme changes can be made. On the other hand, some funders and researchers prefer final programme outcome data after one year.

7. Survey administration. When data about satisfaction and quit status are collected by phone, ideally staff different from those delivering the service administer the survey in order to reduce bias. This is because a participant may feel more of an obligation to give the "right" answers to someone they associate with their treatment than someone independent. Also a counsellor may unconsciously cue a participant to what answer is "right" because it is their job to help people quit. Staff dedicated to evaluation at the quit line or an independent evaluation agency can perform this function. Some quit-line funders require a different agency to the service provider to administer the survey. This diminishes perceptions of potential bias, but requires close coordination between the service provider and the survey group to identify the right people to call and ensure the accuracy of the descriptions and interpretation of data. Other funders prefer that the service provider also conduct follow-up surveys, as long as the staff doing the surveying are independent from the counselling staff.

Reporting outcomes. Quit rates can vary dramatically depending upon how the results are calculated and reported. The North American Quitline Consortium recently published a white paper on how to report quit rates (see Section 11. Resources). The following elements should be included in reports of outcomes. It is important to have full transparency in reporting so that the results can be compared between programmes and over time.

1. Describe how participants were selected for surveying.

2. Describe the baseline characteristics of participants included in the analysis and how participants completing the survey compare to those being attempted for survey and those who received services from the quit line.

3. Describe evaluation methods such as who conducted the survey, whether the survey was conducted by mail, phone or online, and what questions were used to assess outcomes.

4. Report 30-day point prevalence intent-to-treat and responder-quit rates. For intent-to-treat quit rates, quit rates are reported for the entire population for which follow-up was attempted. In this case, quit rates are reported as the total number of people who had quit for 30 days or more at follow-up divided by the total number of people for whom an attempt was made to follow-up. Those not reached are assumed to be using tobacco. This is the most conservative estimate of quit rates, given that some of those not contacted will still not be using tobacco. Quit rates are reported only for those participants who are successfully reached and who complete the survey. In this case, quit rates are reported as the total number of people who quit for 30 days or more at the follow-up divided by the total number of people who completed the follow-up survey.

5. There are other ways to measure quit rates at both ends of the spectrum. The least onerous is to only report the seven-day quit rates of those who complete all aspects of the programme. This will produce an unrealistically high number. More stringent measures require a longer period of abstinence than 30 days. Requiring complete abstinence from the time of quitting is probably an unrealistically low number, given that it is the norm for people who successfully quit to have a few lapses.

6. Specify the survey response rate. That is, the percentage of participants that the survey attempted to evaluate who successfully completed the follow-up survey. It is also useful to report the percentage of people who refused to complete the survey or could not be reached after multiple attempts, and those who were lost to follow-up due to their inability to complete the survey or to their subsequent death.

Key indicators. Below is a list of two key indicators and measures to be included in all outcome evaluations. Additional items may also be added to the follow-up survey. A full copy of the North American Quitline Consortium Minimum Data Set is available online at:
http://www.naquitline.org/?page=technical.

1. Satisfaction. Can be assessed with a single question such as: "Overall, how satisfied were you with the service you received from the quit line?" Additional questions from the MDS or other measures of satisfaction may be added.

2. Quit rates. Thirty-day point prevalence quit outcomes can be assessed with a question such as: "Have you smoked any cigarettes or used other tobacco, even a puff or pinch, in the last 30 days?"

APPENDIX 10. CHECKLIST

Data to gather and issues to resolve when launching a quit line

Demographics

A. What percentage of the population uses tobacco?
   a. Cigarettes vs. other forms?
B. What is the language distribution?
   a. Are people multilingual?
C. What percentage of tobacco users made a quit attempt last year?
D. How many people have phone access?
E. What are the barriers to use of a phone-based counselling service?

Tobacco control

A. How strong is the overall tobacco control situation in your country?
   a. Clean indoor air ordinances?
   b. Taxes?
   c. De-normalization campaign?
   d. Enforced bans on tobacco advertising?
   e. Monitoring of tobacco use and prevention policies?
B. How developed are resources to help tobacco users quit?

Tobacco treatment/cessation support

A. How much support is there for tobacco users through health-care systems and community-based programmes?
   a. Do health-care providers use tobacco more, less or the same as the general population?
   b. Do health-care providers ask about tobacco use and provide brief advice to quit?
   c. Are there programmes to support people who want to quit?
   d. Are cessation medications available?
   e. Is there coverage for medications and counselling by health-care insurance system?

What are the goals for the quit line?

A. Reach, effectiveness, or both?
B. Increasing quit attempts?
C. Integrating with health systems and community programmes?
D. Other?

What types of services will the quit line offer?
How will demand for services be generated?
Who will fund the quit line?
A. What is a realistic start-up and ongoing budget?

Who will deliver the services?
How will quality standards be set and monitored?
How can the quit line coordinate with other tobacco control initiatives?

Table 12. Minimum standards for Australian Quitline Services

(Note: not all elements will apply to a new quit line, especially if funding is limited.)

	Standard	Status	**Additional information** *If standard not fully achieved outline what is not meeting requirement, reasons and planned remedial action including timeline*
1	1.1 The Quitline is answered 24 hours a day 7 days a week. 1.2 Someone answers the Quitline number at all times. This could be a call centre agent (e.g. link operator), a Quitline counsellor or Quitline reception staff. 1.3 Call answered within a maximum of 5 rings.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	
2	2.1 The Quit Book is readily available and offered to all callers (universally) to the Quitline, irrespective of whether they are ready and willing to discuss issues more fully with a counsellor.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	
3	3.1 Direct access is provided to appropriately credentialed and trained counsellors. This access occurs by direct patch and without long hold-times or delays. 3.2 Calls to the Quitline are either answered by a counsellor or Quitline reception staff or, if answered by another agency (e.g. link), then calls are patched through. Consistent with literature:[a] 3.3 Those who request counselling are able to speak to a counsellor at that time or leave a number with appropriate reception/call centre operator for re-contact. 3.4 Those who leave a number are re-contacted within an hour or within a later time frame if requested. 3.5 After initial response to call within five rings (as above), max hold time of 30 seconds during transfer to counsellor or invitation to leave number for re-contact.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	
4	4.1 Counselling is available during minimum hours, i.e. business hours plus out of hours as dictated by call demand. This will be determined by each jurisdiction, but times when mass media campaigns are on air would always be times when the extension of hours should be a priority. 4.2 Business hours are at minimum 09:00 – 17:00.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieve**	
5	5.1 A proactive call-back service is available, which takes the caller through the process of quitting and which has a well-structured schedule according to best evidence about outcomes.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieve**	
6	6.1 A referral programme from health professionals and other sources is integrated that enables all health professionals (e.g. doctors, hospital departments, dentists) to refer clients to Quitline. 6.2 The referral is received in a confidential secure location. 6.3 A return fax or e-mail is made to confirm receipt of referral and scheduling of call for general practitioner (GP) at minimum (consistent with Australian GP guidelines). 6.4 Where desired/appropriate, a feedback loop is maintained with health professional about outcome.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieve**	

	Standard	Status	**Additional information** *If standard not fully achieved outline what is not meeting requirement, reasons and planned remedial action including timeline*
7	7.1 Tailored assistance for callers with special needs is available. 7.2 Tailored assistance is consistent with national protocols for each of the following groups: a. Culturally and Linguistically Diverse group – linking with Translation and Interpretation Service and/or bilingual counsellors b. callers with mental illness c. pregnant callers – planning for pregnancy, pregnancy and post-partum d. young callers e. Aboriginal and Torres Strait Islander callers f. crisis calls.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	
8	8.1 Further enhancements of the Quitline service are driven by evidence of effectiveness such as that from peer-reviewed literature or from assessment by research groups. 8.2 Enhancements are proposed, piloted and evaluated to evidence of additional benefit above standard practice. 8.3 Quit Group kept informed of proposals for major changes, which are to be consistent with minimum standards.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	
9	9.1 The boundaries and theoretical underpinnings of Quitline counselling content and advice are consistent with the national protocol and based on current psychological literature on: • cognitive behavioural therapy • motivational interviewing • relapse prevention strategies	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	
10	10.1 Tailored assistance for callers with special needs is provided that is consistent with national protocols, including for: cultural and linguistic diversity callers, mental illness callers, pregnant callers, young people, Aboriginal and Torres Strait Islander callers and crisis calls (refer to section above).	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieve**	
11	11.1 Recruitment criteria are in place, which enable effective service delivery and credibility for the service. No qualification or experience is specified as mandatory. 11.2 Job descriptions for Quitline counsellors that include a combination of qualifications and experience that enables counselling staff to understand and deliver an effective service and which comply with national protocols are in place. 11.3 Quitline staff are required to be non-smokers (includes not being "social smokers"), i.e. having quit for at least six months.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieve**	

	Standard	Status	**Additional information** *If standard not fully achieved outline what is not meeting requirement, reasons and planned remedial action including timeline*
12	12.1 Initial training in smoking cessation counselling, ongoing training and updates on tobacco control that are consistent with the national protocol are in place. 12.2 Counsellors' initial training includes: • understanding the quitting process; • understanding the different needs of smokers at different stages of quitting; • providing accurate assessment of caller needs; • providing brief intervention skills; • examining and promoting callers' motivation to change; • smoking-related information and issues; • pharmacotherapies; • resources available to assist smokers in their quit attempts; • strategies for addressing relapses; • strategies for providing callers with ways of coping with staying stopped; • dealing with callers with mental illness. 12.3 Professional development takes place as needed (and not less than six-monthly) in: • cessation counselling • evidence updates for cessation • major developments in tobacco control; or • any training relevant to delivering the service. 12.4 A weekly bulletin boarding (by e-mail or paper) is in place that includes information on: • campaign updates • major issues in the media (e.g. on Telecommunications - TCN) • updates from State representatives on relevant activity on national committees.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	
13	13.1 Referral by Quitline to other agencies, cessation services and cessation products is consistent with nation protocols. 13.2 Clients are referred to other (non- smoking cessation) services or agencies to meet their special needs. 13.3 Unproven cessation services or therapies are not endorsed and Quitline callers are not referred to such services or therapies. 13.4 Other smoking cessation products or services are only endorsed or callers referred where these products or services have demonstrated effectiveness (long-term cessation outcome published in peer-reviewed journals). 13.5 Only product categories (e.g. nicotine replacement therapy) and not specific brands are endorsed or referred to.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	

	Standard	Status	**Additional information** *If standard not fully achieved outline what is not meeting requirement, reasons and planned remedial action including timeline*
14	14.1 Process indicators are collected, collated and monitored and included in standard quarterly reporting. 14.2 Answering rate is in excess of 95% at all times. (Monitored by TCREc using Telstra Analyser.) 14.3 Quit Book is dispatched within 24 hours during normal business hours and receipt within 3 working days. (Receipt rate to be monitored by caller self-report during evaluation.) 14.4 Referrals from health professionals are counted and categorized. 14.5 A count is kept of Incoming callers including type of service received – counselling, resource distribution, volume of call backs.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	
15	15.1 A minimum dataset on all calls is maintained including demographics and smoking measures. This data is included in standard quarterly reporting. 15.2 The minimum data set includes: a. age b. gender c. postcode d. indigenous status e. current smoking behaviour and measures of dependence f. no. of previous quit attempts g. nature of call h. outcome of call (counselling, call-backs scheduled, resources) i. callers' special needs.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	
16	16.1 National outcome evaluation by independent research agency 16.2 Periodic rigorous impact and outcome evaluations, which measure caller satisfaction, as well as smoking behaviour outcomes will be conducted. 16.3 Evaluation of National Service including Health Professional Referrals, every five years, or when significant changes made to the service will be conducted. 16.4 Follow-up of callers at three months post-call to assess caller appraisal of the service and materials, receipt and use of any materials and cessation aids will be conducted. 16.5 Follow-up callers at three, six and 12 months to assess self-reported smoking cessation and other behavioural outcomes will be conducted.	☐ Fully achieved ☐ **Partly achieved** ☐ **Not achieved**	

a CDC (2004). Telephone quitlines: a resource for development, implementation, and evaluation. Atlanta, GA, US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health. (*http://www.cdc.gov/tobacco/quit_smoking/cessation/quitlines/pdfs/quitlines.pdf*, accessed 25 July 2011).

Signed For And On Behalf Of		In The Presence Of	
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