Final Report

**Project Title: Behavioral Health Residential Treatment Intervention
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Executive Summary

In 2018, the California Tobacco Control Program (CTCP) identified behavioral health populations, including people with substance use disorders or behavioral health conditions, as a priority population for tobacco control. To address tobacco-related disparities experienced by this population, CTCP launched a five-year, two-part initiative within the overall Initiative to Prevent and Reduce Tobacco-Related Disparities. The first part, the Tobacco-Free for Recovery Initiative, was an organizational change intervention delivered to residential behavioral health treatment programs designed to improve tobacco and other wellness policies and reduce tobacco use. The intervention was delivered to 19 programs, selected into three cohorts. In this report, we refer to this as the Cohort Intervention. The second part was called the California Behavioral Health and Wellness Initiative (CABHWI). CABHWI provided 1) support to cohorts and 2) training/technical assistance (TA) for California behavioral health and substance use disorder (BH/SUD) programs and CTCP-funded projects. The CABHWI involved one-day Behavioral Health Regional Trainings aimed at behavioral health leadership and staff. We refer to this as the Training Intervention. Both the Cohort and the Training Intervention were conducted by the University of California San Francisco (UCSF) Smoking Cessation Leadership Center (SCLC). The evaluation of both interventions was conducted by the UCSF Institute for Health Policy Studies and findings are included in the current report.

The Cohort Intervention recruited residential behavioral health treatment programs and engaged them in implementing tobacco-free policies and in improving tobacco use disorder (TUD) screening, assessment, and referral. The intervention applied a wellness context so that, in addition to tobacco, the intervention sought to improve nutrition, physical activity, and problem gambling policies. CTCP posted requests for applications through its Tobacco Control Funding Opportunities and Resources (TFCOR) network and interested behavioral health programs applied. The Cohort Intervention included staff training, consultant support, and peer-based learning community activities.

Evaluation methods for the Cohort Intervention included data collection from Program Directors, staff, and clients before the intervention started (pre-intervention), 12 months later, and then at the end of the 18-month intervention (post-intervention). In addition to surveys, program policies in each of the four areas (tobacco, nutrition, physical activity, and gambling) were collected at each timepoint. Using information provided by Program Directors, other system changes that may not be reflected in written policies were also captured. Cohort 1 (7 programs) received the intervention from December 2018 through April 2020. In Cohort 2 (6 programs) one program started and ended six months early, but the remaining programs participated from May 2020 through November 2021. Cohort 3 (6 programs) participated from January 2021 through June 2022. Considering all Cohort 1 programs, client smoking prevalence decreased from 54.2% at pre- to 26.6% at post-intervention (Adjusted Odds Ratio [AOR] = 0.25, 95% CI = 0.13, 0.45) and the proportion of clients who reported receiving nicotine replacement therapy (NRT) increased from 11.9% at pre- to 25.2% at post intervention (AOR = 3.02, CI = 1.24, 7.35). Data for Cohorts 2 and 3 were analyzed separately from Cohort 1. In those later cohorts, client smoking prevalence decreased from 60.3% at pre- to 40.5% at post-intervention (AOR = 0.45, CI = 0.27, 0.76) and the proportion of clients who reported receiving nicotine

replacement therapy (NRT) increased from 31.9% at pre- to 45.6% at post-intervention (AOR = 1.84, CI = 1.01,3.35).

Evaluation methods for the Training Intervention included participant surveys immediately following the one-day training. Three months later, the training participants were surveyed a second time and convenience samples of participants were recruited for qualitative interviews and focus groups. The one-day trainings were conducted in Calaveras County, San Mateo County, and Fresno County in April, June, and October 2019, respectively. Due to the COVID-19 pandemic, trainings were first suspended and then moved to statewide webinar formats conducted in May 2021 and in May 2022. Across all five training events, there was a total of 322 participants, representing 108 agencies in the State of California. Of these, 196 (62%) completed the first survey and 142 (44%) completed the 90 day follow up survey. Analyses of change over time in respondents' readiness to implement new policy/system changes, dedicate resources, and adopt written polices in the four areas of wellness (i.e., tobacco use and dependence, nutrition, physical activity, and problem gambling) rely on participants who provided complete responses at both baseline and 90 day follow up timepoints (n = 78). Among 78 participants who completed the baseline and 90 day follow up surveys, the proportion of respondents who reported that they felt ready to make policy/system changes in the areas of tobacco and nutrition increased from baseline to the 90 day follow up assessment (tobacco: 71% vs. 76%, respectively, and nutrition: 45% vs 50%, respectively). Across all four wellness areas, the proportion of respondents who reported that their agency dedicated at least one resource to each wellness area increased from baseline to the 90 day follow up assessment. There was wide variability in participants' reports as to whether their agencies had dedicated resources to address the four wellness areas ranging from 14% to 45%. Overall, the Training Intervention had limited impact on the development of written policies, partnerships, and the receipt of technical assistance from participating organizations.

Introduction

The prevalence of combustible cigarette smoking among adults in the United States (US) is 14% (Cornelius, Wang, Jamal, Loretan, & Neff, 2020). Smoking prevalence among persons with serious psychological distress is 35.2% (U.S. Department of Health and Human Services, 2020), and Weinberger et al. (2018) estimated a 55.48% smoking rate among persons meeting criteria for substance use disorder (SUD). Persons entering SUD treatment, as a subgroup of all those who meet SUD diagnostic criteria, have very high smoking rates. A survey of 1,700 clients in 24 SUD treatment programs in 14 states reported a 77.6% smoking prevalence (Yip et al., 2019). A recent survey of clients enrolled in 20 California residential SUD treatment programs reported a 68.9% smoking prevalence (Guydish, Kapiteni, et al., 2020). These estimates reflect a gradient in smoking rates from 14% in the general population to 35-55% among persons with mental health or substance use problems to about 70% among those in SUD treatment.

Large differences in rates of tobacco use concern public health as a matter of health disparities (Okuyemi, Reitzel, & Fagan, 2015) and social justice (Healton & Nelson, 2004). They also concern tobacco control as a field, suggesting that decades of successful tobacco control efforts have achieved limited impact in this group. The disparity in rates of tobacco use is of concern to behavioral health treatment payors and providers because the health and economic costs of smoking are concentrated in this population. People with SUDs, for example, smoke more heavily than other smokers (Ward, Kedia, Webb, & Relyea, 2012), have a harder time quitting smoking (Weinberger, Funk, & Goodwin, 2016) even while attempting to quit at rates similar to the general population (Martinez et al., 2015), are more likely to relapse to drug use (Weinberger, Platt, Jiang, & Goodwin, 2015), and more often die of tobacco-related illness (Bandiera, Anteneh, Le, Delucchi, & Guydish, 2015).

To reduce tobacco use in behavioral health settings, several states implemented tobacco-free grounds (or campus) policies in treatment programs. New Jersey mandated tobacco-free grounds in residential SUD programs in 2001 (Williams, Foulds, & Dwyer, 2005) and New York implemented tobacco-free grounds in all state licensed SUD programs in 2008 (Brown, Nonnemaker, Federman, Farrelly, & Kipnis, 2012), later followed by both Oregon and Utah (Drach, Morris, & Cushing, 2012; Marshall, Kuiper, & Lavinghouze, 2015). Different from a statewide policy mandate, Texas implemented a community-academic partnership including staff training and program access to nicotine replacement therapy (NRT) to encourage tobacco-free grounds in mental health (Correa-Fernandez et al., 2019) and SUD treatment settings (Martinez Leal et al., 2021).

Tobacco-free policy implementation has been associated with decreased client smoking rates (Guydish, Yip, et al., 2017; Richey, Garver-Apgar, Martin, Morris, & Morris, 2017). Staff training has been associated with higher delivery of smoking cessation treatment (Knudsen, Studts, & Studts, 2012). Smoking cessation interventions, particularly NRT, behavioral treatment, and combined approaches, have been shown to increase smoking cessation during SUD treatment (Thurgood, McNeill, Clark-Carter, & Brose, 2016). In 2016, only 34.5% of SUD treatment facilities nationwide reported tobacco-free grounds and 47.4% reported offering smoking cessation counseling (Marynak et al., 2018). A 2019 survey of California residential SUD programs found that 11% had implemented tobacco-free policies (Guydish, Wahleithner, Williams, & Yip, 2020).

In 2018, the California Tobacco Control Program (CTCP) launched a five-year, two-part initiative within the overall Initiative to Prevent and Reduce Tobacco-Related Disparities (California Tobacco Control Program, 2018). The first part, the Tobacco-Free for Recovery Initiative, was an organizational change intervention delivered to residential behavioral health treatment programs, designed to improve tobacco and other wellness policies and to reduce tobacco use. The intervention was delivered to 19 programs, selected into three cohorts. In this report, we refer to this as the Cohort Intervention. The second part was called the California Behavioral Health and Wellness Initiative (CABHWI). CABHWI provided 1) support to cohorts and 2) training/ technical assistance (TA) for California behavioral health/substance use disorder (BH/SUD) programs and CTCP-funded projects. The CABHWI involved one-day Behavioral Health Regional Trainings aimed at behavioral health leadership and staff. We refer to this as the Training Intervention. Both the Cohort and the Training Intervention were conducted by the University of California San Francisco (UCSF) Smoking Cessation Leadership Center (SCLC). The current report concerns the evaluation of the Tobacco-Free for Recovery Initiative, and includes evaluation of both interventions. These two interventions (Cohort, Training) were quite different in their scope and aims, and evaluation methods were tailored specifically for each intervention. For these reasons, the intervention description, Evaluation Methods, and Results are described below in separate sections.

Tobacco-Free for Recovery: Cohort Intervention

Description of Cohort Intervention

The Cohort Intervention recruited a total of 19 residential behavioral health treatment programs and engaged them in implementing tobacco-free policies and improving tobacco-related screening, assessment and referral services. The intervention applied a wellness context so that, in addition to tobacco, the intervention sought to improve nutrition, physical activity, and problem gambling policies. CTCP posted requests for applications through the Tobacco Control Funding Opportunities and Resources (TFCOR) network, and interested behavioral health programs applied. The intervention, led by SCLC, assisted programs in implementing tobacco-free policies, tobacco cessation staff training, and tobacco cessation services to clients. Any NRT provided was paid for by the treatment program and not this evaluation project.

Each cohort intervention was 18 months long. As the intervention included a peer-based learning community model in which program leadership met and discussed progress together, the 18 participating programs were recruited in 3 cohorts (see Table 1).

Table 1. Behavioral health programs recruited into 3 cohorts

Cohort	Number of Programs	Intervention period
Cohort 1	7	December 2018 - April 2020
Cohort 2	6	May 2020 - November 2021[†]
Cohort 3	6[*]	January 2021 – June 2022

[*] In Cohort 3, two programs in the same agency were recruited, but later combined during the COVID-19 pandemic, leaving 18 programs reported in analyses.
[†] One program in Cohort 2 started and ended 6 months earlier than the others.

Staff training topics included benefits of tobacco use cessation during SUD treatment, as well as assessing and treating tobacco use among clients. Wellness-oriented policies that promoted healthy alternatives to smoking such as exercise, yoga classes, and modifying smoking areas for other activities were included in the intervention. SCLC consultants worked with programs to develop individually tailored policies and procedures to achieve these goals over the 18-month intervention period.

Evaluation Methods

Evaluation methods, measures, and procedures were approved by CTCP prior to the start of the evaluation. All study procedures were approved by the UCSF Institutional Review Board. Evaluation of the Cohort Intervention included Program Director interviews and surveys, staff surveys, and client surveys conducted in each participating program at baseline (pre-intervention), at 12 months, and at the end of the 18-month intervention period (post-intervention). In addition, written program policies in the areas of tobacco, nutrition, physical activity, and gambling were collected from the programs at each timepoint. These policies were later rated to assess policy change over time in each area. Last, data included in the Director Survey and Director Interview, collected at each timepoint, were incorporated into a system change measure that was also rated. This was intended to capture changes that may have occurred but may not be reflected in the written program policies.

Measures

Director Interview and Checklist. The qualitative Program Director Interview asked about how policies are developed and communicated within the program and asked specifically about policies related to smoking among program staff and clients. Questions included, for example, whether the program encourages staff and/or clients to quit smoking, what interventions for smoking are available in the program, and whether the program has any committees or trainings related to tobacco dependence. The interview also asked about development and implementation of nutrition, physical activity, and gambling policies, and what services were available for clients in each of these areas. At 12-month and 18-month timepoints, Directors were asked the same questions but focused on changes since the last interview.

The Checklist included items drawn from research on tobacco-free grounds, (Muilenburg, Laschober, Eby, & Moore, 2016), research on staff smoking prevalence (Cookson et al., 2014; Skelton et al., 2017), and research on staff and clients smoking together (Guydish et al., 2017). The survey also asked whether a number of tobacco cessation services were available in the program, including whether staff screen for tobacco use status, advise clients to quit or refer to cessation services, and whether the program provides tobacco education groups or materials or offers groups for clients who are trying to quit tobacco products. The Checklist asked about staff training and client services related to gambling, about whether the program had an overall wellness committee, and about nutrition standards and guidelines at the program.

Staff Survey. In addition to demographic characteristics, the survey asked about self-report smoking status (current, former, never). Current smokers reported number of cigarettes per day (CPD) and, as a measure of readiness to quit smoking, whether they intended to quit in

the next 30 days, the next 6 months, or were not thinking of quitting (DiClemente et al., 1991). Given the high rate of use of electronic smoking devices (ESDs) among persons in SUD treatment (Masson et al., 2021), staff also reported whether they had used ESDs in the past month.

Staff completed the Smoking Knowledge, Attitudes and Practices (S-KAP) survey (Delucchi, Tajima, & Guydish, 2009), which includes scales reflecting staff beliefs about addressing tobacco in the treatment setting (7 items, α = 0.74), self-efficacy to help clients quit smoking (9 items, α = 0.72), and practices (8 items, α = 0.91) used to help clients quit (Delucchi et al., 2009). Individual scale items and response codes can be found in Appendix I. Responses to each item are scored from 1 to 5, with the mean of items comprising the scale score. Higher scores reflect more positive beliefs about treating smoking, greater self-efficacy to treat smoking, and greater use of practices to treat smoking. All staff completed the Belief scale, while clinical staff completed the Self-Efficacy and Practice scales. Clinical staff included those having an active client caseload and/or conducting group or individual counseling sessions.

Client Survey. The client survey collected demographic characteristics and smoking status. Current smokers reported CPD and readiness to quit smoking, and all clients were asked if they had used ESDs in the past month. To assess tobacco-related services received, clients reported whether any staff member had asked if they smoke. Current smokers and former smokers who quit smoking while in treatment reported whether they had attended a smoking cessation support group (yes/no) and how often their counselor encouraged them to quit smoking or arranged an appointment to discuss quitting (Never vs. Occasionally/Often/Very Often/Always). Clients who received one or more of these three services were coded as having received tobacco-related counseling. Last, smokers and former smokers who quit while in treatment were asked if they received any NRT or other cessation medication in the program. Answering "yes" to either question was coded as having received cessation medication.

Written Policy Rubric. Written program policies in the areas of tobacco, nutrition, physical activity, and gambling were collected from Program Directors at each timepoint. These written policies were later rated by two independent raters using a modified version of the School Tobacco Policy Index Rating Form & Manual from the Center for Tobacco Policy Research at Washington University in St. Louis (Boyce, Mueller, Hogan-Watts et al., 2009). Selected items in the Nutrition Policy rating rubric were from the Wellness School Assessment Tool 2.0 (WellSAT 2.0) from the University of Connecticut Rudd Center for Food Policy & Obesity.

System Change Rubric. In an effort to capture programmatic changes in participating programs that may not be reflected in the policy change measures, the evaluation team developed a system change rubric. This measure incorporated items from the Director Checklist and from the Director Interview.

Procedures

In each program, and at each data collection timepoint, a research associate (RA) contacted the Program Director to schedule the Director Interview. Shortly before the interview, the RA emailed the consent information and a link to complete the Director Checklist online. At the end of the Director Interview, the RA reminded the director to complete the Checklist, asked the director for the number of paid full- and part-time staff (later used to track

staff response rates), and asked for a list of work email addresses for those staff. Directors received a $50 incentive material (i.e., merchandise card) for completing the interview and checklist. All incentive materials were tracked and logged by project staff.

Eligible staff were contacted by email, provided an opportunity to consent online, and invited to complete the online staff survey. Staff surveys were confidential, as each respondent received a unique link to the survey, and responses could be linked for the same staff person over time. Non-responding staff received a series of up to three weekly reminders to complete the survey. After three weeks, RAs discussed staff response rates with the director and then used additional strategies recommended by the director. These usually involved send an additional invitation coupled with an announcement or reminder made to staff by the director. Staff received a $25 merchandise card for completing the survey. As above, all incentive materials were tracked and logged by project staff.

After the staff survey had been launched, RAs worked with directors to identify a date and time when the evaluation team could visit the program to conduct client surveys on-site. During these site visits, RAs met with groups of 8-10 clients at a time, reviewed consent procedures, and gave clients a computer tablet with a pre-populated client identification number to complete the online client survey. At the time of data collection, directors provided the evaluation team with the program client census for use in computing client survey response rates. Client responses were anonymous as the survey did not collect any identifying information. Clients received a $20 merchandise card for completing the survey.

Following completion of director, staff, and client data collection, Program Directors were asked whether written policies in any of the four areas (tobacco, nutrition, physical activity, gambling) had changed since the last interview. Where polices had changed, RAs collected the new written policies.

The State of California initiated COVID-19 pandemic stay-at-home orders beginning March 19, 2020, which was at the end of data collection for Cohort 1. Thereafter, due to visitor restrictions on residential programs and travel restrictions imposed by the University of California, all client surveys were conducted on paper. Further due to the challenges of the pandemic, some directors also asked to conduct the staff surveys on paper. Transitioning staff and client surveys from online formats, which included multiple skip patterns, to paper formats where skip patterns result in increased error, necessitated shortening and simplifying the surveys forms. The shortened staff and client surveys were approved by CTCP before use in the field.

Results of the Cohort Intervention

Staff and client survey participation rates

Survey participation rates are important because they reflect how well the staff and client survey data represent the population of staff and client population at the time of data collection. Table 2 includes staff and client participation rates for each cohort and at each of the three data collection timepoints. In each cell, the numerator is the number who completed the survey, while the denominator is the number of eligible staff or clients as given by the Program Director. The top left cell shows that there were 165 eligible staff in Cohort 1 at pre-intervention, and that 135 of those staff completed the survey, giving 135/165 = an 81.8% participation rate.

The "total by cohort" rows show that staff participation rates, collapsed across timepoints, were 79.5% in Cohort 1, 72.3% for Cohort 2, and 74% for Cohort 3. The bottom line in the table shows that client participation rates for the three cohorts were 84.6%, 94.4%, and 90%, respectively.

Table 2. Staff and client survey participation rates for three intervention cohorts

|	Cohort 1 (7 programs)	Cohort 2 (6 programs)	Cohort 3 (5 programs[*])
	Staff Response Rates		
Pre-Intervention	135/165 (81.8%)	103/131 (78.6%)	61/78 (78.2%)
12 months	135/180 (75.0%)	77/115 (67.0%)	49/71 (69.0%)
Post-Intervention	144/176 (81.8%)	81/115 (70.4%)	47/63 (74.6%)
Total by Cohort	**414/521 (79.5%)**	**261/361 (72.3%)**	**157/212 (74.1%)**
	Client Response Rates		
Pre-Intervention	249/327 (76.1%)	108/119 (90.8%)	76/83 (91.6%)
12 months	275/311 (88.4%)	131/142 (92.2%)	98/107 (91.6%)
Post-Intervention	219239 (91.6%)	133/133 (100.0%)	92/104 (88.5%)
Total by Cohort	**743/877 (84.7%)**	**372/394 (94.4%)**	**266/294 (90.5%)**

[*] In Cohort 3, two programs in the same agency were combined during the COVID-19 pandemic, leaving 5 programs for analyses in that cohort.

Results for Cohort 1

Results from Cohort 1 were in part published in a paper by McCuistian et al. (2022). This paper analyzed client survey data, including cross-sectional samples from baseline (n = 249), 12 months (n = 275), and post-intervention (n = 219. Included in these analyses were data from clients receiving treatment in seven programs. Univariate and multivariate models were used to assess differences by time in smoking prevalence, tobacco use behaviors (cigarettes per day, clients and staff smoking together) and client reports of receiving tobacco-related services (tobacco screening, referral, counseling, and receipt of NRT in the treatment program). Univariate comparisons showed a significant decrease in client smoking prevalence from pre- (54.2%) to post-intervention (26.6%, p. < .001), and an increase in receipt of NRT among clients who were smokers at intake while in the program from 11.9% at pre- to 25.2% post-intervention (p. < .01). There were, however, no significant differences in client reports of the amount of tobacco screening, counseling, or referral they received while in the treatment program. Subsequent logistic regression models controlling for demographic characteristics and for nesting of clients within programs supported the pre- post-intervention decrease in smoking prevalence (Adjusted Odds Ratio [AOR] = 0.62, CI = 0.42, 0.92) and the increase in use of NRT or other cessation pharmacotherapy (AOR = 3.68, CI = 1.11, 12.19). In this cohort, five of the seven programs implemented tobacco-free grounds policies during the intervention period at different times (see Figure 1), while two program did not implement tobacco-free policies.

In an additional paper analyzing data from Cohort 1, Campbell et al. (2022) analyzed survey data for staff participants at baseline (n = 135) and post-intervention (n = 144) using multivariable regression models and examining nine outcomes. These included whether staff

received tobacco-related training in the past 12 months, scaled measures of staff attitudes toward treating smoking and practices used to treat smoking among with clients, workplace smoking policy, specific tobacco-related services provided (education or counseling, referral, NRT), staff smoking prevalence, and staff intent to quit smoking. Analyses adjusted for staff demographic characteristics and controlled for nesting of staff within clinics. The models allowed for correlations within staff who completed surveys at both data collection periods.
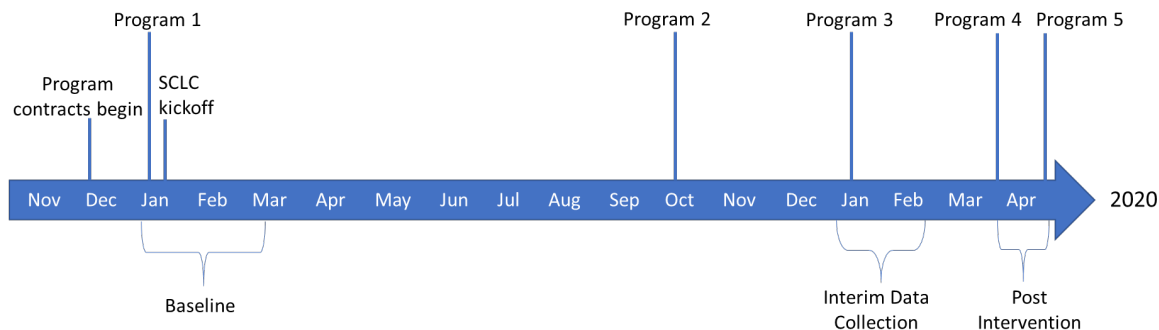
* Two programs did not implement tobacco free policies due to county directives requiring a designated smoking area

Figure 1. Timeline for data collection and tobacco-free policy implementation

At post-intervention, as compared to pre-intervention, staff were much more likely to report having received tobacco-related training in the past year (OR = 17.64 (8.26, 37.64), p < .0001). Also at post-intervention, staff reported more positive attitudes toward addressing smoking with clients (mean difference = 0.29, CI 0.15, 0.44, p < .001) and reported using more practices to address client smoking (mean difference = 0.38, CI 0.01, 0.76, p < .05). Staff also reported greater use of NRT with clients at post-intervention (OR = 4.01, CI 1.54, 10.43, p < .001). However, staff at post-intervention did not report significantly more tobacco-related education or counseling or referral provided to clients, and there were no significant changes in staff smoking prevalence or in staff intent to quit smoking in the next 30 days.

In Cohort 1, none of the seven participating programs had tobacco-free grounds policies in place at pre-intervention, however five of the seven programs had such policies in place at post-intervention. As reported by clients, implementation of these policies was associated with significant reductions in client smoking prevalence and with significant increases in use of NRT. As reported by staff, implementation of these policies was associated with significantly more tobacco-related training, with more positive attitudes about treating smoking with their clients and with reports of staff using more practices to address smoking among clients. Staff also reported significant increases in use of NRT among clients. Apart from NRT, however, neither clients nor staff reported increased tobacco-related education/counseling services or increased tobacco-related referral, and there was no change in smoking prevalence among program staff.

Results for Cohorts 2 and 3

Client data from Cohorts 2 and 3 were examined for similar associations found in Cohort 1. Data from baseline (n = 184), 12 months (n = 229), and 18 months (n = 225) following the completion of the intervention were collected. Smoking prevalence, tobacco-related behaviors

(cigarettes per day, report of clients and staff working together) and tobacco-related services (tobacco screening, receipt of any NRT, any referral to or provision of smoking cessation counseling, and smoking cessation being added to the client treatment plan) were assessed at all three timepoints. Univariate analyses on demographics and other characteristics at the three timepoints revealed a difference in gender, reason in treatment, and healthcare coverage. These three variables were considered covariates in subsequent analyses. After adjusting for these covariates as well as controlling for nesting of participants within clinic, a significant decrease in smoking prevalence was found from baseline (60.3%) to 18 months post intervention (40.5%; Adjusted Odds Ratio [AOR] = 0.45, CI = 0.27, 0.76). A significant increase in receipt of NRT from baseline to 18 months was also found among current smokers and former smokers who quit while in treatment (31.9% vs. 45.6%; AOR = 1.84, CI = 1.01,3.35). When comparing baseline to 12 months post intervention, a similar increase in receipt of NRT was observed (31.9% vs. 50.0%; AOR = 2.00, CI = 1.12, 3.37). Other services also significantly increased at 12 months post intervention, but subsequently decreased. Referral to smoking cessation services increased significantly from 32.9% at baseline to 54.8% at 12 months post intervention (AOR = 2.42, CI = 1.43, 4.10). However, it decreased at 18 months to 46.5%. Receipt of any smoking cessation counseling followed a similar pattern, increasing from 61.6% to 77.3% from baseline to 12 months (AOR = 2.21, CI = 1.16, 4.22), only to decrease again to 73.8% by 18 months post intervention. Overall, the intervention was associated with decreased smoking prevalence from baseline to 18 months and increased receipt of NRT at both baseline to 12 months and baseline to 18 months. While other services (referral and counseling) initially increased, these increases were not sustained at 18 months.

Results of Written Policy Analysis

　　　　Written program policies in the areas of tobacco, nutrition, physical activity, and gambling were collected from Program Directors at each timepoint (Baseline, 12 months, 18 months). These written policies were rated by two independent raters using a modified version of the School Tobacco Policy Index Rating Form & Manual from the Center for Tobacco Policy Research at Washington University in St. Louis (Boyce, Mueller, Hogan-Watts et al., 2009). The tobacco policy rubric includes items related to the presence and strength of a tobacco-free environment, enforcement, tobacco screening and treatment services, and how the policy is communicated and managed. The scoring range for the tobacco policy rating was 0 to 49. Written policy rubrics concerning nutrition, physical activity, and gambling were modeled on the tobacco rubric, and included the same general areas, but included fewer items. The maximum scores on the latter three rubrics were 21, 19, and 32, respectively.

Written Tobacco Policy Ratings:

　　　　Most programs had a written tobacco policy in place at the start of the intervention. These baseline policies ranged widely. Some policies mentioned only indoor smoking restrictions and noted specific outdoor areas where clients could smoke. However, a few programs started the Cohort Initiative with tobacco-free grounds policies in place, and those polices were more developed. The rating scale used for written tobacco policies rated the presence or absence of tobacco-free grounds, tobacco-related services available to both clients and staff, and how policies were enforced and communicated within the agency. The rating rubric considered all policy aspects within a single total rating score. As a consequence, written

tobacco policy rating scores represent a measure of overall policy strength including all policy aspects, and do not provide separate scores for tobacco free grounds or for tobacco-related services that may be available.

There was a total of 19 residential treatment programs included across all three cohorts. However, in Cohort 3 two programs from the same agency later combined during the COVID-19 pandemic and remained as one program, so that only 18 programs had written policy information. If each program had a written policy at each timepoint, a total of 51 policies could have been rated (17 programs x 3 timepoints = 54 written policies). In practice, however, programs most often had a policy at baseline and then provided a new written policy at either 12 months or 18 months, but not both, giving a total of 35 unique tobacco polices.

Each written tobacco policy was rated by two independent raters. Raters held either a bachelor or master degree in psychology or a related field, and were also trained by the study team on use of the CTCP approved rating rubrics. The 35 pairs of ratings were assessed for inter-rater reliability (IRR). As the tobacco policy change rating is applied to each program at three different times, there is a question about whether IRR levels replicate over time. When data are collapsed across time, there is a risk of inflating IRRs because the same programs are measured three times. Accordingly, we developed three IRRs reflecting the inter-rater reliability at baseline, 12 months, and 18 months. The IRRs for written tobacco policy ratings ranged from 0.89 at baseline, and 0.95 at both 12 and 18 months.

Given high IRR, we used the mean of each pair of ratings to develop a mean rating for each program at each timepoint. In three cases where there was no tobacco policy at baseline, we used a 0 rating. In cases where there was no change in the policy from baseline to 12 months or from 12 to 18 months, we used the value for the most recent prior rating. This procedure ensures one value per program at each timepoint. We then averaged these values per timepoint for each cohort and for all programs combined (See Figure 2).

Cohort 1 Data:	Cohort 2 Data:

Tobacco: (max score: 49)

Cohort 1: Baseline 7.6, 12 Months 19.4, 18 Months 21.9

Tobacco (max score: 49)

Cohort 2: Baseline 9, 12 Months 13, 18 Months 22.3

Cohort 3 Data:	Combined Cohorts Data:

Tobacco: (max score: 49)

Cohort 3: Baseline 5.5, 12 Months 12.1, 18 Months 18.4

Tobacco: (max score: 49)

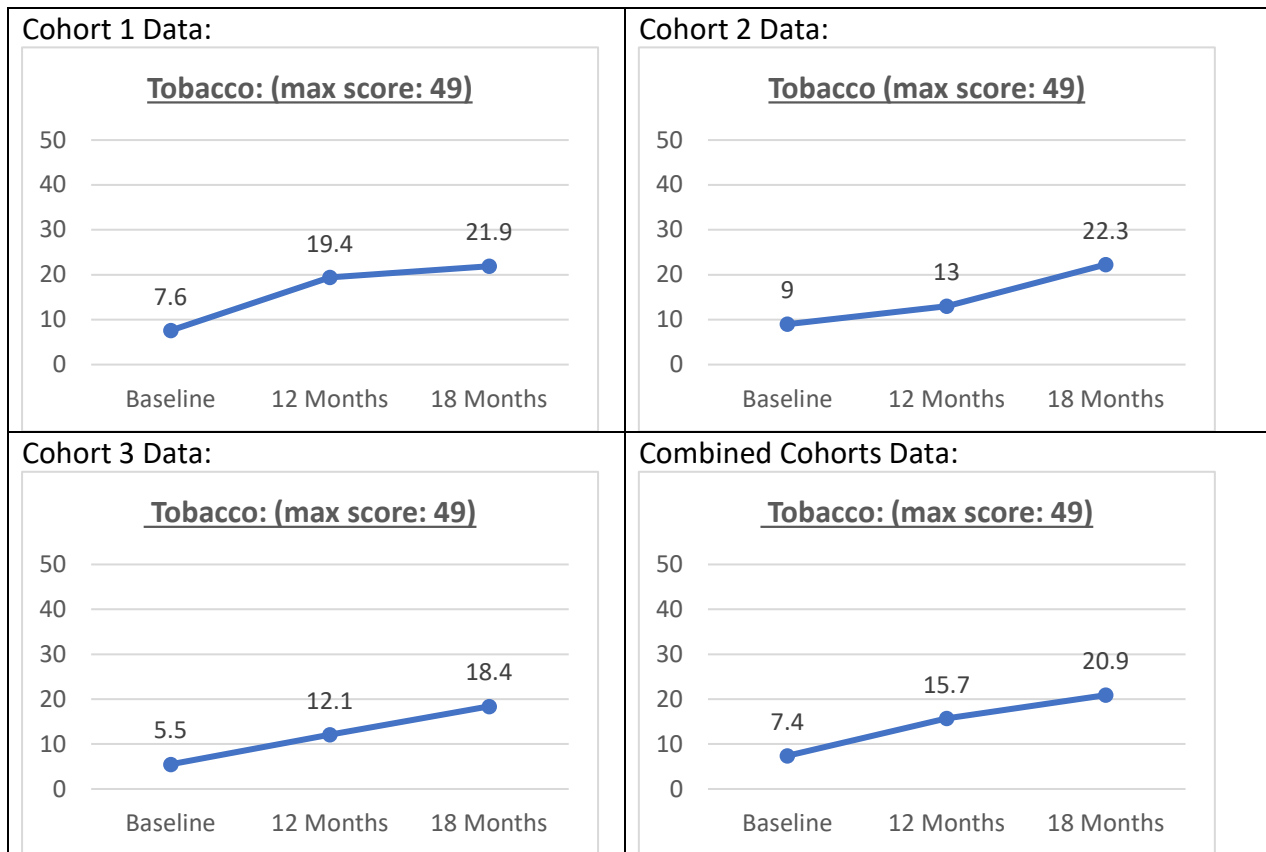Combined: Baseline 7.4, 12 Months 15.7, 18 Months 20.9

Figure 2. Average written tobacco policy ratings by cohort, and for all cohorts combined

The graphs show a similar, but not the same, pattern for tobacco policy ratings over time. Specifically, Cohort 1 programs showed the greatest change from baseline to 12 months, while Cohort 2 showed the greatest change from 12 to 18 months. This reflects when, during the intervention, the majority of programs in the cohort implemented stronger tobacco policies. The bottom right graph shows data for all cohorts combined. The 17 programs implemented improved written tobacco policies which, on average, were rated at 7.4 at baseline and increased to 20.9 at 18 months.

Written Nutrition, Physical Activity and Gambling Policy Ratings:

Nearly all programs had a tobacco policy in place at baseline. Baseline tobacco policies most often addressed only restrictions on smoking combustible tobacco products indoors and indicating specific outdoor areas where smoking was permitted. Most programs improved tobacco policies over time, and these improvements took different forms. Most programs implemented tobacco free grounds policies by the end of the intervention period and extended tobacco policies to address staff smoking restrictions and to mention some specific tobacco services available to program clients.

The situation was different for written nutrition, physical activity, and gambling policies. For these policy areas, there were somewhat fewer policies at baseline, and a common pattern was to move from having no policy at baseline to having a policy in place at 12 or 18 months. There were also several programs that made no policy change in these areas, and a small

number of programs that had a policy in place at baseline and improved that policy by the end of the project. Consequently, there was a large amount of missing data with when calculating mean rating scores for written nutrition, physical activity, and gambling policies. Using a mean representation without considering missing data may be misleading. A more accurate representation of policy development in these areas is shown in Table 3, which gives the status of policy change across all 17 programs and in each of three policy areas and the number of programs with written policy changes in each area. For example, in the nutrition area, eight programs moved from having no written policy at baseline to having a written nutrition policy at the end of the project. Five programs had no change in their nutrition policy and four programs improved on their existing nutrition policy. The last column shows the average number of programs (from among the 17 programs) with each policy status.

The rightmost column offers a way to understand how programs responded to the intervention by making policy changes in the areas of nutrition, physical activity and gambling. If we ask how many programs, on average, implemented new nutrition, physical activity and gambling policies, the answer is 8.7, or about 51% of programs (8.7/17 = 51%). Similarly, and on average, 6.3 programs (37%) made no change in written policies for nutrition, physical activity, and gambling. Only 2 programs (12%), on average, improved existing policies in each area.

Considered in context of tobacco policies, where every program developed and implemented a stronger tobacco policy, this means that there was substantially less change in the areas of nutrition, physical activity, and gambling policy development. However, considering that many programs had no policy at all in these areas at baseline, the implementation of policies in over half of the programs and in all three areas may be considered a positive outcome.

Table 3. Written policy development for Nutrition, Physical Activity, and Gambling

Policy status	Nutrition	Physical Activity	Gambling	Mean
New policy implemented	8	9	9	8.7
No change in policy	5	6	8	6.3
Existing policy improved	4	2	0	2
Total	17	17	17	17

Results of System Change Analysis

To capture programmatic changes in participating programs that may not be reflected in the policy change measures, the evaluation team developed a system change rubric. This rubric incorporated items from the Director Checklist and from the Director Interview.

At each measurement timepoint (baseline, 12 months, 18 months) the Program Director completed an online survey using close-ended questions and completed a qualitative interview. Selected items from the Director Survey and from the Director Interview were included in the system change rubric. As the Director Survey and Director Interview were completed by all

directors at all timepoints, there were few missing data and system change ratings could be calculated for all programs at all timepoints. One weakness of the system change rubric is that it relies completely on director self-report, and so results should be considered in context of other data sources. One strength is that the system change rubric may measure actions taken by programs even when they did not have a written policy in a given area. For example, a program may not have developed a written gambling policy, but the director may report that there was a gambling training for all staff in the past few months. In that case the record would show that there was no written gambling policy for the program, but the gambling system change rubric would capture and value the training that occurred.

As with the written policy rubrics (discussed above), data collection measures always included more tobacco-related items than nutrition, physical activity, and gambling items. As a result, the maximum score for the tobacco system change rubric was 38, while the maximum score for the remaining rubrics was lower. The maximum score for the nutrition, physical activity, and gambling rubrics were, respectively, 19, 8, and 12. In the graphs below, the vertical axes are adjusted to be a few points above the maximum scale score so that readers can assess the mean scores and change across time in context of the approximate size of the measurement scale.

All system change measures were rated by two independent raters. As the system change rubrics is applied to each program at three different times, there is a question about IRR levels replicated over time. When data are collapsed across time, there is a risk of inflating IRRs because the same programs are measured three times. Accordingly, we developed three IRRs for each area reflecting the IRR at baseline, 12 months, and 18 months. The IRRs for tobacco ranged from 0.95 – 0.98, while the IRRs for nutrition ranged from 0.92 – 0.95. The IRRs for the gambling system change ratings ranged from 0.92 – 0.96, while those for physical activity ratings were somewhat lower, from 0.66 – 0.92. IRRs near 0.7 are generally considered acceptable while those at or above 0.9 are high. IRRs for the system change ratings were generally high (0.92 – 0.98) except for physical activity ratings where IRRs were in the acceptable range (0.66 – 0.92).

Figure 3, below, plots mean system change values over time in each of the four wellness areas targeted by the Tobacco-Free Recovery initiative. The figure shows increased reports of systems change in all four areas over time. In all four areas, the greatest change occurred between baseline and 12 months, with lesser change occurring from 12 to 18 months.
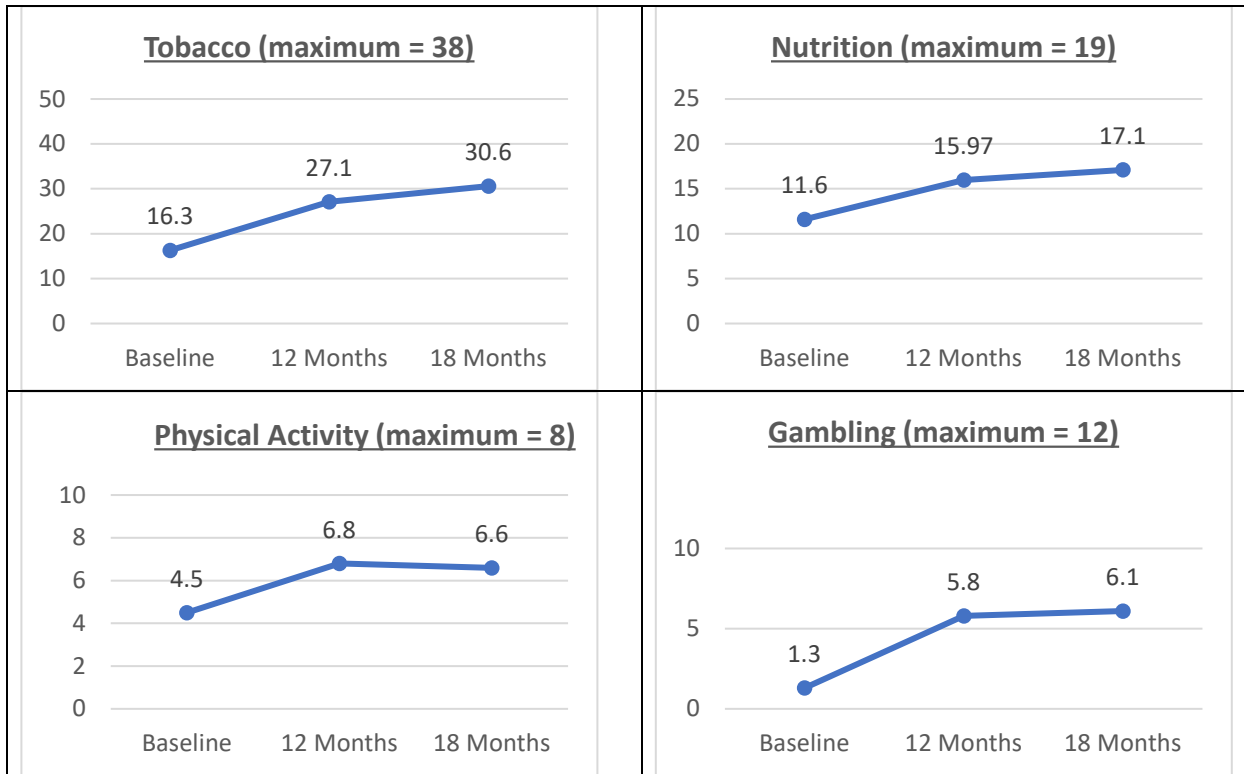
Figure 3. Plot of Mean System Change Scores over time, in four wellness areas

Summary of Findings for the Cohort Intervention

The Tobacco-Free for Recovery Cohort Intervention was associated with decreased rates of smoking among clients, from pre- to post-intervention. In Cohort 1 the decrease was from 54.2% to 26.6% and in Cohort 2 and 3 (combined) the decrease was from 60.3% to 40.5% (see Figure 4).
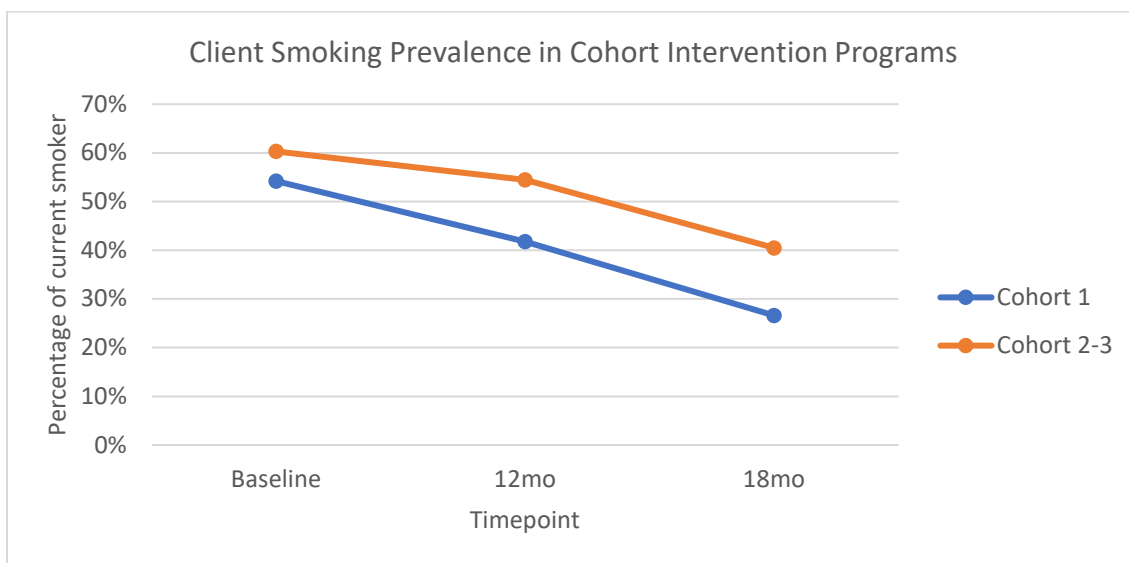

Figure 4. Client Smoking Prevalence in Cohort Intervention Programs

A complementary finding was that client use of NRT also increased from pre- to post-intervention. In Cohort 1 this increase was from 11.9% to 25.2%, and in Cohort 2 and 3 the increase was from 31.9% to 45.6%. These increases are both statistically significant and clinically meaningful. The study design did not include any control or comparison condition, and the absence of a control condition precludes causal interpretation. However, there is other evidence to suggest that these findings are likely due to the intervention. First, these changes were observed in analyses for Cohort 1 and these same findings were observed in the later cohorts where data were analyzed separately. Second, staff surveys from Cohort 1 showed that at post-intervention staff members reported using more services to address smoking with clients, and staff also reported increased availability of NRT. Third, analysis of written tobacco policies, and analysis of tobacco-related system change measures also showed strengthened tobacco policies in participating programs from pre- to post-intervention. The overall picture related to tobacco is that clients reported lower rates of smoking, both staff and clients reported increased access to NRT, Program Directors reported system changes related to tobacco, and actual written tobacco policies became stronger over the course of the intervention. We note, however, that clients did not report increased tobacco-related assessment, counseling, or referral.

With regard to other wellness areas, findings are also positive, if less strong. Written policy analyses show that about two-thirds of participating programs implemented new policies or strengthened existing policies in the areas of nutrition or physical activity. About half the programs implemented new or strengthened existing policies related to gambling (Table 3). Consistent with these policy changes are the increasing system change ratings over time in the areas of nutrition, physical activity, and gambling (Figure 3).

California Behavioral Health and Wellness: Training Intervention

Description of Training Intervention

The Behavioral Health Regional Trainings were one-day training events originally designed to be conducted in a single county and to reach a broad group of behavioral health leaders, administrators, and providers in the selected county. The trainings, conducted by SCLC, typically began with a "Gallery Walk" in which participants visited posters that described and contextualized the high rates of smoking and associated consequences in behavioral health populations. The Gallery Walk was followed by introductory comments by the SCLC team and by local behavioral health leadership representing, for example, the local Department of Public Health. Presentations followed, describing the issues related to smoking in behavioral health populations and outlining a series of steps to help programs implement tobacco-free grounds policies. Wellness partners from the California Department of Public Health's (CDPH) Office of Problem Gambling (OPG) or Nutrition Education and Obesity Prevention (NEOP) branch also presented on how they could support wellness effort in participating programs. The participants discussed action planning, designed to identify where programs were on a continuum of tobacco-related policies, and action steps that would help programs strengthen those policies. Additional presentations were included, tailored to the interests of the specific county. For example, the use of smokeless tobacco (e.g., chew, nicotine pouches, etc.) may be

discussed in rural counties where it was more prevalent or use of electronic cigarettes may be discussed in counties concerned about increasing use of those products. The daylong agenda usually included a presentation by representatives of Kick It California (formally the California Smokers' Helpline), designed to encourage programs to refer clients who use tobacco products to available quitline services. The day ended with a further action planning session, facilitated group discussion, and closing remarks. While the initial training session occurred in-person and on-site in selected counties, the trainings were transitioned to webinar platforms in response to the COVID-19 pandemic, and the webinar trainings were open to a statewide audience rather than being limited to persons in a specific county.

Evaluation Methods

Evaluation methods, measures, and procedures were approved by CTCP prior to the start of the evaluation. All study procedures were approved by the UCSF Institutional Review Board. The evaluation included a post-training survey sent the day after the training and a 90 day follow up survey sent to all participants. Also at 90 days, the evaluation team conducted two qualitative leadership interviews and two focus groups with training participants. There was a total of five Behavioral Health Regional Training events, summarized in Table 4, that also includes survey response rates at post-training and at 90-day follow-up for each training. Across all five training events there was a total of 322 participants. Of those, 196 (61%) responded to the post-training survey and 142 (44%) responded to the 90-day follow-up survey.

Table 4. Date and location of Behavioral Health Regional Trainings

Date	Location	Participants	Post-training survey response	Follow-up survey response
April 8, 2019	Calaveras and Tuolumne Counties	52	42 (81%)	30 (58%)
June 12, 2019	San Mateo County	40	19 (47%)	19 (47%)
October 16, 2019	Fresno County	31	23 (74%)	17 (55%)
May 13, 2021	Statewide Webinar	74	45 (61%)	30 (41%)
May 18, 2022	Statewide Webinar	125	67 (54%)	46 (37%)
All dates	All locations	332	196 (61%)	142 (44%)

Measures

Participant survey. The same survey was used at both post-training and at 90-day follow-up. However, in the follow-up survey some questions referred to the time period following the training. The survey included demographic items related to the participant and their agency (agency represented, type of facility, service population, and current role in the agency). This was followed by questions developed by SCLC concerning satisfaction with the training session, specific presentations and activities, and open-ended questions about changes that may be made in the participants' organization.

The survey included a Capacity Building Checklist containing practices or resources dedicated to implementing tobacco control and wellness practices in the areas of nutrition, physical activity, and gambling. The checklist asked participants if their agency has dedicated

resources to the following items: 1) written policy; 2) educational materials/signage); 3) client education/groups; 4) staff training; 5) dedicated staff; 6) external consultation; 7) referral mechanisms; 8) created a committee to drive the process; 9) developed partnerships; and 10) treatment components/lifestyle wellness programs.

Strength and quality of partnerships outside the agency was assessed with a modified version of the Partnership Self-Assessment Tool (Center for the Advancement of Collaborative Strategies in Health, ND), which evaluates partnerships that are advancing public health initiatives. Participants were asked about partnerships they developed in the areas of tobacco and wellness policy/system changes, as well as benefits, drawbacks, satisfaction, and effectiveness of their main partnership.

Last, participants were asked whether they have received technical assistance from participating technical assistance organizations (SCLC, Kick It California, Tobacco Control Evaluation Center at the University of California, Davis, CA Quits Smoking Cessation Collaborative, NEOP, and OPG) and, if so, the number of times they received technical assistance and the quality of the technical assistance.

Interview and focus group discussion guides. Regional training evaluation procedures included efforts to conduct participant interviews and focus groups at the 90 day follow up point. The interview guide and focus group guide were developed by the evaluation team, with the support of a qualitative investigator and with input from SCLC staff, and pilot tested prior to use. Interview and focus group questions were guided by constructs of the Consolidated Framework for Implementation Research (CFIR; Damschroder et al., 2009) including: (1) "Intervention Characteristics" (e.g. How has the Behavioral Health Regional Training allowed you to partner with other training participants?); (2) "Outer Setting" (e.g. Since the training, in what areas have you received technical assistance for policy implementation?); (3) "Inner Setting" (e.g. Since the training, has your agency been able to implement new policies or update existing policies or systems in the areas of tobacco and wellness?); (4) "Characteristics of Individuals" (How has the training impacted your confidence in your ability to implement tobacco and wellness policies or system changes?); and (5) "Process" (e.g. Could you describe some of the barriers to implementing tobacco and wellness policies or system changes in your agency?).

Procedures

At the end of each training day, SCLC staff sent a list of email addresses for all persons who participated in the training to the evaluation team. Using this list, the evaluation team sent the online Qualtrics survey out to all participants, including a study information sheet and a button to consent or decline participation. Following the initial invitation, a series of three weekly reminders were sent to non-respondents. Participant responses were confidential, as participants can be identified using the email address recorded in Qualtrics. For the first training in Calaveras-Tuolumne Counties, no survey incentives were provided based on discussion with CTCP. However, after finding that survey response rates were lower than expected, participants received a $25 incentive (i.e., merchandise card) for completing the survey. All incentive materials were tracked and logged by project staff.

Approximately three months after the training, participants were again surveyed using the same instrument and the same procedures and incentives. Following the three-month

follow-up survey, persons who completed the follow-up survey were invited to participate in interviews and focus groups. Specifically, efforts were made to interview one or two persons in a position of leadership (e.g., County Behavioral Health Directors, Treatment Program Directors) and to conduct one or two participant focus group approximately three months after each training event. Potential participants for the leadership interviews were identified by the SCLC team or if they identified as a Program Director or county administrator on their survey form. Interview participants received a $50 incentive following the interview.

All other participants who completed the follow up survey were eligible to participate in the post-training focus groups. Groups of about 10 follow-up survey participants were invited by email to participate in focus groups, and recruitment continued until six to seven participants had agreed to participate in each of two focus groups or until the list of participants was exhausted. Focus group participants received a $25 incentive.

Across all five training events, we conducted six leadership interviews and three participant focus groups. The focus groups included a total of nine persons. Our procedures were not sufficient to recruit a robust sample of interview and focus group participants, and we believe this was partly due to the unprecedented strain placed on community behavioral health providers during the COVID-19 pandemic. In consultation with our qualitative research expert, we deemed these qualitative data too few to reach saturation, and therefore uninformative.

Results of the Training Intervention

Data and Analysis Considerations

In this design, which relies on surveys completed by training participants immediately following the intervention and then again at 90-day follow-up, there are several considerations related to representativeness, generalizability, and rigor. We first review these considerations. We then summarize descriptive characteristics of participants at post-intervention and development of policies, partnership, and technical assistance during the 90-day follow-up period.

Number of Trainings and Training Participants. There were five Tobacco Training Interventions, with the first training in April 2019 and the last training in May 2022 (Table 4). Each training was conducted in a one-day format and provided the same experience and information to participants (e.g., the Gallery Walk, introductory comments, information on smoking in behavioral health settings, presentations by partner organizations, and then small group reflection on action steps supporting practice change). The first three training events were conducted in-person and within requesting counties. The last two trainings, due to COVID-19 restrictions, were conducted by webinar and were open to statewide participation. Across all five trainings there was a total of 332 participants

Survey Response and Completion Rates. Among the total 332 persons who attended the trainings, 196 (61%) responded to the post-training survey and 142 (44%) responded to the 90 day follow up survey. However, respondents returned surveys that ranged from 2% complete to 100% complete. To minimize the influence of missing data on analyses, only those surveys that were 100% complete were used in all analyses. The numbers of participants completing all survey items at baseline and follow up were 173 (54% of those eligible) and 111 (34% of those eligible), respectively. This result limits generalizability of findings reported.

Number of Agencies Represented. Survey participants reported, using an open text field, the agency they represented. Some agencies were represented by a single participant, however other agencies were represented in the dataset by two to seven participants. For example, seven participants identified their agency as the Tuolumne County Behavioral Health and seven identified their agency as San Mateo County Behavioral Health. Consequently, the 173 participants at baseline represented approximately 100 distinct agencies. This is relevant because participants representing the same agency may give different responses when asked about current wellness policies, recent partnerships, or technical assistance.

Number of Participants Surveyed at both Timepoints. For analyses assessing change during the 90- day post-training observation period, use of all surveys may be misleading. Thus, analyses of change over time in respondents' readiness to implement new policy/system changes, dedicate resources, and adopt written polices in the four areas of wellness (i.e., tobacco use and dependence, nutrition, physical activity, and problem gambling) rely on participants who provided complete responses at both baseline and 90-day follow-up timepoints (n = 78). The smaller sample erodes generalizability, but also increases the likelihood that any changes observed are associated with the Training Intervention.

Description of Participants and Agencies

Across all five training sessions there were a total of 332 participants and, of these, 173 (54%) completed the baseline survey. These 173 respondents represented 108 different agencies. Approximately 42% of participants represented county agencies such as Departments of Public Health, 24% represented outpatient or partial hospitalization settings, and about 10% represented inpatient or residential treatment settings. The remaining participants reported representing "other" settings including school/university, public health, prevention, domestic violence, tribal, housing support, and state and federal tobacco control and nutrition programs. About 60% of respondents said they worked in an agency that served persons with both mental health and substance use disorders, while 20% served mental health populations, 14% served substance use disorder populations, and the remaining 7% reported serving "other" populations. Approximately 39% of respondents held a clinical position (e.g., therapist, counselor, case manager), 22% held administrative positions (e.g., Program Director, administrator), and smaller proportions reported county representative (6%), peer worker (2.3%) or training (1.7%) roles. Almost a third (29%) reported "other" roles within their agency.

Readiness to Adopt Wellness/System Changes and Dedication of Resources.

Participants were asked about their readiness to implement new policy/system changes at the baseline and 90-day follow-up assessment for four aspects of wellness including tobacco use and dependence, nutrition, physical activity, and problem gambling. The proportion of respondents who reported that they felt ready to make policy/system changes in the areas of tobacco and nutrition increased from baseline to the 90-day follow-up assessment (tobacco: 71% vs. 76%, respectively and nutrition: 45% vs 50%, respectively). There was no change in the proportion of respondents who reported their readiness to implement policy/system changes in the areas of physical activity (46% at both baseline and follow up) and gambling (31% at both baseline and follow up). Participants were also asked about whether their agency had dedicated resources (educational materials, signage/website, client education/groups, staffing

training, dedicated staff, external consultation, referral mechanisms, creation of a committee, partnership development, treatment/lifestyle, wellness program) to four aspects of wellness: 1) tobacco; 2) nutrition; 3) physical activity; and 4) gambling at baseline and the 90-day follow-up assessment. Across all four wellness areas the proportion of respondents who reported that their agency dedicated at least one resource to each wellness area increased from baseline to the 90-day follow-up assessment. For the wellness areas of tobacco use/dependence, gambling, physical activity, and nutrition no one reported that their agency had dedicated resources to address these issues at baseline. However, at the follow up 45% of respondents reported that their agency had dedicated resources to address tobacco use/dependence, 14% had dedicated resources to address problem gambling, 19% for physical activity, and 19% for nutrition.

Policies, Partnerships and Technical Assistance

The adoption of written policies regarding wellness/system changes increased from baseline to the 90-day follow-up assessment for two areas: tobacco and gambling. Among those who completed the survey at baseline and the 90-day follow-up (n = 78), the proportion of participants who reported that their agency had adopted a written wellness policy for tobacco use increased from 56% at baseline to 60% at the 90-day follow-up. Similarly, the proportion of participants who reported that their agency had adopted written gambling policies increased from 9% at baseline to 14% at the 90-day follow-up. For written policies regarding nutrition and physical activity, there was a decrease over time in the proportion of respondents who reported that their agency had current written policies for these wellness areas from the baseline to the 90-day follow-up assessment (nutrition: 31% vs. 23%, respectively and physical activity: 17% vs. 13%, respectively).

At the 90-day follow-up assessment, participants (n = 111) were asked which organizations their agency had partnered with to implement policy/system changes in the four wellness areas. Almost a third (30%) reported that their agency had partnered with a county government office, 29% a non-profit organization, 18% other treatment programs, 6% foundations, 7% other organization, and 42% reported that their agency had not formed a partnership with an organization. In addition, following participation in the Training Intervention respondents reported low rates of technical assistance received from the various organizations (e.g., SCLC, Kick It California, Tobacco Control Evaluation Center at UC Davis) participating in this initiative. The proportion of participants who reported that their agency had received technical assistance following their participation in the Training Intervention training ranged from 1 % to 19% (Table 5).

Table 5. Technical Assistance Received Following Training Intervention (n = 111)

Participating Organizations	Yes n(%)	No n(%)
Smoking Cessation Leadership Center (SCLC)	21 (19%)	90 (81%)
Nutrition Education and Obesity Prevention Branch (NEOPB)	1 (1%)	110 (99%)
Office of Problem Gambling (OPG)	4 (4%)	107 (96%)
California Smokers Helpline	21 (19%)	90 (81%)
Tobacco Control Evaluation Center at UC Davis	12 (11)	99 (89%)
CA Quits Smoking Cessation Collaborative	14 (13%)	97 (87%)
Other	1 (1%)	110 (99%)

Summary of Findings for the Training Intervention

The Training Intervention was successful in engaging behavioral health leaders and staff in a one-day training to address tobacco use and wellness practices in the areas of nutrition, physical activity, and gambling at their agencies. Three hundred thirty-two participants representing over 100 agencies in the State of California participated in person and in online trainings. Following participation in the Training Intervention, participants' readiness to implement policy or system changes increased in only two areas, tobacco use and nutrition. There was wide variability in participants' reports as to whether their agencies had dedicated resources to address the four wellness areas ranging from 14% to 45%. Overall, the Training Intervention had limited impact on the development of written policies, partnerships, and the receipt of technical assistance from participating organizations.

Educational meetings alone or combined with other interventions as compared with no intervention has been found to slightly improve desired practices and patient outcomes (Forsetlund et al., 2021). Future evaluations should use several behavioral change study techniques to compare more intensive interventions with less intensive interventions using cluster randomized designs. Interventions should take into consideration the organizational structure and program-level characteristics that may influence outcomes.

Limitations of this evaluation should be noted. The small sample size and lack of a comparison/control group limits the conclusions that can be drawn from the survey responses and does not allow us to generalize the findings to all behavioral health programs operating in California or other regions of the country.

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Appendix I

SKAP Scales

Beliefs

#	Statement or Question	Response Options
1	If a patient has been in recovery from alcoholism for less than 6 months, quitting smoking would threaten their sobriety	1 = Strongly Disagree 2 = Disagree 3 = Unsure 4= Agree 5 = Strongly Agree
2	Smoking cessation counseling is an important part of my agency's mission	
3	Counseling by a clinician helps motivate smokers to quit	
4	Clinicians should make appointments specifically to help' patients quit	
5	Smoking is a personal decision which does not concern the clinician	1 = Strongly Agree 2 = Agree 3 = Unsure 4 = Disagree 5 = Strongly Disagree
6	In your opinion, what is the best point to encourage clients to stop smoking?	1 = Never 2 = After 1 year of treatment 3 = After 6 months of treatment 4 = After three months of treatment 4 = After one months of treatment 5 = As soon as they begin treatment
7	In your opinion, for clients who use drugs and smoke cigarettes, which should come first?	1 = Quit using drugs 3 = Quit smoking 5 = Quit smoking and using drugs at the same time

Self-efficacy

#	Statement or Question	Response Options
1	I have the required skills to help my patients quit smoking	1 = Strongly Disagree
2	My patients are concerned about smoking	2 = Disagree
3	My patients follow my advice about behavior change	3 = Unsure
4	My patients want to quit smoking	4= Agree
5	I know where to refer patients for help with smoking cessation	5 = Strongly Agree
6	If you counseled all your patients who smoke, what percentage do you think would try to quit smoking for more than 6 months?	1 = 0% 1 = 1-10% 2 = 11-20%
7	If you counseled all your patients who smoke, what percentage do you think would successfully quit smoking for more than 6 months?	3 = 21-30% 4 = 31-40% 5 = more than 40%
8	How confident are you in your current ability to treat tobacco addiction?	1 = Not at all confident 2 = Not very confident 3 = Unsure 4 = Confident 5 = Very confident
9	Given your clinical experience, how much emphasis do you believe should be placed on tobacco dependence treatment while in drug abuse treatment	1 = None at all 3 = A moderate amount 5 = A great deal

Practices

#	Statement or Question	Response Options
1	Smoking cessation counseling is an important part of my job	1 = Strongly Disagree 2 = Disagree 3 = Unsure 4= Agree 5= Strongly Agree
2	In the past month, how frequently did you ask your patients whether they smoked?	1 = Never 2 = Occasionally 3 = Often 4 = Very Often 5 = Always
3	In the past month, how frequently did you advise patients who did smoke to quit?	
4	In the past month, how frequently did you assist patients who wanted to stop smoking with referrals and advice to quit?	
5	In the past month, how frequently did you arrange a follow up visit or phone call to discuss quitting?	
6	In the past month, how frequently did you encourage patients who smoke to stop smoking completely?	
7	In the past month, how frequently did you encourage patients who smoke to use nicotine replacement?	
8	In the past month, how frequently did you encourage patients who smoke to reduce smoking to five or fewer cigarettes per day, if patient stated they could not quit?	