

**California Department of Public Health
California Tobacco Control Program**

DP- 14-1410
Public Health Approaches for Ensuring Quitline Capacity

Evaluation Plan
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Intended Use and Users

This document describes a plan for process and outcome evaluation to inform cessation efforts administered by the California Tobacco Control Program (CDPH/CTCP), including those funded by *DP14-1410, Public Health Approaches for Ensuing Quitline Capacity*. Because these Quitline Capacity funds reflect only one small element of the California's cessation efforts, to enhance the utility of the plan and to demonstrate the interconnectedness of various efforts, CDPH/CTCP created a comprehensive evaluation plan that encompasses both federal and state-funded cessation strategies.

The evaluation plan was developed through a collaborative process involving workgroup members from CDPH, and representatives of funded programs including the California Smokers' Helpline (CSH) and the California Youth Advocacy Network (CYAN). Stakeholders were invited to participate, and will be engaged throughout the evaluation process. This plan fosters transparency related to program plans, activities, and outcomes, and promotes collaboration and communication among stakeholders to share responsibility regarding the purpose and use of the evaluation results.

Evaluation data will be shared with stakeholders including the Centers for Disease Control and Prevention, Office on Smoking and Health (CDC/OSH); the Tobacco Education, Research and Oversight Committee for California (TEROC); University of California San Francisco School of Pharmacy; California Pharmacists Association; Medi-Cal; CalPERS; Covered California; Smoking Cessation Leadership Center; CDPH/CTCP staff; community groups; and the general public. The purpose of this evaluation plan is to examine and document the links between program planning, activities, measures, and outcomes to evaluate CTCP's cessation efforts. Results will be used to inform current and future program activities, document lessons learned, and provide recommendations which may be translated to future projects focusing on cessation.

Program Description

Program Overview

CTCP was established in 1989 as a result of a voter-approved initiative that increased the excise tax on cigarettes and other tobacco products and designated a portion of the tax for a comprehensive tobacco control program (Roeseler & Burns, 2010). Organizationally, CTCP is a Branch within CDPH. CTCP is advised by the Tobacco Education and Research Oversight Committee of California (TEROC). The current TEROC Master Plan for 2015-17 includes an objective to increase the number of Californians who quit using tobacco (Tobacco Education and Research Oversight Committee, 2014).

CTCP's efforts to prevent and reduce tobacco use focus primarily on a denormalization strategy to change tobacco use norms in the larger physical and social environment rather than individual behavior change (Roeseler & Burns, 2010). The program seeks to impact the diverse and complex social, cultural, economic, and political factors which foster and support continued tobacco use, through the use of mass media, policy, system and environmental changes.

Overall, California's social norm change strategy seeks to create an environment in which tobacco use becomes less desirable, less acceptable, and less accessible. Through community interventions, the provision of statewide training and technical assistance, a mass media campaign, and a statewide quitline, CTCP works to achieve social norm changes which in turn lead to significant reductions in the uptake and use of tobacco at the population level (Roeseler, Hagaman, & Kurtz, 2011). The overall goals of CTCP are to: 1) Limit tobacco promoting influences; 2) Reduce exposure to secondhand smoke, tobacco smoke residue, tobacco waste, and other tobacco products; 3) Reduce the availability of tobacco; and 4) Promote tobacco cessation.

The marketing and provision of free tobacco cessation services provided by CSH is the primary method used to support this last goal. Established as a statewide service in 1992, CSH is administered by the University of California San Diego, Moores Cancer Center (UCSD). It provides free evidence-based telephone counseling in six languages (English, Spanish, Mandarin, Cantonese, Vietnamese, and Korean) as well as in-language self-help materials. Additionally, CSH provides tailored cessation support to

teens, pregnant smokers and smokeless tobacco users (Zhu, Anderson, Johnson, Tedeschi, & Roeseler, 2000).

The CSH counseling protocol combines principles of Cognitive Behavioral Therapy and Motivational Interviewing. Counseling sessions are proactive (counselor-initiated) and front-loaded (timed according to the probability of relapse) (Zhu et al., 2002). To assess quit rates and satisfaction with service, an average of 131 randomly selected program participants per month¹ (1,572 annually) are called at 7 months post-intake. An evaluation instrument is used which provides data consistent with the recommended Minimal Data Set questionnaire of the North American Quitline Consortium, but is more comprehensive and allows for additional analyses (i.e., not just 30-day point prevalence abstinence but also 6-month continuous abstinence).

UCSD also operates the Center for Tobacco Cessation (CTC as the training and technical assistance arm of CSH. This program focuses primarily on improving the capacity of health care providers and systems to support tobacco cessation. Activities include collaborating with health care and other community organizations, providing in-person and webinar trainings, and maintaining a web site with downloadable cessation-related materials and links to relevant resources, participating on various work groups and planning committees, and developing print ads, educational materials, and mass mailings. CTC trainings address topics such as behavioral health and cessation, evidence-based behavioral interventions, pharmacological treatments, preventing relapse, how and whether to tailor cessation services and promotion to special populations, and considerations for the successful evaluation of cessation programs.

CSH receives regular program funding from state (CTCP and First 5 California) and federal (CDC) sources, as well as funding for research (from sources such as the Centers for Medicare and Medicaid Services, the National Cancer Institute, and the Tobacco Related Disease Research Program) that leverage available state funding. CSH and CTC are currently funded under a \$13.8 million 4.25-year interagency agreement (IA 14-10611) from CTCP that ends June 30, 2019. Under this IA, at least 91,800 youth and adult smokers, chewers, and other tobacco users or their non-tobacco

¹ 90 per month on Prop 99 grant; 32 per month on CDC/OSH Quitline Capacity Agreement; and 9 per month on First Five of California contract.

using proxies (1,800/month on average) are to complete an intake survey and receive one or more tobacco cessation services, with quit rates for those receiving telephone counseling comparable to those from a recent randomized CSH trial.

Statement of Need

Smoking is the leading cause of preventable death in California, resulting in 40,000 deaths annually (Campaign for Tobacco Free Kids, 2015). Seventy-five percent of California smokers say they would like to stop smoking (California Department of Public Health California, 2008). The cost of smoking totals \$18.1 billion each year, including direct health care costs and lost productivity costs from illness or premature death (Max, Sung, Shi, & Stark, 2014). Smoking is a risk factor for the development of heart disease, lung disease, cancer, Type 2 diabetes, low-birth weight and premature delivery and a variety of other diseases (U.S. Department of Health and Human Services, 2014).

Since CTCP began in 1989, California has made remarkable progress in decreasing smoking rates among adults and teens. Adult smoking rates declined from 23.7% in 1988 to 11.7% in 2013, reflecting a 51% decline (California Department of Public Health, 2015). While California's statewide adult smoking rate of 11.7% and high school smoking rate of 10.5% are among the lowest smoking rates in the nation, the magnitude of the tobacco use problem in California remains sizable; there are 3.8 million adult and 297,000 youth smokers in California (California Department of Public Health, 2015). The number of smokers in California exceeds the individual population of more than 20 states.

Smoking rates in California vary considerably by gender, race, sexual orientation, income, educational attainment, geographic region, behavioral health status (encompassing mental health and substance use), and military status. (See [California Tobacco Facts and Figures 2015](#)). Smoking rates among men and women were comparable in the 1980's but began diverging in the late 1980s. However, by 1995, smoking rates were 5 to 6 percentage points lower in women than men. Since then, this difference has widened; in 2013, the smoking rate for men was 15.1% whereas for women it was 8.5% (California Department of Public Health, 2015).

Over the last 15 years, smoking rates declined steadily across all racial/ethnic groups for both men and women. However, smoking rates declined faster among White and Asian/Pacific Islander men compared to African American and Hispanic men and faster among Hispanic and Asian/Pacific Islander women than among White and African American women. Smoking rates among Asian men in California vary considerably: Chinese 15.2%, Korean 23.3%, and Vietnamese 27.0% (California Department of Public Health, 2015). Awareness of the dangers of secondhand smoke exposure follows a similar pattern with 96% of Chinese, 55% of Koreans and only 28% of Vietnamese agreeing with the following statement, “You should protect your family from secondhand smoke” (California Department of Public Health, 2014).

The rate at which the lesbian/gay/bisexual population smokes is nearly twice that of the general California population, at 21.6% (California Department of Public Health, 2015).

Smoking rates decrease with higher levels of income and the highest rates of smoking are observed in the poorest individuals. Smoking rates also decline with educational attainment. Those who have a high school or lower educational level smoke at a rate three times higher than those with some graduate school or beyond, while those with a vocational school education smoke at more than five times the rate of those with some graduate school or beyond (California Department of Public Health, 2015).

Smoking rates are highest in rural counties, and lowest in urban counties. The smoking rate in Santa Clara County is 8.9% compared to 16.9% in the Central/Imperial Valley region of Fresno, Imperial, Kern, Kings, Madera, Merced, and Tulare counties (California Department of Public Health, 2015).

Tobacco use is also a serious concern in the United States (U.S.) Armed Forces. Both active duty service members and Veterans have tobacco use rates that are higher than their civilian counterparts, in California and nationally (Barlas, Higgins, Pflieger, & Diecker, 2013; Crawford, Olsen, Thompson, & G, 2005). According to a 2011 survey, nationwide, close to half of all military service members (49.2%) used a nicotine product within the past 12 months (Barlas et al., 2013). Nearly one-quarter (24%) of active duty military personnel in 2011 reported current smoking, compared to 19% of civilians at

that time (Barlas et al., 2013). Smoking rates vary by service, with the highest rate reported by the Marine Corps (30.8%), followed by the Army (26.7%), Navy (24.4%), and Air Force (16.7%) (Barlas et al., 2013). Among Veterans, tobacco use prevalence is twice that of the national civilian population, and close to one-third are heavy smokers. The number is even higher for Veterans who have received a post-traumatic stress disorder (PTSD) diagnosis, with 48% being heavy smokers (Vasterling et al., 2007). California has witnessed the same disproportionately high rates of smoking and smokeless tobacco use by active duty military personnel compared to the general population. Active duty service members aged 18-24 smoke more than twice as much as civilians of the same age, and smokeless tobacco use by active duty personnel is three times that of the civilian population of California (Crawford, et al, 2005). Adding to the complexity of the problem, California's Veteran population totals more than 2.2 million, the highest number of Veteran residents of any U.S. state.

California's health care system has room to improve related to the availability and delivery of tobacco cessation services. Seventy-one percent of smokers in California saw a health care provider in 2012-2013, but only two-thirds of these individuals reported receiving advice to quit during their visit (*Behavioral Risk Factor Surveillance System/California Adult Tobacco Survey*, 2013). As of January 2015, more than 12 million people were enrolled in Medi-Cal, the state's Medicaid program. Among this population, the smoking rate is 21.1% (University of California Los Angeles Center for Health Policy Research, 2011) which is nearly twice the 2013 California general adult smoking rate of 11.7% (California Department of Public Health, 2015). Another population of high need is people with mental health conditions. Californians reporting serious psychological distress have a smoking rate of 27.7% (University of California Los Angeles Center for Health Policy Research, 2011) and are disproportionately represented among California's smoking population relative to their representation in the general population. People with mental health conditions who smoke want to quit (up to 79%) and are interested in obtaining information on cessation services (Prochaska et al., 2011; Prochaska et al., 2004). Decreasing barriers to effective tobacco cessation services in both the health care and behavioral health systems is a priority.

Inputs & Program Resources

Quit Plan for California: In 2009, CTCP convened a *Cessation Summit* which included a diverse group of subject matter experts and stakeholders from the community, state, and national levels to strategize an array of policy, insurance, media, training, and outreach strategies to accelerate quitting behavior among California smokers. The Summit culminated in the 2010 release of [Creating Positive Turbulence: A Tobacco Quit Plan for California](#) (Roeseler, Anderson, Hansen, Arnold, & Zhu, 2009). This document provides the strategic vision and foundation for California's current cessation efforts. Table 1: Provides a Logic Model for CTCP's cessation goal which incorporates many elements of the Tobacco Quit Plan for California.

Statewide Quitline: The cornerstone of CTCP's strategy to promote cessation is the marketing and provision of free tobacco cessation services through the California Smokers' Helpline (CSH). Established in 1992, CSH is a statewide telephone-based tobacco cessation program operated by UCSD and funded through tobacco taxes administered by CDPH (Proposition 99) and First 5 California (Proposition 10), CDC/OSH, Medi-Cal reimbursement, and research funding (e.g., TRDRP, Centers for Medicare and Medicaid Services, National Institutes of Health).

CSH employs a counseling protocol experimentally proven to be effective. Historically, the CSH has provided free evidence-based support in six languages (English, Spanish, Mandarin, Cantonese, Vietnamese, and Korean). (Beginning in August 2015, the provision of Asian language services transferred to the National Asian Quitline funded by CDC/OSH. Additionally, tailored cessation support is provided to teens, pregnant smokers and smokeless tobacco users. The CSH counseling protocol combines principles of cognitive behavioral therapy and motivational interviewing. Counseling sessions are proactive (counselor-initiated) and front-loaded (timed according to the probability of relapse). Free nicotine replacement therapy (NRT) is available to qualified callers based on special research projects or promotions offered by a funder, e.g., the Medi-Cal Incentives to Quit Smoking (MIQS) project, First 5 California (for parents of children 0 to 5), and the Asian Smokers' Quitline.

CSH hours of operation were expanded in 2012 as the result of CDC/OSH funding. Since that time, English and Spanish language lines operate Monday through

Friday, 7:00 a.m. to 9:00 p.m., and Saturday and Sunday, 9:00 a.m. to 5:00 p.m., along with reduced holiday closures. In fiscal year 2015, CSH received 10,096 calls through the national 1-800-QUIT-NOW line and 93,543 through 1-800-NO-BUTTS.

Other CSH services include certification of participation in counseling for purposes of obtaining NRT, an after-hours menu of recorded messages about quitting, and a text messaging service. The text messaging program includes 89 distinct messages drawn from the CSH experience working with over half a million smokers. Participants register for the text messaging program on the CSH website, www.nobutts.org. The text messaging program allows users to set their quit date and change it as needed, with the messaging schedule automatically adjusting to the new quit date. The scheduling of messages mirrors the relapse-sensitive scheduling of the CSH's counseling protocol, (i.e., participants receive more frequent assistance when they are most likely to relapse, and less frequent assistance over time as they become more confident in their ability to stay quit). The text messaging program begins with tailored messages sent daily before the quit date, twice daily in the first week of quitting, daily texts in week two, twice weekly texts in week three, and weekly texts starting in week four and continuing through the first six months of quitting. If users relapse, they can access more intensive help to get back on track and make a new quit attempt.

Electronic Referrals to CSH: Electronic Health Records (EHR) hold the promise of simplifying complex tasks such as identifying patients who would benefit from a specialty service such as a tobacco quitline and referring them for treatment. CSH is working with several large health systems to make programming changes in their EHR so as to provide their clinicians with such an option for their patients who use tobacco. CSH e-referrals feature bidirectional information exchange, with individual-level feedback messages sent by CSH to the referring provider. E-referrals increase the likelihood that providers will raise the issue of tobacco because they have a quick and effective way to intervene that is built around their current workflow (Adsit et al., 2014). The CSH e-referral system was developed in part with Affordable Care Act (ACA) Grant # 3U58DP002007-03W1 funds. With ACA funds, an HL7 (Health Level Seven International) 2.x interface was developed to create two-way linkages between University of California EHR systems and CSH in 2011-2012. The e-referral interface

launched at the University of California Davis campus in 2013 and is currently live across five University of California medical campuses. Implementation of the technology is supported by training health care providers on its use. This project, called UC Quits, includes a provider resource website (www.ucquits.com) that includes brief webinar modules on tobacco cessation available for free educational credit.

Health Care Provider Outreach: In patient care, a medical visit is a “teachable moment,” when the tobacco using patient may be particularly receptive to a clinician's advice to quit. Many clinicians want their patients to be tobacco-free, but feel they don't have enough time or knowledge to help them quit. Educating health care and behavioral health providers about how easy it is to refer their patients to CSH removes these barriers and increases the likelihood that they will intervene on their patients' tobacco use. The intervention activities include conducting outreach to health care and behavioral health organizations, drawing professional visitors to the CSH website, engaging providers with useful online content, and providing education and technical assistance (TA) to increase awareness of and referrals to CSH. The outreach also includes strategically placed advertising in online vehicles targeting health care providers, behavioral health professionals, and health plans, and dissemination of e-books, white papers, reports, blog posts, social media posts, infographics, videos, webinars, and online trainings.

Paid and Social Media: CTCP actively promotes CSH and motivates quitting through paid and social media opportunities. Media strategic planning is conducted annually which among other things takes into consideration the funding available, external media promotions (e.g., Tips campaign, Legacy campaigns, MIQS promotions, local health department promotions), media evaluation findings, and tobacco-use data. CTCP conducts a paid multi-cultural English language campaign as well as Spanish and Asian language campaigns (i.e., Chinese, Korean, and Vietnamese). Direct cessation ads that promote CSH generally seek to demonstrate empathy for smokers and provide resources for motivated quitters to get help. Asian ads that focus on secondhand smoke and anti-industry themes also motivate quitting and are tagged with the appropriate toll-free numbers. CTCP also conducts a robust social media campaign on Facebook which includes using Tips campaign materials, CSH materials, and

innovative themed campaigns such as the July 2015, “Truly Free” campaign which utilized the voices and stories of former tobacco users who are now free of all tobacco products including electronic cigarettes.

Center for Tobacco Cessation (CTC): Administered by UCSD, the CTC seeks to increase the capacity of organizations to develop, implement, and evaluate effective tobacco cessation efforts. Activities are based on an annual needs assessment and generally include 8-12 training webinars per year for health care providers and/or other professionals, 4-8 in-person trainings per year, and technical assistance. Course content is tailored to each audience and may cover such topics as pharmacotherapy for the treatment of tobacco dependence, effective behavioral interventions, motivating quit attempts, health systems approaches to cessation, supporting cessation in behavioral health settings, and how to implement systems change to support tobacco cessation in health care and/or behavioral health settings.

Behavioral Health Trainings: Since 2012, three to four regional trainings are conducted annually to: advance tobacco-free policies within behavioral health settings, make system changes that include routine identification and treatment of nicotine dependence within the mental health and substance abuse settings, and create partnerships between county-level tobacco control and behavioral health programs to address tobacco use. The trainers include: Dr. Chad Morris, Associate Professor and Director, Behavioral Health & Wellness Program, University of Colorado and other partners such as CSH, ChangeLab Solutions, and the Center for Tobacco Policy and Organizing. The trainings involve a local health department convening public health, county mental health, county alcohol and drug programs, behavioral health facility administrations, and providers of mental health substance abuse disorder treatment (Gordon, Modayil, Pavlik, & Morris, 2015).

Military Cessation Systems: Project UNIFORM is an intervention that focuses on changing how systems provide tobacco treatment services to military community members. While policies affecting the use and sale of tobacco products on military installations are primarily determined by the Department of Defense (DoD), there is great opportunity at the local level to elevate the need and provision for cessation services targeting active duty and Veteran populations. Administered by the California

Youth Advocacy Network (CYAN), this intervention is guided by a Board of Advisors (BOA) comprised of members of military communities, Veterans, and those working with service members. Outreach activities include proactive dissemination of information to military installations, health care agencies, organizations that serve Veterans, and college student health centers regarding tobacco issues impacting military communities via a listserv; social media messages using Facebook and Twitter; paid print and digital advertising to active duty service members and Veterans promoting CSH; and participation in events for military personnel and Veterans. These messaging strategies support a *Day of Action* which includes development and dissemination of a toolkit that provides resources and best practice guidelines to facilitate implementation of tobacco identification and treatment systems in a manner tailored to active duty and Veteran populations.

Pharmacists as Cessation Providers: This intervention focuses on increasing engagement of pharmacists as cessation providers. Senate Bill (SB) 493, [Hernandez, Statutes of 2013] declared pharmacists as health care providers and expanded the scope of their practice to include among other things, furnishing prescription NRT without a physician's prescription. Engaging pharmacists in cessation treatment may significantly expand access to treatment for smokers statewide since over 90% of people live within five miles of a pharmacy and most pharmacies are open beyond normal business hours. Additionally, pharmacists are highly qualified and trained in direct patient care and disease prevention and management, and rank as one of the most trusted professions for Americans (Gallup, 2014). Once proposed 2015 implementation regulations are finalized, CTCP will disseminate tools to increase awareness about the role of pharmacists in cessation. These include: a fact sheet, evergreen article, and talking points. CTC and the California Pharmacists Association will co-host a webinar training on this topic and both will promote it directly to pharmacists.

Standard Cessation Benefit: Tobacco cessation treatment benefits that reduce barriers to cessation assistance have one of the highest returns on investments in healthcare savings. Yet current practice does not reflect these findings. Currently, there is no uniform tobacco cessation benefit in California and the cessation benefit available

to beneficiaries varies greatly in coverage across health insurance purchasers and by health plan, (e.g., the Affordable Care Act, Medi-Cal and employer-based plans). Quitting takes multiple attempts, thus a smoker transitioning between types of health insurance must navigate benefits that vary greatly based on the purchaser or plan. Health care providers must also be cognizant of differences in available benefits based on a patient's insurance coverage. This intervention seeks to create a uniform cessation benefit across all insurance plans that is at a minimum consistent with the essential health benefit defined for ACA insurance plans in order to improve provision of cessation treatment and utilization of the cessation benefit by tobacco users.

Stakeholder Collaboration: CTCP works with a variety of stakeholders to promote and support cessation system change in health care and behavioral health settings, promote pharmacists as cessation providers, expand cessation insurance coverage, and promote CSH. Stakeholders include the American Lung Association of California, the American Heart Association, the American Cancer Society, the University of California, Medi-Cal, CSH, CYAN, Covered California, TERO, Smoking Cessation Leadership Center, health care provider champions, and local public health, mental health and alcohol and drug treatment providers. CTCP works with stakeholders on development of outreach campaigns, educational materials, training, system change efforts, cessation benefit design, and cessation reimbursement issues.

Stage of Development

CTCP is a mature comprehensive tobacco control program in operation since 1989. The media campaign and CSH are well-established interventions that have supported cessation for more than twenty years. Cessation efforts aimed at health care and behavioral health system change are in the implementation phase, while efforts to standardize cessation benefit and promote pharmacists as cessation providers are new interventions that are in the development stage.

Table 1. Logic Model

CDC-DP14-1410: Public Health Approaches to Ensuring Quitline Capacity				
Inputs: Maintain a statewide tobacco cessation quitline for adults and teens that provides services in English and Spanish and referral to the national Asian Smokers' Quitline.				
Program Strategy 1: Maintain and expand state quitline capacity.				
Program Strategy 2: Encourage and support health care and behavioral treatment systems to systematically implement tobacco user identification systems and to provide a uniform cessation benefit consistent with the Affordable Care Act.				
Activities	Outputs	Short-Term Outcomes	Intermediate Outcomes	Long-Term Outcomes
<ul style="list-style-type: none"> • Administer a statewide quitline (UCSD) • Promote EHR referrals to the quitline (CSH) • Paid and social media promotion directed towards tobacco users (CTCP Media) • Paid and social media promotion directed towards health care providers (UCSD) • Center for Tobacco Cessation (UCSD) • Behavioral health cessation and tobacco-free campus trainings (CTCP) • Military cessation systems intervention (CYAN) • Promote pharmacists as cessation providers (CTCP) • Promote public and private coverage of cessation as a standard benefit (CTCP) • Stakeholder collaboration (CTCP) 	<ul style="list-style-type: none"> • Media promotions and reach • Calls to the quitline • EHR referrals to the quitline • Training and technical assistance provided • Toolkit and material dissemination 	<ul style="list-style-type: none"> • Increased awareness of CSH • Increased call volume to CSH • Increased referrals from health care providers to CSH • Increased referrals from EHR Systems • Maintain Medi-Cal member call rates to CSH • Increased health care systems change to promote and support cessation • Increased cessation advice from health care providers 	<ul style="list-style-type: none"> • Increased quit attempts among callers • Improved cessation benefit for Medi-Cal and CalPERS beneficiaries • Increase number of callers who quit for at least 30 days • Increase callers from priority populations (LGBT, Low SES, behavioral health, etc.) 	<ul style="list-style-type: none"> • Increase cessation among current tobacco users • Decreased tobacco-related disparities • Reduced tobacco use prevalence and consumption • Reduced lung cancer and heart disease rates
<p>Environmental Context: Tobacco cessation insurance coverage, state excise tax rates, rates of smoking, smoke-free policies, media campaigns, integration of CSH with health systems, promotion of quitline services, state tobacco control funding.</p>				

Evaluation Plan

Evaluation Focus

The evaluation methods are focused on the major cessation interventions that comprise CTCP's cessation strategy. With a few exceptions, the cessation methods rely on data sources readily available and collected through ongoing surveillance and evaluation survey mechanisms conducted by the California Department of Public Health, CTCP, and CTCP contractors and grantees.

Evaluation Methods

CTCP works in partnership with CSH and CYAN on the evaluation and serves as the lead agency to coordinate and ensure that all data collection and reporting commitments are met. As outlined in Table 2: Evaluation Methods, a combination of outcome and qualitative data will be collected to evaluate CTCP's cessation goal.

Analysis and Interpretation Plan

Table 3: Analysis Plan provides an overview of how the data will be analyzed. CTCP will work with its partners, CSH and CYAN on the interpretation of data and additionally use our external Evaluation Task Force to review and vet evaluation results. The 13 member Evaluation Task Force is co-chaired by David Burns, M.D., and Michael Cummings, Ph.D., and is comprised of representatives from throughout the U.S. including state health departments, academia, private research firms, and TERO. The group meets annually to review CTCP intervention, evaluation, and surveillance efforts.

Table 2. Evaluation Methods

Evaluation Question	Indicator/Performance Measure	Method	Data Source	Frequency	Responsibility
<ul style="list-style-type: none"> • What is the impact of media promotions on CSH call/web volume? • What are the most effective and efficient methods for prompting referrals to CSH? 	<ul style="list-style-type: none"> • Number of calls/web intake to CSH who heard about the quitline from a media campaign • Number of calls/web intake to CSH who heard about the quitline through a health care provider • Number of e-referrals to CSH • Description of promotional activities, reach of targeted groups, dose, and intensity • Total CSH call/web volume • Awareness of CSH among those exposed to media promotions 	<ul style="list-style-type: none"> • CSH intake • Social media tracking • Online survey 	<ul style="list-style-type: none"> • CSH call/web volume • E-referrals • Google Analytics for TobaccoFreeCA and NoButts.org • Facebook statistics • DRTV and other media placement data including cost, weekly gross ratings, airings, impressions, and media markets • Media tracking study 	Annual	CTCP CSH
<ul style="list-style-type: none"> • To what extent do groups with high rates of tobacco use, use CSH services? 	<ul style="list-style-type: none"> • Number of callers/web intake to CSH by demographics, insurance status, health status (e.g., mental health status) 	<ul style="list-style-type: none"> • CSH intake 	<ul style="list-style-type: none"> • CSH intake survey 	Annual	CSH
<ul style="list-style-type: none"> • What proportion of users of CSH services quit using tobacco products? 	<ul style="list-style-type: none"> • Proportion of former smokers who sustained abstinence from tobacco use for 6 months or longer 	<ul style="list-style-type: none"> • Random telephone survey to a sample of CSH clients 	<ul style="list-style-type: none"> • CSH Evaluation follow-up 	Annual	CSH

Evaluation Question	Indicator/Performance Measure	Method	Data Source	Frequency	Responsibility
<ul style="list-style-type: none"> • What percent of smokers seeing a health care provider received advice to quit? 	<ul style="list-style-type: none"> • Health care provider advice to quit 	<ul style="list-style-type: none"> • Telephone Survey 	<ul style="list-style-type: none"> • BRFSS 	Annual	CTCP
<ul style="list-style-type: none"> • To what extent do Medi-Cal and CalPERS cessation benefits reflect the ACA cessation benefit standard? 	<ul style="list-style-type: none"> • CalPERS and Medi-Cal cessation benefit description 	<ul style="list-style-type: none"> • Document review 	<ul style="list-style-type: none"> • CalPERS benefit brochures • Medi-Cal Policy Letters 	Annual	CTCP
<ul style="list-style-type: none"> • To what extent do clinics and facilities providing services to military personnel and Veterans routinely identify and treat tobacco users? 	<ul style="list-style-type: none"> • Cessation benefit description provided to active duty military and Veterans 	<ul style="list-style-type: none"> • Key Informant Interviews 	<ul style="list-style-type: none"> • Telephone interview 	Annual	CYAN
<ul style="list-style-type: none"> • To what extent do behavioral health training participants routinely identify and treat tobacco users? 	Extent to which health providers/counselors report they routinely identify and treat tobacco use of patients/clients.	<ul style="list-style-type: none"> • Pen-paper survey of training • Post-training online survey 	<ul style="list-style-type: none"> • Training Participant Survey • Post Training Follow-Up Survey 	Annual	CTCP
<ul style="list-style-type: none"> • To what extent have smoking rates decreased among groups with high rates of smoking? 	<ul style="list-style-type: none"> • Adult smoking prevalence by race/ethnicity and gender; sexual orientation, federal poverty level, educational level, geography and serious psychological distress 	<ul style="list-style-type: none"> • Telephone Survey 	<ul style="list-style-type: none"> • BRFSS/CATS • CHIS 	Annual	CTCP

Evaluation Question	Indicator/Performance Measure	Method	Data Source	Frequency	Responsibility
<ul style="list-style-type: none"> To what extent have cessation quit attempts in the population increased? 	<ul style="list-style-type: none"> Proportion of adult smokers who have made a serious quit attempt in the last 12 months (defined as lasting at least a day) 	<ul style="list-style-type: none"> Telephone Survey 	<ul style="list-style-type: none"> BRFSS/CATS 	Annual	CTCP
<ul style="list-style-type: none"> To what extent has lung/bronchial cancer decreased? To what extent has the coronary heart disease death rate declined? 	<ul style="list-style-type: none"> Age-Adjusted Incidence of Lung and Bronchus Cancer Coronary Heart Disease Death Rate per 100,000, Age 35+ 	<ul style="list-style-type: none"> Disease reports 	<ul style="list-style-type: none"> http://www.cancer-rates.info/ca/index.php http://apps.nccd.cdc.gov/DHDSPAtlas/reports.aspx 	Biennial	CTCP

Table 3: Analysis Plan

Short-term Outcomes:	Data Source	Survey Question	Analysis Plan
Increase awareness of CSH	Online CATS	Do you know the Smokers' Helpline, 1-800 NO-BUTTS, which assists in quitting smoking?	Percent of population aware of CSH
Maintain call volume to CSH	CSH intake survey	N.A. (direct count of clients completing intake)	Number of calls to CSH
Increased referrals from health care providers to CSH	CSH intake survey, CSH referral records	Intake question: How did you hear about us? (Also a direct count of referrals received, regardless of whether they completed intake)	Number of patients referred to CSH by health care providers
Increased referrals from EHR Systems	CSH records	(A direct count of electronic referrals received, regardless of whether they completed intake)	Number of patients electronically referred to CSH directly from an EHR
Maintain call volume to CSH from Medi-Cal members	Helpline intake survey	Do you have any form of health insurance, such as Kaiser or Medi-Cal?	Number of callers to CSH who have Medi-Cal coverage.

Intermediate Outcomes	Data Source	Survey Question	Analysis Plan
Increased health care systems change to promote and support cessation	Consumer Assessment of Health Care Providers Survey (CAHPS) Medi-Cal, CalPERS, Covered CA policy documents CSH web referral organizations	<u>CAHPS</u> Q25 Were you advised to quit smoking or stop using tobacco by your PDN? Y / N Q26 [Medication to help you quit smoking can include nicotine gum, patch, nasal spray, inhaler, or prescription medication.] Did your PDN recommend or discuss medication to help you quit smoking or using tobacco? Y / N Q27 Did your PDN recommend or discuss methods or strategies other than medication to help you quit smoking or using tobacco? <u>Policy Documents</u> Minimum number of cessation treatments offered per year Minimum number of cessation counseling sessions offered and modes available (e.g., in person or telephone and individually or group) Length of drug treatment regimen Prior authorization requirements <u>CSH Web Referral Organizations</u> Name and location	Percent of CAHPS responders who are smokers who are advised to quit and offered cessation treatment assistance Comparison of Medi-Cal, CalPERS and Covered CA policy documents over time to assess changes in cessation benefits Type and geographical distribution of organizations that have registered for web referral
Increased cessation advice from health care providers	Behavior Risk Factor Survey System (BRFSS)	In the last 12 months did your doctor or other health care provider advise you to stop smoking?	Percent of current smokers advised to stop smoking by their healthcare providers

Intermediate Outcomes	Data Source	Survey Question	Analysis Plan
Maintain quit attempt rate among callers	Helpline 7 month evaluation	Since you first called the Helpline on (screen date), how many times have you tried to quit (including this time)? Out of those times, how many were for 24 hours or more?	Percentage of callers quit one day or longer
Improved cessation benefit for Medi-Cal and CalPERS beneficiaries	Documents from Medi-Cal and CalPERS	Cessation Benefit	Cessation benefit analysis
Maintain 30 day abstinence rates	CSH 7 month evaluation	How long did you quit for? _____ days/weeks/months/ years	Proportion who were quit for 30 days or more at the time of evaluation comparable to that found in previous randomized trials.
Increase calls from priority populations (LGBT, Low SES, behavioral health, etc.)	CSH intake survey	Which of the following best describes how you think of yourself? Would you say you are a) heterosexual (that is, straight), b) gay/lesbian, c) bisexual, or d) other? Do you have any current mental health issues such as: An anxiety disorder? Depression? Bipolar disorder? Schizophrenia? Drug or alcohol problem?	Percentage of callers who identified themselves as LGB, having a behavioral health condition, or low SES comparable to their proportion in the state population.

Use, Dissemination and Sharing Plan

Evaluation results will be used to adjust intervention activities as needed as well as to assess overall program impact, CSH utilization and effectiveness, and the impact of efforts to impact health care systems to improve the quality of cessation benefits and the use of benefits. Findings will be disseminated through TEROC meetings, the TEROC Master Plan, reports such as the annual Tobacco Facts & Figures, infographics, social media, and other vehicles. CTCP will work with its staff and partners to translate evaluation findings into action, which may include bill analyses and high-level administrative policy meetings with internal and external policy makers such as health care purchasers and insurance plans.

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