Helping New Hampshire Residents Quit Tobacco

Reach and Services Provided Through the New Hampshire Tobacco Helpline and QuitWorks-NH
(July 2010 - June 2012)

New Hampshire Department of Health and Human Services

Division of Public Health Services

Tobacco Prevention and Control Program

Funded by the Cooperative Grant Program of the US Centers for Disease Control and Prevention
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Summary

Tobacco is the leading cause of preventable and premature death, killing an estimated 443,000 adults nationally and 1,700 New Hampshire adults annually.\textsuperscript{11} Healthcare-related costs for treating tobacco mortality and morbidity is staggering even before adding in the cost of lost productivity of employees who smoke and/or take smoke breaks during work hours. Involuntary exposure to secondhand and thirdhand smoke is considered a health risk, particularly for children and those with compromised respiratory systems. In 1964, the first Surgeon General’s Report, \textit{Report on Smoking and Health}, publicized a science base that demonstrated the higher rate of mortality among smokers than non-smokers. Almost 50 years later, the tobacco control community has made significant progress towards treating tobacco use and dependence through a partnership of researchers, scientists, healthcare agencies, insurers, purchasers, government agencies, public health organizations and smokers who have quit successfully. This report highlights the New Hampshire Tobacco Helpline’s (Helpline) evidence-based tobacco treatment services for residents of NH who want to quit tobacco.

Tobacco use is considered a pediatric disease, with the majority of adult smokers having started smoking as youth or young adults.\textsuperscript{1} According to the 2011 Behavioral Risk Factor Surveillance System (BRFSS), the adult smoking rate in NH is 19.4% compared with the national adult smoking rate of 19.0%. Among New Hampshire high school students, the smoking rate is 18.1%, equal to the national high school smoking rate. The use of smokeless tobacco (e.g. spit tobacco, chewing tobacco, snus [rhymes with moose]) is on the rise among youth, males in particular. Among NH high school males surveyed, 14.1% use smokeless tobacco; nationally the rate is 12.4%.

This report defines evidence-based quitline services offered by the Helpline and the client outcomes from June 2010 to July 2012. Quitlines are acknowledged by the US Public Health Services Clinical Practice Guidelines \textit{Treating Tobacco Use and Dependence} - 2008 Update (PHSG) as an evidence-based tool for tobacco treatment. The New Hampshire Tobacco Prevention and Control Program (TPCP) contracts with the JSI Research and Training Institute, Inc. (JSI) to provide tobacco treatment counseling services. This report describes how the public can access tobacco treatment services by calling 1-800-QUIT-NOW (784-8669), visiting www.TryToStopNH.org, and texting CALLME to 22122 and how healthcare providers can refer patients to tobacco treatment services through QuitWorks-NH. Further, this report describes the successes and challenges of media promotions for Helpline services to increase utilization by tobacco users, healthcare providers, and public health professionals, including federal initiatives, such as the National Education Campaign, “Tips from Former Smokers.” Integrating quitlines into all aspects of healthcare increases the likelihood a person who wants to quit using tobacco will have a successful quit. The TPCP promotes the evidence-based brief intervention, Ask, Assist and Refer (2As and R), at all routine healthcare visits. Research indicates that the more often the intervention is made, the more likely the patient will make a quit attempt. This report describes strategies that TPCP deploys to assist healthcare entities that are interested in referrals to QuitWorks-NH for counseling (and nicotine patches, when available).

The US Centers for Disease Control and Prevention (CDC) strongly supports tobacco treatment quitlines. There is substantial variation across the country in funding levels and services offered through quitlines. Dr.
Thomas R. Frieden, Director of the CDC, believes that reducing tobacco use is a winnable battle and worth the efforts to improve the nation’s health and the future of children.
Overview of the New Hampshire Tobacco Helpline

During the time of this report, July 2010-June 2012, the New Hampshire Department of Health and Human Services (DHHS), Division of Public Health Services (DPHS), Tobacco Prevention and Control Program (TPCP) was funded solely through a cooperative agreement between the NH Department of Health and Human Services and the Centers of Disease Control and Prevention (CDC), Office on Smoking and Health (OSH). The TPCP was funded to decrease the burden of tobacco use by addressing the following goals:

- Reduce initiation of tobacco by youth
- Increase quitting among adults and youth
- Eliminate exposure to secondhand smoke
- Reduce disparities in tobacco use

The New Hampshire Tobacco Prevention and Control Program (NH TPCP) contracts with the JSI Research and Training Institute (JSI) and Community Health Institute (CHI) to provide tobacco treatment services through the New Hampshire Tobacco Helpline (Helpline). These services are free and confidential to NH residents. JSI’s call center is located in Boston and also provides services to the Massachusetts Department of Public Health (MA DPH) and the Rhode Island Department of Health, creating the Tri-State Initiative around tobacco treatment services. The Tri-State Initiative creates a cost-sharing relationship among the three states with benefits such as regional media messaging and database management.

Tobacco treatment quitlines are part of a comprehensive tobacco control program and are accessible in every state by calling 1-800-QUIT-NOW. The 1-800-QUIT-NOW number is a national portal that routes callers to state quitlines based on the area code of the outgoing call. Tobacco treatment services vary throughout the country and are dependent on the level of quitline funding (e.g., robust funding allows programs to offer more than one evidence-based treatment). The Helpline was established in July 2005. Currently, there are a variety of avenues to reach a tobacco treatment counselor at the Helpline. Calling 1-800-QUIT-NOW during business hours reaches a live answer. Outside of business hours or during times of high call volume, there are voice messaging capabilities for call-backs and a separate telephone line for daily recorded quit tips available 24/7. In 2007, the Helpline added QuitWorks-NH. QuitWorks-NH is modeled after the Massachusetts Department of Health ‘QuitWorks’. QuitWorks-NH is a tobacco treatment referral source for providers to refer tobacco-dependent patients to telephonic counseling. Referrals are faxed or electronically sent via a secure file transfer protocol (FTP) into the QuitWorks-NH web-based database. Figure one shows the process of how a provider implements QuitWorks-NH into the patient visit. Note the provider feedback process of QuitWorks-NH creates a complete communication loop between the provider and the Helpline counselors. QuitWorks-NH complies with all sections of the Health Insurance Privacy and Portability Act (HIPPA). The NH TPCP offers assistance to any hospital, community health center, or healthcare practice interested in adopting QuitWorks-NH.
The CDC’s Quitline Resource Guide provides states with examples of effective quitline development. These guidelines were prepared by the US Department of Health and Human Services under the direction of the CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health (OSH), in response to growing interest in telephone-based cessation services, known as quitlines. Each state’s quitline vendor includes components of the Resource Guide (Appendix I).

Quitline call centers and data storage operations vary in size and sophistication, depending on the funding level. Databases have the capacity to compile reports based on queries submitted to the system. Evaluation information is critical to a comprehensive tobacco control program for the purposes of reporting to funders, engaging cost-share partners and stakeholders, for quality control and for meeting performance measures. Evaluation serves to predict quitline utilization and can act as a resource when responding to Legislative requests. The Helpline evaluation activities measure detailed process variables and report out to TPCP each month. Process variables include: volume of clients utilizing self-referral and volume of clients referred from a healthcare provider via QuitWorks-NH. Intake data include gender, age, educational achievement level, income, and health plan status. Additional reporting covers the type and quantity of treatment service provided to each client, demographics, and how the client heard of the Helpline’s services.

Community Economics Corporation (CEC) currently evaluates the effectiveness of Helpline services in assisting clients to quit tobacco. This survey group conducts telephone follow-up surveys seven months after the Screener Call to assess quit attempts, medications used to assist quitting, current smoking status, and...
satisfaction with services received from Helpline tobacco treatment counselors. The survey collects the National Minimum Data Set (MDS) information, which offers a standard approach to evaluating tobacco cessation quitlines. More on the MDS can be found at the North American Quitline Consortium (NAQC) (http://www.naquitline.org/default.asp?page=mds). Although 100% of the clients giving permission for this follow-up call are pursued by CEC evaluators, approximately 50% participate in the survey. A ‘Quit Rate’ is determined by the number of clients answering “no” to the survey question, “Have you smoked during the past 30 days?” In 2012, the quit rate was 22.6% for the clients served and reached. During the State Fiscal Years (SFY) 2011 and 2012, the Helpline and QuitWorks-NH services included added nicotine replacement therapy patches (NRT) to the menu of services offered due to funding from the Communities Putting Prevention to Work initiative. Clients were assessed by the counselors for contraindications prior to mailing the NRT. Evidence shows that the use of medications combined with counseling result in higher quit rates. Other New England states, such as Maine, offer NRT in the forms of the patch, gum, or lozenge to quitline clients. These NRTs are approved by the US Food and Drug Administration (FDA) as appropriate tobacco treatment medications. Maine’s quit rate is 28.10%. Vermont, Rhode Island, and Massachusetts offer free patches for quitline clients.

What Happens When You Call

When a call comes into the Helpline, a Quit Line Associate conducts a ‘Screener Call’, which is the initial call for all clients and is approximately 5-9 minutes in length. The Screener Call is designed to collect demographic data for quitline reporting purposes. The client is offered a mailed packet containing a “Quit Guide” and the option to transfer to a certified tobacco treatment counselor. A person requesting counseling can access a Certified Tobacco Treatment Specialist (CTTS) to begin the first of six tailored counseling sessions. The client will remain with the same CTTS for as many counseling sessions as they participate in. The CTTS uses evidence-based theoretical framework counseling that addresses nicotine addiction and the behaviors associated with tobacco use. The first Treatment Call (45 minutes) reviews tobacco use history, quitting history and discusses triggers and problem-solving for a successful quit. In NH, residents who are 18 or older may receive up to six telephonic counseling sessions regardless of health insurance status. There are two other ways for NH residents to connect with the Helpline: (1) www.trytostopnh.org/contact/, or (2) text CALLME to 22122. Pregnant women trying to quit or trying to stay quit may receive additional counseling calls throughout gestation as this population is a priority for treatment services in NH.

The Helpline’s Role in a Comprehensive Tobacco Control Program

A comprehensive statewide tobacco control program is a coordinated effort to establish smoke-free policies and social norms, to promote and assist tobacco users to quit, and to prevent initiation of tobacco use. This comprehensive approach combines educational, clinical, regulatory, economic, and social strategies. Comprehensive tobacco control programs include treatment as a key component. The CDC recommends funding levels that will move the public health needle toward improved health outcomes. In NH, the recommended funding level is $14.58 per smoker (Appendix II).
Tobacco-related diseases kill more people than alcohol, AIDS, car crashes, illegal drugs, murders, and suicides combined. In New Hampshire, more than 1,764 deaths are attributable to tobacco use (Fig. 2). Exposure to secondhand and thirdhand smoke is linked to thousands of additional deaths. The New Hampshire Office of the State Fire Marshal receives an average of 111 calls per year that are related to careless disposal of cigarettes; a total of $1 million is lost due to these fires.

The NH BRFSS (www.cdc.gov/brfss/) shows that the adult 2011 smoking prevalence is 19.4% and that 60% of these individuals have indicated a desire to quit smoking. Finally, the 2011 BRFSS reports that 55.6% of current adult smokers attempted to quit smoking in the past 12 months.

**Strategies for Treating Tobacco Use and Dependence**

According to Tim McAfee, MD, MPH, Director of CDC, OSH, within the National Center for Chronic Disease Prevention and Health Promotion, nicotine is similar to other addictive drugs, such as heroin. Nicotine unlocks the brain’s “feel good” organic chemical (hormone), dopamine. The more dopamine that is released due to outside chemicals (nicotine), the more dopamine-resistant a person becomes, requiring more chemicals, more often, for the same physiological result. This cycle leads to drug-dependent behavior such as cravings, compulsive use, and withdrawal symptoms and results in an increased number of doses required for the same effect. The addictive make up of cigarettes makes successful quitting a formidable challenge.

![Impact of Smoking Cessation on Life Expectancy](image)

**Figure 3. Mortality in relation to smoking, British Medical Journal, 2004; 328:1519.**

Tobacco use and dependence has a behavior aspect as well, such as social relationships and routine dosing. Therefore, to quit using nicotine, two issues must be addressed: (1) physiological addiction and (2) behavioral need. There is evidence demonstrating that smokers die 8-13 years earlier than non-smokers. However, life expectancy can increase dramatically if abstinence is achieved before age 30 (Fig. 3).
The Public Health Service Clinical Practice Guidelines *Treating Tobacco Use and Dependence* - 2008 Update (PHSG) is the body of evidence that documents effective tobacco use and dependence treatments. The PHSG demonstrates that using medication/s increases the likelihood of a successful quit and that using medication/s in addition to participating in behavior counseling further increases the likelihood of a successful quit\textsuperscript{ix}. Another way to think of this is that increased counseling intervention time and intensity combined with appropriate medication dose yields more successful quits. Tobacco use treatment interventions have medical codes for health insurance reimbursement. There is compelling evidence throughout the literature that tobacco treatments are cost effective. According to a 2005 analysis by the Partnership for Prevention (www.floridatobaccotreatmentalliance.org), smoking treatment is as cost-effective as childhood immunizations and daily aspirin use in high cardiac infarction risk adults. Smoking treatment is more cost-effective than other frequently covered adult disease prevention interventions (e.g., hypertension, high cholesterol).\textsuperscript{ix}

The 2011 NH BRFSS reports that 30% of current smokers that visited a healthcare provider in the past year were not advised to quit. Quitting smoking without medication or counseling results in only a 5-7% likelihood of being successful. Healthcare providers can truly tip the scale in favor of successful quits by engaging with patients around tobacco use and dependence. In a satisfaction-rating report, patient satisfaction is rated higher when a healthcare provider engages in a tobacco treatment intervention. Healthcare providers are in the perfect position to make an impact on health outcomes by implementing effective strategies for tobacco treatment such as institutionalizing the gold standard treatment protocol: Ask, Advise, Assess, Assist and Arrange (5A’s). The Division of Public Health Services has adopted the version Ask (identification of tobacco use), Assist (offer FDA-approved medications and treatment advice), and Refer patients who are ready to quit to the Helpline for behavior counseling (2A’s and R). TPCP encourages healthcare systems that are working towards meeting Meaningful Use criteria to utilize the electronic medical record (EMR) to implement the 2A’s and e-Refer to QuitWorks-NH. This electronic referral method allows the referring provider to receive patient status reports from QuitWorks-NH back into the patient record seamlessly. Even after the patient is considered a “former tobacco user,” it is important for healthcare providers to encourage abstinence and offer assistance. As a treatment strategy, brief interventions have proven highly successful when integrated into a continuum of care. The 2011 NH BRFSS shows that 14.4% of current smokers visiting a health care provider in the past 12 months were referred to a quitline.

Another effective strategy for reaching tobacco-dependent individuals is through health plans. Currently, 30% of the Helpline’s services are utilized by individuals with private health plans. Individuals who have public health insurance (Medicaid/Medicare) or are uninsured utilize 60% of the Helpline’s services. Within...
NH private (commercial) health plans, it is not transparent what each plan offers for tobacco treatment benefits or how many members take advantage of what is available. These are barriers for making informed decisions when employers are purchasing health benefits plans for employees or as a private purchaser. The State of New Hampshire is the largest employer in the State and currently contracts with Anthem for employee health benefits. Tobacco treatment benefits are available to State employees with a prescription for any FDA-approved product. Cost sharing partnerships between health plans and the Helpline have the potential to result in streamlined tobacco treatment benefits so that members can access behavior change counseling, and tobacco treatment medication by contacting the Helpline. Some states use the quitline vendor as a clearinghouse for treatment print materials, counseling and medications. It just makes good medical sense to address tobacco use in a coordinated effort including public health policy, insurance benefits, employer benefits, and direct healthcare.

The Helpline’s Role in Public Health

According to the 2011 NH BRFSS, populations with a higher prevalence of tobacco use are between 18 and 35 years of age, chronically unemployed, employed in low-wage-earning occupations and with a low educational attainment. Tobacco use is less prevalent among populations having higher educational attainment and incomes above $50,000.

Currently, 30% of quitline services are utilized by individuals with insurance through private health plans. Public health plans, such as Medicaid/Medicare and the uninsured population utilize approximately 60% of quitline services.

Figure 4. Self-referral methods to the NH Tobacco Helpline.
Raising awareness of the Helpline services has been a challenge since inception of the services due to media communication funding. States with robust media communication funding have shown statewide awareness among providers and residents about quitline services. Some of these promotional campaigns can be viewed on www.QuitWorksNH.org and on www.TryToStopNH.org. With adequate promotional opportunities, quitlines can reach beyond community health centers, private practices, hospitals and health plans. Once the population is aware of the Helpline services, there are a variety of ways to get for help with quitting (Fig 4.) referred to as “self-referral.” Self-referral includes the telephone for a live answer and texting for a counselor call-back.

**Care Coordination: Strategies to Increase Helpline Utilization**

Two effective strategies to increase quitline utilization are to: (1) raise awareness of services through media campaigns that include cost-free NRT and (2) change the way healthcare systems treat tobacco use and dependence. Helpline media campaigns with cost-free NRT are covered in the next section. *Systems change* is a process where a healthcare practice adopts and implements a different way of treating patients with an aim of show an improved health outcome. Improving chronic disease health outcomes related to tobacco requires institutionalizing effective and efficient tobacco treatment strategies. Evidence shows that effective tobacco treatment cannot be separate from health care systems. Clinical systems must have administrative support to provide brief interventions and assist treatment efforts with FDA-approved medications. Insurance plans, purchasers, and health care organizations should promote utilization of evidence-based treatments and assess usage and outcomes through performance measurement systems. Population-level tobacco control policies need the support of an educated, effective healthcare system where tobacco use is routinely screened for and treated across diverse clinical settings.

The TPCP provides training and technical assistance to health care institutions for implementing the tobacco treatment model, Ask, Assist and Refer (2As and R) to QuitWorks-NH. QuitWorks-NH has a unique feature referred to as the *Feedback Loop*. When a provider sends a referral for tobacco treatment counseling into QuitWorks-NH, a Certified Tobacco Treatment Specialist (CTTS) reaches out to the patient up to three times over the following five to seven business days. The CTTS then sends the referring provider a *Disposition Report* stating what, if any, services the patient accepted. This feedback loop feature fits the Joint Commission’s follow up requirement for tobacco treatment.

A 2006 study compared fax referral with providing a brochure to connect patients to a quitline. This study reported a 59% contact rate for those who were fax-referred to the quitline compared with a 19% contact rate for the group receiving a brochure with instructions to call the quitline. Of those in the fax-referral group who were contacted by the quitline, 90% accepted a one-time counseling call. Program costs for the first year were $15 - $22 per patient who connected with the quitline, and in subsequent years it decreased to $4 - $6 per patient. Currently TPCP is working with multiple hospitals, community health networks, and practices in New Hampshire at various levels of systems integration of QuitWorks-NH and the fax-referral or e-referral process.
Institutionalizing QuitWorks-NH into a healthcare setting is a process that requires a team approach. Team members include front-line staff, technical operations, quality performance, clinical supervisors, medical directors, and direct care staff. The team assesses the current workflow of a patient visit then maps the visit integrating the systems change. Considerations for this process include who will initiate the referral (e.g., an individual provider or a unit within the practice/hospital) and who will receive the disposition reports back (e.g., an individual provider or a unit in the practice or hospital). Once these questions are resolved, the team can implement the changes on a very small scale to test the usability of the change, then spread the changes and train more staff in the process to gather wider feedback. A system change may take 12-18 months before process and outcome data demonstrate a positive system change.

![Comparison of QuitWorks-NH Utilization](image)

**Figure 5. Number of referrals to QuitWorks-NH by location, July 2010-June 2011 and July 2011-June 2012.**
Integrating the Helpline with the New Hampshire Maternal and Child Health Programs

Smoking during pregnancy is associated with higher risk for poor birth outcomes often requiring hospitalization for the infant, mother, or both. According to 2011 NH Birth Data, 13.6% of women report smoking during pregnancy. This translates to about 1,738 out of 12,736 women who smoked while pregnant. Pregnant women receiving Medicaid smoke at a rate of 31.9%.xii Pregnant teenagers (<19 years of age) smoke at a rate of 36%. These data paint an expensive picture for public health budgets.

In 2010, the Belknap-Merrimack Community Action Program (B-M CAP) participated in a pilot project to implement a microsystems change in the prenatal program. In 2011, after the project training, implementation, and evaluation period, B-M CAP leaders expanded the 2As and R model to the B-M CAP Women, Infants, and Children Program (WIC). The CHI trained two additional WIC agency’s medical assistants and nutritionists for a total of 40 WIC staff and nutritionists during 2012 in the 2As and R via a microsystems quality improvement curriculum (Fig 6). The NH WIC program monitors performance targets set by each WIC agency through the StarLINC system. The training for the remaining two WIC agencies is scheduled for spring 2014. Current data indicate that at least one WIC-enrolled pregnant woman a month quits tobacco use with the assistance of QuitWorks-NH counseling services. Although this may not resonate as a successful number of pregnant women quitting, this population faces numerous challenges to quit, remain quit, and keep their infants away from secondhand smoke. Quitting smoking successfully for these women depends upon consistent messaging, support for treatment and brief interventions at all clinical visits.

TPCP continues to work in collaboration with multiple Maternal and Child Health programs (WIC, Home Visiting, Prenatal and Primary Care) to reach women who are smoking before, during, and after pregnancy.

Current data indicate that at least one WIC-enrolled pregnant woman a month quits tobacco use with the assistance of QuitWorks-NH counseling services. This population faces numerous challenges to quit, remain quit, and keep their infants away from secondhand smoke.
Electronic Referrals: A Pilot Project with a Federally Qualified Community Health Center

In 2011, in anticipation of increased Electronic Medical Record (EMR) utilization, TPCP contracted with the Community Health Access Network (CHAN) to pilot the 2As and R with an electronic referral system. CHAN’s membership includes ten Federally Qualified Health Center (FQHC) members, which include three Healthcare for the Homeless programs. Populations served within the centers include: under insured, uninsured and Medicare/Medicaid populations, refugees, multi-cultural families, and the homeless. The aim of this pilot was to increase the capacity of the CHAN’s member centers to successfully provide an electronic referral to QuitWorks-NH based on a brief tobacco treatment intervention. This included the feedback loop back to the referring provider via a secure transmission regarding the patient’s treatment services. This project was during the same time as the Helpline services included the nicotine replacement patch campaign, which motivated patients to accept a referral to the Helpline.

Once the EMR went live with the QuitWorks-NH button, providers were able to refer patients interested in quitting to QuitWorks-NH with one click.

Figure seven shows QuitWorks-NH utilization data before the pilot, during the pilot when free NRT was available for patients referred to QuitWorks-NH, and after the pilot when additional CHAN sites incorporated the 2As and R workflow. The NRT supply was exhausted in December of 2012 and no longer offered to patients referred to QuitWorks-NH. When the providers could no longer use free NRT to decrease a patient’s ambivalence about quitting, referrals to QuitWorks-NH declined steadily over the following months. Currently, TPCP gathers provider loyalty and utilization data and feeds it back to CHAN, as requested, for quality improvement.

Figure 7. QuitWorks-NH referrals reflecting implementation of CHAN systems change, SFY 2010-2012.
improvement activities. With over 90 providers involved in CHAN, the progression of adoption and accurate implementation of “e-referring” to QuitWorks-NH is continuing into 2013. Lessons learned are tracked in a quality improvement model- plan, do, study, act (PDSA) cycles. Currently, a national workgroup is working to standardize e-referral protocols across the US with a target date of 2015 for completing a guidance document.

The Helpline and New Hampshire Chronic Disease Prevention and Screening Program Integration

Cigarette smoking exacerbates symptoms of chronic disease such as diabetes, asthma, and heart disease. There is epidemiological data indicating higher prevalence of smoking among persons with a mental health diagnosis, particularly depression and schizophrenia. Further, the PHSG describes tobacco use and dependence as a chronic disease by itself due to the relapsing nature of quitting and using. There is growing interest in how to best integrate quitline services with chronic diseases such as behavioral health, substance abuse, diabetes, and asthma. Utilization of Helpline services by people with chronic conditions is documented at intake when NRT is available (Fig. 8). In 2010 the CDC funded the TPCP, the NH Asthma Control Program, and the NH Diabetes Education Program to enter into a collaborative process to address smoking and chronic disease. Some of the activities during this time included training Asthma and Diabetes Educators to use QuitWorks-NH for patients who were willing to make a quit attempt.

![Percentage of Helpline Clients (self-referred and provider-referred) Reporting a Chronic Disease Condition During the NRT-kit Availability Period (September 1, 2010-February 16, 2012)](chart.png)

Figure 8. Helpline clients reporting a chronic disease condition at screener call for NRT, September 1, 2010-February 16, 2012.
The Role of Media in Helpline Promotion

Traditional media and social media interventions are a key component in comprehensive tobacco control programs. A strong evidence base is emerging for anti-tobacco (also known as counter-marketing) that elicits strong negative emotions which produce higher levels of arousal than positive content. These types of messages receive greater viewer attention and have better recall value. Today’s media-rich society offers multiple channels (radio, television, print, internet, and out-of-home [OOH]), but television is regarded as the most powerful media channel to spread messaging and/or target a specific audience. The TPCP core budget provides inconsistent funding annually to implement counter-marketing or health messaging that promotes the Helpline services. TPCP has two websites providing treatment information: (1) www.TryToStopNH.org, which contains treatment information for the general population, and (2) www.QuitWorksNH.org, which is exclusively for health and wellness providers to obtain evidence-based treatment information as well as QuitWorks-NH enrollment forms.

Figure 9. Number of referrals to Helpline from all media campaigns, July 2010 – June 2012.

In 2010, the CDC’s CPPW funding allowed TPCP supplemental budget funds, which were used to enhance TPCP’s public presence through three statewide, emotionally engaging media campaigns (Fig 9.) employing television, print, radio, web, and out-of-home sources. Funds were also allocated for a limited supply of NRT patches to be given away to clients who were determined to have no NRT contraindications. Finally, funds were used to increase the Helpline’s capacity to serve the anticipated increase in request for services as a result of the media campaign.
The “On the Road to Freedom” campaign, which ran in 2010, targeted the NH Department of Transportation (DOT) employees and any household members. The DOT Commissioner, during that time, felt that treatment was a priority among DOT employees and worked with TPCP to create radio and TV advertisements featuring DOT employees who wanted to quit or had already quit tobacco. Two weeks of free NRT (patch) was provided to any DOT employee or household member calling the Helpline who had no NRT use contraindications.

The Dear Me media campaign, which was implemented in 2011 to reach out to TPCP’s target audience of low income/low educational achievement women of childbearing age, and youth and adults who use tobacco, was implemented in two phases. In phase one, the original Washington State Department of Health (WA DOH) “Dear Me” campaign ran on statewide media outlets. The campaign targeted rural, working, blue-collar tobacco users who might be considering quitting and asked them to write a letter to themselves with the reasons they had to quit tobacco. The campaign tagline is, “No one can make me quit, but me,” and was found to resonate with the priority population. Phase two, “Dear Me New Hampshire”, began as a contest to encourage NH residents who saw the commercials to write their own Dear Me letters, and ultimately compete to be chosen to star in their own Dear Me commercial. The Dear Me NH ads are scheduled to run in late December of 2013.

“How heard” data is collected during the Helpline Screener Call, which means that the caller is asked how they received Helpline contact information (print, TV, radio, web, healthcare provider, family, friend, etc). TPCP adds particular campaign/s to this list to determine if the campaign reached the target audience. Unfortunately, it is common that a caller does not have accurate recall of how the Helpline’s contact information was relayed, so these data do not completely reflect campaign reach. Another method to determine the reach of a media campaign is the reach and frequency given in the flight schedules for radio or TV advertisements.

Media campaigns to promote Helpline services are critical so that the public may take advantage of opportunities for tobacco treatment assistance. The media campaigns, running consecutively, resulted in the greatest volume of contacts in the history of the Helpline’s existence. Between June 2010 and June 2012, there was an increase of 300% in self-referrals to the Helpline when NRT was promoted as a limited time offer. The NRT kits were exhausted in January 2012.

**New Technology’s Impact on the Helpline**

Texting and e-mailing into quitlines, rather than calling by phone, is appealing to certain populations. By texting CALLME to 22122, an auto-text will be returned acknowledging receipt and to inform the client that a counselor from the Helpline will make phone contact within two days. Through www.TryToStop.org, an e-mail message can be sent to the Helpline requesting a counselor to call. Further, a NH resident on the website may enroll in the Customized Tips Program, which auto-texts daily tips to mobile phones based on answers selected about type of tobacco used and quantity of tobacco use per day or sends email tips daily. This includes a
reminder when the services are ending (six-week service) and a reminder to sign up for an additional six weeks. Implementing these low-cost Helpline-contact alternatives targets younger tobacco users, provides 24-hour access to treatment information, and allows interaction with the services without directly engaging with a live person. There are no interactive voice recognition (IVR) services offered through the Helpline at this time. Other states have deployed a variety of web-based interactive services, such as completing an on-line application to receive free NRT via mail (New York) and in times of high call volume to use a specified e-mail address for self-referrals.

The NAQC has drafted a paper written by Barbara A. Schillo, PhD, *Quitline Service Offering Models: A Review of the Evidence and Recommendations for Practice in Times of Limited Resources*, examining the evidence base for the use of integrated web, IVR, and text-based interventions to enhance the effectiveness of quitlines. The paper proposes that while these tools represent emerging technology that has not been fully tested with quitlines, these innovations have potential for expanding service offerings.\(^{xv}\) NAQC is particularly looking at the potential for these technologies to integrate with quitlines rather than as stand-alone treatment tools.

**Federal Initiatives and the Impact on the Helpline**

1. **The Affordable Care Act**

In 2010, the Obama Administration and Congress took a major step through the Affordable Care Act (ACA) to address the health and economic burden of tobacco use in America by requiring health insurance plans and employers to cover tobacco treatment. The primary message from the federal government to health plans and employers is that there is evidence that tobacco treatment interventions (medication and counseling) improve health outcomes and therefore will be offered as a transparent benefit. The potential positive relationship development between health plans and quitlines could provide sustainability resources for quitlines. Quitlines, with appropriate funding, could contract with health plans to coordinate counseling, distribute the treatment medications, and track client quit status then report back to the health plans. ACA is a new system of state exchanges, which will operate in every state beginning in 2014. People who are unemployed, self-employed, or not provided with employer-sponsored insurance can purchase insurance on these exchanges. Many of these people are currently uninsured because they cannot afford coverage.

2. **Medical Home Model**

Also known as the patient-centered medical home (PCMH), this model is designed around patient needs and aims to improve access to care (e.g., through extended office hours and increased communication between providers and patients via email and telephone), increase care coordination, and enhance overall quality, while simultaneously reducing costs. The medical home relies on a team of providers—such as physicians, nurses, nutritionists, pharmacists, and social workers—to meet a patient’s health care needs. Studies have shown that the medical home model’s attention to the whole person and integration of all aspects of health care offer potential to improve physical health, behavioral health, access to community-based social services, and management of chronic conditions. The Helpline fits perfectly into the Medical Home Model for treating tobacco use and dependence.
3. **Meaningful Use**

The Health Information Technology for Economic and Clinical Health (HITECH) Act was established for increasing and improving efficient communication among health care providers. Meaningful Use (MU) came out of regulations from the HITECH Act as an incentive for motivating health care providers to adopt certified electronic healthcare record (EHR) technology systems to improve care coordination, privacy, safety, engage patients and family, create better clinical and health outcomes, and maintain privacy and security on patient health information. MU objectives have financial incentives attached that are related to the Center for Medicare Medicaid Services (CMS) reimbursements. MU objectives and measures will evolve in three stages over five years. The first stage of MU (2011-2012) focuses on capturing and sharing data in the electronic health record. The second stage (2014) focuses on advancing clinical processes. The third stage (2016) focuses on improving health care quality and outcomes.

Smoking status and tobacco use are core elements within the Stage One of Meaningful Use rules and the incorporated Clinical Quality Measures (CQM) Stage Two tobacco interventions are “strongly recommended” and optional as a CQM. The public comment period ended in January 2012 for Stage Three and the hope is that tobacco treatment interventions will hold a higher priority for this last CQM.

Meaningful Use is important to New Hampshire’s tobacco cessation efforts as an opportunity to link providers with QuitWorks-NH. As MU moves forward, all quitlines will need to implement an e-referral process to link to referring healthcare systems. In response to this, the NAQC is gathering a workgroup of states, like New Hampshire, already utilizing e-referral. The purpose of the workgroup is to develop a set of standards for creating an e-referral protocol that is flexible enough to allow various healthcare systems some level of individuality.

4. **Federal Medicaid Match for State Quitlines**

In a letter to State Medicaid Directors on June 24, 2011, the CMS provided guidance on tobacco treatment quitlines as an allowable Medicaid administrative cost expenditure. This decision allows states to claim the 50% federal administrative match rate for Quitline services to Medicaid beneficiaries. State tobacco control programs viewed the new guideline as: (1) a tool for building new relationships with their state Medicaid agencies or strengthening existing ones; (2) a window of opportunity in which to engage their state Medicaid agencies in a broader discussion of comprehensive treatment benefits for the Medicaid population of tobacco users; and (3) a way to further build Quitline sustainability efforts through public-public cost-sharing partnerships. It remains to be seen as to how this Federal initiative will impact the Helpline; as of July 1, 2013 (SFY 2014) state dollars were dedicated to Helpline service operations.

On June 24, 2011, the Centers for Medicare and Medicaid Services (CMS) provided guidance on tobacco cessation quitlines as an allowable Medicaid administrative cost expenditure.
5. **New Tobacco Treatment Coverage Announced for Military Families**

In a 2009 Authorizations Bill, Congress required the Department of Defense to provide a comprehensive smoking treatment benefit to members of the military and their families through the TRICARE military healthcare program. After much delay, the Department released a proposed rule to implement this coverage in September 2011. The benefits outlined in the proposed rule include individual, group, phone, and online counseling as well as prescription and over-the-counter medications. While the proposal includes some limitations on access to this coverage, it is a helpful and positive step for members of the military—many of whom begin smoking after they enlist. The American Lung Association is urging the Department of Defense to finalize the rule and begin implementation of a comprehensive benefit that all military members and their families may easily access.

**New Hampshire Initiatives to Sustain and Expand Helpline Services**

Sustaining the Helpline is critical as a public health service to address chronic disease health outcomes and a program priority for TPCP. The following section describes two activities that have potential for positive impact to the Helpline budget.

**Public-Private Partnership**

The NH TPCP participates in a Public-Private Partnership collaborative of eight states under the guidance of NAQC for the purpose of advancing relationships between state quitlines and state health plans. The purpose of this collaboration is twofold: (1) to ensure that public and private health plans cover all FDA treatment medications and offer evidence-based counseling for members making quit attempts for at least two attempts per year and (2) to develop a funding stream for quitline sustainability as the ACA and Medicaid Expansion moves forward, driving smokers to the state quitlines for treatment assistance. Colorado was the first state to successfully form cost-sharing partnerships between the state quitline and public/private Colorado health plans. Massachusetts also has created a successful partnership with the State MassHealth Program. The eight states conference monthly to discuss progress, share strategies, and learn from each other. The TPCP is deploying a number of activities with the intent to engage private health plans in cost sharing agreements. These activities include releasing a Request for Proposals to complete an exhaustive assessment of New Hampshire health plans’ current level of offering and usage of tobacco cessation benefits. Finally, TPCP is committed to forming a stakeholders group with representation from health plans, clinical systems and public health agencies to investigate options for linking health plans treatment benefits with the Helpline and QuitWorks-NH (Fig 10 and 11) as utilization of services is already in process.
Electronic Continuing Medical Education Training

On-site educational trainings for healthcare providers are challenging for two reasons: (1) busy practices have little time for a providers “undivided attention” to a subject and (2) providers’ time is so limited, that incentives (such as professional education credits) are motivators to increase attendance for a specified period of time. On-line trainings that charge a nominal fee and offer a variety of professional education credits are a more successful training platform. Also, it is costly to have TPCP staff traveling throughout the State delivering in-person trainings that are poorly attended. The TPCP anticipates that spreading these online trainings will increase the number of NH practices adopting the 2As and R brief intervention tobacco treatment model. The TPCP is in the discussion phase of placing an on-line training platform within www.QuitWorksNH.org for implementing 2As and R using electronic referring to QuitWorks-NH. Various professional education credits will be attached for completing the training. The purpose of the online trainings is to attract a variety of healthcare professionals to become aware of QuitWorks-NH and work toward full implementation of 2As and R with electronic referrals. Pending budget capacity, an on-line training may be realized by 2015. Dartmouth Medical School has produced an interactive on-line training “Smoking Treatment During Pregnancy and Beyond” that trains healthcare providers on delivering a brief intervention with pregnant women in various stages of readiness for change (pre-contemplation, contemplation, preparation, and action). Professional education credits are attached to this training for a nominal fee. The TPCP reached out to the creator, Dr. Joseph V. Henderson, of this on-line training to amend it with a module on QuitWorks-NH. Discussions have not expanded beyond a letter from Dr. Henderson stating that discussions could begin between Dartmouth-Hitchcock Medical Center (DHMC) Media Department and TPCP.
Return on Investment

Recent research indicates that tobacco prevention and treatment programs not only reduce smoking and save lives, but also save money by reducing tobacco-related healthcare costs. A recent study in the *American Journal of Public Health* found that for every dollar spent by Washington State’s tobacco prevention and control program between 2000 and 2009, more than five dollars were saved by reducing hospitalizations for heart disease, stroke, respiratory disease, and cancer caused by tobacco use. Over the 10-year period, the program prevented nearly 36,000 hospitalizations, saving $1.5 billion compared with $260 million spent on the program.¹⁷ Earlier studies showed that after Massachusetts implemented comprehensive coverage of tobacco treatment services for all Medicaid beneficiaries, the smoking rate among beneficiaries declined by 26% in the first two and a half years.¹⁸ A 2013 study published in *PLOS ONE* found that between 1989 and 2008, California’s tobacco control program reduced healthcare costs by $134 billion, far more than the $2.4 billion spent on the program. Researchers attribute these savings to reductions in smoking rates and cigarette consumption per smoker, generating significant savings in healthcare expenditures.¹⁹

The U.S. Assistant Secretary for Health, Howard Koh, wrote a message in the most recent Surgeon General’s Report, *Preventing Tobacco Use Among Youth and Young Adults*, which sums up the tobacco epidemic: “Tobacco use imposes enormous public health and financial costs on this nation costs that are completely avoidable. Until we end tobacco use, more young people will become addicted, more people will become sick, and more families will be devastated by the loss of loved ones.”
Appendices

Appendix I: Services Provided to New Hampshire Residents through NH Tobacco Helpline.

<table>
<thead>
<tr>
<th>Patient Referrals to QuitWorks-NH and Disposition (July 2010-June 2012)</th>
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</thead>
<tbody>
<tr>
<td><strong>Number of Referrals:</strong></td>
</tr>
<tr>
<td>Total number of referrals that were incomplete/missing</td>
</tr>
<tr>
<td>Total number of tobacco users who were contacted</td>
</tr>
<tr>
<td>Tobacco Users who were contacted, completed an intake and received services:</td>
</tr>
<tr>
<td>Tobacco Users who were contacted and were unable to complete full</td>
</tr>
<tr>
<td>Tobacco Users who were contacted and declined</td>
</tr>
<tr>
<td>Tobacco Users who were unable to be reached after 5pm</td>
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<tr>
<td>QuitWorks-NH Reach Rate = Tobacco Users Contacted / Eligible for Contact</td>
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<thead>
<tr>
<th>Services Provided</th>
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<tbody>
<tr>
<td>Tobacco Users who were contacted, completed an intake and received services*: n = 554</td>
</tr>
<tr>
<td>Accepted Telephone Counseling</td>
</tr>
<tr>
<td>Information Packet Sent*</td>
</tr>
<tr>
<td>Referred to TryToStop.org Website</td>
</tr>
<tr>
<td>Referred to pre-recorded Quit Tips 24-hour telephone line</td>
</tr>
<tr>
<td>Received Nicotine Replacement Therapy</td>
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</tbody>
</table>

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<thead>
<tr>
<th>New Hampshire Tobacco Helpline for Self-Refereed Callers (July 2010-June 2012)</th>
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<tbody>
<tr>
<td>Number of Callers who completed an intake and received services:</td>
</tr>
<tr>
<td>Services Provided</td>
</tr>
<tr>
<td>Accepted Telephone Counseling</td>
</tr>
<tr>
<td>Information Packet Sent</td>
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<tr>
<td>Received Nicotine Replacement Therapy</td>
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<table>
<thead>
<tr>
<th>NH Tobacco Helpline Referred Patient Outcomes* (July 2010-June 2012)</th>
</tr>
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<tbody>
<tr>
<td>Number of QuitWorks-NH patients attempted to reach for follow-up</td>
</tr>
<tr>
<td>Number of QuitWorks-NH patients unable to be reached for follow-up</td>
</tr>
<tr>
<td>Number of QuitWorks-NH patients contacted for follow-up</td>
</tr>
<tr>
<td>Number of QuitWorks-NH patients who completed follow-up</td>
</tr>
</tbody>
</table>

n   rate:

| Number of tobacco users who are currently quit (1 or more days) | 33 | 20.4% |
| 7 or more days                                                  | 32 | 19.8% |
| 30 or more days                                                 | 30 | 18.5% |

| Number of tobacco users who have made quit attempt              | 87 | 53.7% |
| No Attempt                                                      | 71 | 43.8% |

| 1-5                                                            | 79 | 48.8% |
| 6+ Attempts                                                    | 8  | 4.9%  |

Number of tobacco users who are currently smoking                 | 127 |

*Outcomes are presented for tobacco users who completed an intake, received helpline services, and completed a follow-up evaluation. The follow-up evaluation was completed 6-8 months after intake.
+ Tobacco users who were unable to complete a full intake may still receive treatment information.
± rate is based on the number of respondents with a documented smoking status at 6-8 months after intake.
### CDC Recommended Annual Investment: $19.2 million

#### Deaths in New Hampshire Caused by Smoking
- Annual average smoking-attributable deaths: 1,800
- Youth ages 0-17 projected to die from smoking: 31,000

#### Annual Costs Incurred in New Hampshire from Smoking
- Total medical: $564 million
- Medicaid medical: $115 million
- Lost productivity from premature death: $405 million

#### State Revenue from Tobacco Excise Taxes and Settlement
- FY 2006 tobacco tax revenue: $143.4 million
- FY 2006 tobacco settlement payment: $38.8 million
- Total state revenue from tobacco excise taxes and settlement: $182.2 million

#### Percent tobacco revenue to fund at CDC recommended level: 11%

<table>
<thead>
<tr>
<th>Component</th>
<th>Per Capita Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. State and Community Interventions</td>
<td>$5.37</td>
</tr>
<tr>
<td>II. Health Communication Interventions</td>
<td>$3.90</td>
</tr>
<tr>
<td>III. Cessation Interventions</td>
<td>$3.41</td>
</tr>
<tr>
<td>IV. Surveillance and Evaluation</td>
<td>$1.27</td>
</tr>
<tr>
<td>V. Administration and Management</td>
<td>$0.63</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$14.58</strong></td>
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</tbody>
</table>

**Note:** A justification for each program element and the rationale for the budget estimates are provided in Section A. The funding estimates presented are based on adjustments for changes in population and inflation since the 1999 publication. The recommended levels of investment (per capita and total) are presented in 2007 dollars using 2006 population estimates. These should be updated annually according to the U.S. Department of Labor Consumer Price Index and U.S. Census Bureau. The actual funding required for implementing programs will vary depending on state characteristics such as tobacco use prevalence, socio-demographic factors, and other factors. See Appendix E for data sources on deaths, costs, revenue and state-specific factors.

Office on Smoking and Health • Centers for Disease Control and Prevention
www.cdc.gov/tobacco • tobaccoinfo@cdc.gov • 1 (800) CDC INFO or 1 (800) 232-4636
References


12. NH Vital Records 2011


