

## **D1. A Tobacco Cessation Continuity-of-Care Model for the Re-entry Population**

***Our overall aim is to reduce tobacco use among individuals leaving Colorado’s prisons and jails utilizing a continuity-of-care model.***

Together, the University of Colorado, Behavioral Health & Wellness Program (BHWP), Colorado Governor’s Office, Department of Corrections, prison and jail reentry programs, and Substance Abuse and Mental Health Services Administration (SAMHSA) will create innovative tobacco cessation programming for offenders re-entering the community.

The number of persons involved with the criminal justice system is staggering. U.S. prisons house more than 1.5 million inmates and millions more are annually incarcerated in jails (Sabol & Couture, 2008; Sabol & Minton, 2008). These individuals smoke at a much higher rate than the general population, with smoking prevalence ranging from 60%–80% (Kauffman et al., 2008; Kauffman et al., 2011). While all federal, and most state and local correctional facilities have adopted some degree of smoke-free policies, many persons released to the community quickly relapse to smoking. In Colorado, prisons and jails are 100% tobacco-free indoors and outdoors. Having not been able to smoke while incarcerated, many inmates are motivated to maintain tobacco-free lives. Unfortunately, there are few to no known community-based tobacco cessation services tailored to this population. In response, we will create a tobacco cessation/ healthy decision-making “continuity-of-care” model that compliments existing pre-release, community corrections, and re-entry services. This model will pilot “in-reach” services so that parolees’ tobacco cessation, healthcare, and housing needs are not lost in the gap between incarceration and community integration. Our primary objectives are to:

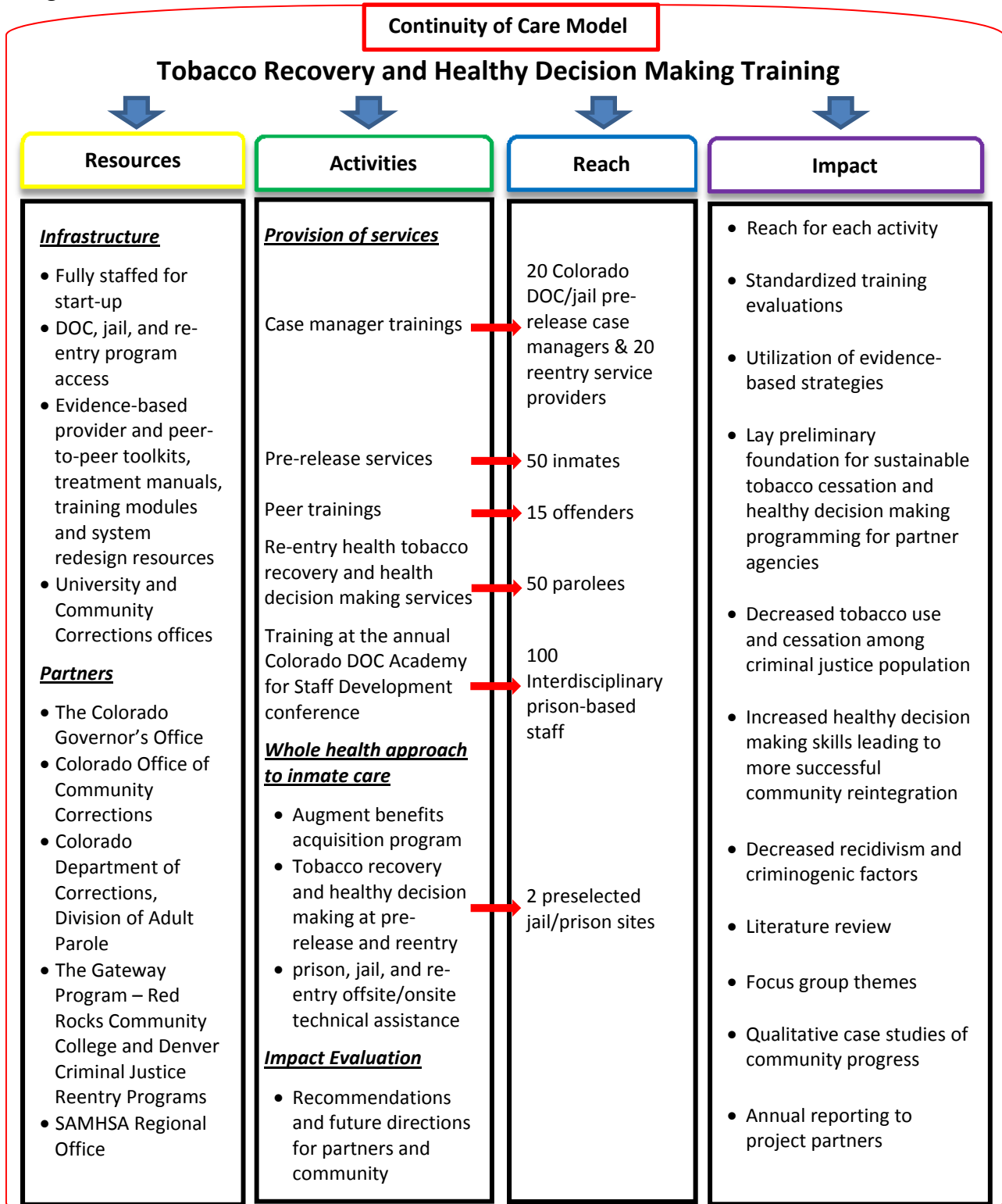
***Objective 1:*** Meet the healthcare needs of parolees. This objective will be achieved through curriculum collaboration with the Colorado Department of Corrections (CDOC) and existing re-entry programs. Offenders will receive tobacco cessation-healthy decision making services at pre- and post-release.

***Objective 2:*** Prepare parolees for common tobacco use triggers. Research indicates that most incarcerated users have the desire to quit (Kauffman, et al., 2011), but cessation programs and assistance vary substantially across states and reentry programs. This objective will be achieved through utilizing evidence-based, behavioral strategies (e.g., cognitive-behavioral therapy, motivational interviewing) and referral to cessation medications to promote the initiation and maintenance of tobacco recovery.

***Objective 3:*** Build healthy social networking for the criminal justice population through peer-to-peer services. We will augment criminal justice case managers’ work, by training offenders to provide motivational and group services to their peers through established jail and prison re-entry programs.

Our project logic model (see **Figure 1**) details the continuity-of-care program and key activities, reach, and expected impact.

Figure 1.



## D2. Current Assessment of Need

***Rates of tobacco use among the criminal justice population.*** Despite recent progress, tobacco dependence remains the largest preventable cause of death and disability in the United States and worldwide (Schroeder, 2008). In the U.S., 19.3% of adults are current smokers (Center for Disease Control [CDC]). A great success story of modern public health is the steady decline in tobacco use over the past 50 years, but unfortunately this is not the case for persons in the criminal justice system. Only 4% of smokers nationally successfully quit smoking each year and most quit attempts are unaided (Fiore et al., 2008). But the picture for offenders and parolees is even more critical. These individuals are typically more nicotine dependent and are not afforded the same opportunities for cessation services in comparison to the general population.

Studies indicate that inmates in U.S. jails and prisons smoke at up to four times the rate of the general population (Marrett & Sullivan, 2005; Trosclair et al., 2005; Voglewede & Noel, 2004). These individuals often want to quit smoking and plan to quit (Kauffman et al., 2011) but frequently lack access to the appropriate healthcare resources. After release from jail or prison, only 15% of inmates returning to the community are estimated to have health insurance and other benefits, making the pursuit of tobacco recovery and healthy choices very difficult (Tobacco Control Legal Consortium, 2012; Wang et al., 2009). This is primarily because individuals lose federally supported benefits (e.g., Medicaid) when they enter the criminal justice system and historically have not been able to apply again for benefits until release. Additionally, many inmates tend to come from disadvantaged social and economic backgrounds, with limited or no access to early preventive health care, and from environments where tobacco use is relatively common or socially acceptable (Tobacco Control Legal Consortium, 2012).

***Tobacco policy and the criminal justice population.*** Over the last few decades, U.S. prisons and jails began adopting tobacco policies, recognizing the importance of tobacco cessation for inmates and staff (Cork, 2012). However, many justice systems fail to operate community-based cessation programs to further promote quitting after re-entry into society. Inmates continue to need support after being released and are prone to relapse without ongoing assistance.

Studies suggest that a majority of inmates housed in tobacco-free facilities resume tobacco use soon after discharge or when moved to a setting that allows tobacco use (Public Health Law Center, 2012). “Targeted relapse prevention interventions are needed for people re-entering the community” (Thibodeau et al., 2010). The Colorado DOC has specifically stressed the need for community programming which includes substance abuse treatment, cognitive skills training, and mental health services (Hetz-Burrell & English, 2006), all of which would be components of our tobacco cessation and healthy decision-making treatment. In coordination with current programming and our many Colorado partners, BHWP seeks to close the “science-to-service” gap, and begin to offer evidence-based tobacco recovery services to the criminal justice population.

**Associated health conditions among the criminal justice population.** The negative health outcomes associated with smoking and other tobacco use have been well documented. However, despite high rates of smoking among this population, research on the negative health consequences among the criminal justice population remains sparse. The research that does exist suggests that inmates are more likely to suffer from tobacco related medical illness than individuals in the general population (Wilper, et al., 2009). It is also broadly acknowledged that a disproportionate number of inmates in U.S. prisons or jails also have a psychiatric illness or suffer from a substance abuse disorder (Fellner, 2006). And research indicates that in the U.S., individuals with mental illness and addictions are two to three times as likely to smoke as those who do not have behavioral health conditions (Lasser, 2000; Richter, et al., 2001). **Table 2** outlines the percentages of inmates in Colorado with mental health, substance abuse, or chronic medical conditions:

**Table 2. Statistics for the Colorado Inmate Population as of June 30, 2012.**

Percentages: (represent moderate to severe needs)	Males	Females
Mental Health	30%	67%
Substance Abuse	76%	77%
Medical	21%	45%

(Colorado Department of Corrections, 2012)

**Effectiveness of tobacco cessation interventions.** Tobacco cessation strategies save lives, improve quality of life and are cost effective. In fact, recent research has shown that every dollar spent on tobacco cessation program costs was associated with \$3.12 in medical savings (Richard et al., 2012). While tobacco cessation strategies will need to be tailored to the criminal justice population, the same major strategies that work for the general population work across other priority populations. The most effective interventions consist of a combination of behavioral supports, nicotine replacement therapy or other cessation medications, and environmental support (e.g., positive social networks, and tobacco-free policies).

For the criminal justice population specifically, 30 years of research has demonstrated that certain evidence based strategies are effective in changing behaviors (Przybylski, 2008). Cognitive-behavioral therapy and the use of therapeutic communities are effective interventions. Motivational interviewing is also an evidence-based modality that has been utilized successfully with the offender population, including individuals with behavioral health conditions (National Institute of Corrections, 2012). The Tobacco Recovery Program developed by BHWP will utilize a blend of evidence based strategies for tobacco cessation generally and behavioral strategies for the criminal justice population specifically.

Though there is increased recognition that tobacco use is socially, fiscally, and physically harmful to this population, it is important to note that a significant practice gap still exists. While all federal, and most state and local correctional facilities have adopted some level of

tobacco-free policies, tobacco dependence continues to be rampant among the criminal justice population. And tobacco dependence treatment is largely absent in jails and prisons, and even less common in community corrections or re-entry programs.

There is a critical gap between prison and jail health services and pre-release planning and community corrections and re-entry programming. Only recently, states have begun to explore in-reach programming, whereby re-entry case-managers work with offenders before being released and then help bridge the gap back to communities. But little to no work has been done on integrating tobacco-cessation and healthy decision making into such models.

**D.3. Technical Approach, Design, and Methods.** The below proposed objectives are created to insure that persons in the criminal justice system have the same opportunities to quit smoking and live in smoke-free environments as anyone else. Core methods of changing the criminal justice culture will include building awareness, enhancing knowledge, and insuring that cessation services are integrated into pre-release and re-entry services and policy. We will strive to meet jails, prisons, re-entry programs, and parolees “where they are at” and then help create buy-in for sustained tobacco control programming.

Strong partnerships between a number of state organizations and agencies are necessary to meet our aim and objectives. Over the last six months the University of Colorado- Behavioral Health & Wellness Program (BHWP) has forged a strong alliance between the Colorado Governor’s Office, Office of Community Partnerships, the Office of Community Corrections, Division of Criminal Justice, the Department of Corrections (DOC), Division of Adult Parole, the Community Corrections Gateway and Community Re-entry Programs, and the Substance Abuse and Mental Health Services Administration, Regional Office. In July through September 2012, we had extremely productive series of planning meetings when all the above partners asserted their commitment to implementing a continuity-of-care model to teach offenders tobacco cessation and healthy decision making skills, to increase these individuals’ overall health and decrease rates of recidivism.

Our continuity-of-care model will be built complement existing programs and initiatives. This will allow the project partnership to leverage existing resources to realistically meet our innovative objectives. Programming this project builds upon includes the following:

1) The DOC currently provides pre-release planning services to offenders. Instead of building a tobacco cessation “silo”, we will increase healthy decision making capacity utilizing tobacco cessation as a primary target for behavioral change strategies.

2) The Governor’s Office of Community Partnerships has obtained funding to roll out SAMHSA's SSI/SSDI Outreach, Access, and Recovery program (SOAR) in Colorado’s prisons. This national project is designed to increase access to the disability income benefit programs administered by the Social Security Administration for eligible adults who are homeless, at risk for homelessness and/or have mental illnesses and/or co-occurring addictions (<http://www.prainc.com/SOAR/>).

SOAR training has occurred in six DOC facilities in 2012. Through this project we will tie healthy decision making and benefits acquisition together. Simply put, even if offenders successfully obtain benefits, they must make healthy life decisions to use these new benefits appropriately.

3) The Colorado DOC, Division of Adult Parole is currently piloting an in-reach program. The DOC is very interested in how these case managers might learn how to provide health and wellness services, potentially allowing parolees to more successfully integrate into communities.

4) The jail and prison re-entry programs we are partnering with already have peer-based and/or prevention and wellness services. BHWP peer-to-peer programming dovetails nicely into these existing programs.

The continuity of care planning group, with representatives from all the above partners, decided that it would be most effective to target one jail (the Denver jail) and one prison (the Colorado Women's Prison) for pilot tobacco cessation and healthy decision making programming. The Denver jail was chosen due to the strong relationship with the Denver Re-entry Program. The Women's prison was also a natural choice due to in-reach programming already in place and the fact a case manager was already providing benefits acquisition services.

Our project's key activities as presented in **Figure 1** are detailed below:

**White paper.** To adequately prepare for this project, we will complete a rapid but intensive literature review for tobacco cessation among persons in the criminal justice system. We will also contact any national experts as they emerge through the literature or suggestions from our numerous national partners. This literature review will be presented to SCLC-Pfizer as a white paper and resource for national dissemination.

**Case manager trainings.** BHWP will provide multiple levels of training in our tobacco cessation and healthy decision-making continuity-of-care model. Core methods of shifting the criminal justice culture will include building awareness, enhancing knowledge, and insuring that cessation services are integrated into standards of care through system redesign, policy, and measurable rapid improvement initiatives. We will cross-train 20 prison/jail pre-release and 20 re-entry case managers on our behavior change model that emphasizes tobacco cessation. BHWP has fully developed this evidence-based tobacco cessation programming, and accompanying provider tobacco cessation toolkit, tobacco-free policy toolkit, brief motivational interventions, and provider/ peer group manual. Some of the primary areas prison, jail, and reentry case managers will be trained in are habits for a healthy lifestyle, myths and facts about smoking, behavior change strategies, nicotine replacement therapy and other FDA approved cessation medications, coping with cravings, managing stress, planning for high risk situations, and community referrals (e.g., quitline).



**Pre-release services.** After receiving training, case managers will pilot pre-release tobacco cessation and healthy living services with 50 prison and jail inmates. We will integrate this programming into existing pre-release planning and benefits acquisition services. The format for services will be one-on-one motivational and group sessions.

**Peer Trainings.** The Peer-to-Peer Tobacco Dependence Recovery Program will be an integral component of reentry programming. Peer-to-peer interventions, now a central part of the behavioral health recovery movement, are an important augmentation to provider-driven cessation strategies. The “recovery movement” suggests that adjuncts to formal treatment, involvement in self-help groups, and social opportunities in community and institutional settings foster empowerment and self-efficacy (Davidson, Chinman, Sells, & Rowe, 2006; Knight, 2006). Wellness is sustained through positive social networking, and peers are an effective means of building and sustaining cultures of wellness. BHWP has developed a Peer-to-Peer Tobacco Recovery Program that is a train-the-trainer model now active in 14 states. Through this proven train-the-trainer model, peers will gain skills in awareness building, building positive social networks, a brief motivational intervention, and a 6-session cessation group. Trained peers are also invited to join a national peer network with monthly teleconferences and a listserv administered by BHWP. We will train up to 15 peers (i.e., individuals with a criminal justice history) who are currently employed by the re-entry programs to provide these services. The initial training is two days and this will be followed by continuing education, as well as supervision by trained re-entry case managers.

**Re-entry services.** Utilizing our continuity-of-care model and existing prison/jail in-reach, tobacco cessation and health living services will be maintained as individuals begin to reintegrate into communities. Case managers will seek to build rapport with offenders pre-release and then guide these individuals into re-entry programming where they will continue to provide tobacco cessations and healthy living services in the community. Community individuals and groups will be co-facilitated by case managers and trained peers. There will be no cap on the number of group parolees can attend. These services will be piloted with 50 parolees.

**Annual staff development.** BHWP and continuity-of-care partners will provide tobacco cessation and healthy living training at the annual Department of Corrections Academy for Staff Development. This will be an opportunity to present the importance of issue, evidence-based practices, the need for a continuity-of-care model and current project progress. We plan to train 100 prison staff.

Throughout the grant years and in follow-up to the above activities, BHWP will provide ongoing off-site and on-site consultation to jail and prison leadership and case managers. In anticipation of project start-up, BHWP and our continuity-of-care partners have thought through a number of potential barriers and solutions for meeting all project objectives.

**Access to inmates.** Our postdoctoral fellow requires access to prison and jail inmates. Gaining such access can be a lengthy process. Therefore, the postdoctoral fellow has already initiated background reviews and her “integrity” interview took place in early October 2012.

**Competing demands.** Pre-release case managers are over-extended, often double as guards, and may take the perspective that tobacco cessation and healthy living have little importance. For example, we have heard these individuals say directly that inmates “don’t deserve” these types of services. We will use a mix of strategies to address this potential barrier. At the same time we build buy-in through awareness building trainings, we will also administer focus-groups with case managers to get feedback on program implementation, and will work with DOC/jail leadership to explore which staff are best positioned to provide these services and what incentives might be offered to staff for providing high-quality pre-release services.

**Differing cultures.** The criminal justice system has a very different culture and climate than academia or the community behavioral health system. We have therefore established project offices at the DOC and Governor’s Office to foster the relationships necessary for system change.

**Staff turn-over.** We will hold case manager and peer trainings each grant year to account for expected staff turn-over.

**Institutional review.** The DOC views components of this project as research, therefore the program will need to be submitted to both the DOC research review board and University of Colorado Institutional Review Board (IRB). Having ample experience in how long research reviews can take, BHWP has already initiated this process. The project objectives and design will go before the DOC review board in late October 2012, and we will then submit the project to the University IRB by December 2012

**Comingling.** By Colorado law, parolees are not allowed to comeingle with previous offenders. This law would make peer programming impossible. Luckily, we have been working with DOC leadership on loopholes in this law. DOC leadership agrees that peer models have significant potential and can grant such programming “pilot” and exempt from the law. Additionally, there is growing support internally at the DOC for substantially changing this law to allow for structured peer programming.

**D4. Evaluation Design.** Our project team has a long history of providing program evaluation services across many different systems, including the criminal justice sector. We will be employing mixed qualitative and quantitative evaluation methods. Throughout the project and will stress a participatory-based design and Utilization Focused Evaluation values (Patton, 2008). By this we mean that any evaluation data will be of high utility to the communities, agencies, providers, and peers who are providing information.



Our team will promote effective management and discipline by mapping out inputs, processes, outputs and outcomes to ensure that all stages of the project and its evaluation are logically linked and coordinated to fully complete all measurable activities. We will use the Logic Model (see **Figure 1**) as a living document that will be updated at project start-up and as the project evolves to ensure that our team, SCLC, and Pfizer have the same mutual understanding of deliverables, timelines, and accountability.

**Reach.** For all activities we will report how many case managers, prison/ jail/ reentry staff have been trained, and how many individuals in the criminal justice system have received services.

**Standardized Training Evaluations.** For all trainings and consultation we will keep lists of attendees with contact information. We will use training evaluations to measure satisfaction and to collect ways in which we can continuously improve. We will report aggregate training evaluation results annually.

**Rapid Improvement Projects.** We will work with continuity-of-care partners, and prison/ jail/ reentry leadership to establish rapid improvement plans for tobacco control and healthy decision making. Through a start-up meeting, partners will be asked to evaluate organizational readiness for change and develop realistic and measurable system redesign actions to be implemented over the next six months. BHWP successfully piloted this planning strategy in regional trainings across California and Colorado utilizing established rapid diffusion strategies (e.g., Plan-Do-Study-Act cycles). We have created an agency motivational ruler whereby project partners can self-report importance of specific tobacco control strategies, confidence in implementing change, organizational readiness for change, and amount of control over implementation strategies. Using this ruler, BHWP will assist agency staff to fine-tune incremental change strategies. Six month goals will then written using SMART (specific-measurable-attainable-relevant-timely) objectives. We will track progress toward these goals at monthly project team meetings.

**Focus Groups.** As an essential step toward achieving DOC buy-in to the project, BHWP postdoctoral fellow will run focus groups with DOC pre-release case managers at the Colorado Women's Prison. Questions will focus on the competing demands that case managers face and options for successfully offering pre-release tobacco cessation and healthy lifestyle services.

**Case Study.** An integral component of our evaluation will be telling the story of how the criminal justice system integrates tobacco cessation into programming. BHWP anthropologist, Dr. Virginia Visconti, will complete a process evaluation and document prison, jail, and reentry site(s) progress and qualitative outcomes. She will capture the depth of change through site observations, key stakeholder interviews, and document review.

**Tracking Indicators and Outcomes.** Annually, we will track report on several indicators and outcomes to include: 1) Active number of peer programs running, 2) Utilization of NRT or other

cessation medications, 3) Recidivism among those served, 4) Criminogenic risk factors among those served including substance use and life functioning (e.g., employment, housing).

For the above evaluation plan, BHWP will use its established program evaluation infrastructure for data collection, data entry, cleaning and analyses via Microsoft Excel and PASW, Version 18 (2009) and QSR NVivo (2009) data management and analytic software.

## E. Work Plan and Deliverables Schedule

Dr. Chad Morris will have ultimate responsibility for the project’s fiscal management, and all aspects and timeliness of deliverables. The Behavioral Health & Wellness Program (BHWP) will utilize a detailed project management plan created by the project team with Microsoft Project software. The project management plan includes specific tasks, responsible parties and target dates for completion of grant activities, providing an accurate and up-to-date tracking mechanism.

The project leads for BHWP will be Drs. Chad Morris and Patrece Hairston. **Table 2** details activities and leads for each key deliverable and the budget narrative below breaks down activities by approximate cost. We propose that all continuity-of-care partners have a start-up meeting with SCLC-Pfizer in early January 2013 to finalize goals and the working logic model. The continuity-of-care partnership will then meet in person monthly for project team meetings. Planning meetings will be used to regularly measure our progress and will provide a forum for all project partners to identify potential barriers and to propose viable solutions. This is essential when implementing a new programming within a complex criminal justice system. Complementing these meetings will be the written annual project status and progress reports that all members of the team will contribute to and receive upon completion.

**Table 2. Work Plan Schedule.**

Activity/Deliverable	Lead Agency & Staff	Year 1				Year 2			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Finalize Logic Model	BHWP* (Morris)	■							
White Paper	BHWP (Hairston)		■	■					
Focus Groups	BHWP (Hairston)	■							
Case Manager Trainings	Council (Morris)		■			■			
Pre-Release Services	BHWP (prison and jail case managers)			■	■	■	■	■	■
Peer Trainings	BHWP (Hairston)			■			■		
Re-entry Services	BHWP (reentry case managers and peers)			■	■	■	■	■	■

Activity/Deliverable	Lead Agency & Staff	Year 1				Year 2			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Annual Staff Development	BHWP (Hairston)								
Case Study	BHWP (Visconti)								
Evaluation Data Analysis	BHWP (Brannon)								
Annual Reports to SCLC-Pfizer	BHWP (Morris)								

Sustainability planning is also a substantial component of the work plan and will be woven into both years of the grant. Through project team meetings we will explore mechanisms to support ongoing tobacco cessation and health decision making starting the first month of the grant. The PI and postdoctoral fellow will facilitate collaborative meetings and the development of a strategic action plan to guide sustainability efforts. The Governor’s Office has also agreed to play a major role in identifying systemic means of continuing these services.

BHWP has a seasoned training and technical assistance team. We are intimately familiar with the “hidden” resources and time commitment necessary to successfully complete trainings, provide ongoing technical assistance, develop and vet resources and tools, collect, clean and analyze evaluation data, and create data-driven reporting. We can accomplish the proposed package of deliverables for the following reasons:

- BHWP and the continuity-of-care partners have built strong working relationship over the last six months and we are co-creating objectives that can be achieved.
- We will leverage both our existing infrastructure and staff to accomplish project activities. For example Drs. Virginia Visconti and Sarah Brannon at BHWP will be providing in-kind services made possible through other existing contracts and agreements.
- Training and planning technology (e.g., teleconferencing, webinar capacity) is already in place.