

# Community Support Evaluation Supporting Statement

## A. Justification

The Substance Abuse and Mental Health Services Administration’s (SAMHSA’s) Community Support Branch of the Center for Mental Health Services (CMHS) is requesting clearance for a **new** data collection for the ***Community Support Evaluation (CSE)***. Recognizing that individuals with serious mental illness (SMI), substance use, and co-occurring mental and substance use disorders often experience challenges to identifying and receiving appropriate care and supports for recovery, as well as obtaining competitive employment, SAMHSA funded the Behavioral Health Treatment Court Collaborative (BHTCC) and Transforming Lives through Supported Employment (SE) Programs. The programs are rooted in the belief that recovery is a holistic process bolstered by trauma-informed care and individual- and community-level support.

The CSE consists of two studies, the BHTCC and SE Studies. In total, 15 data collection instruments and activities compose the CSE, including web-based surveys, key informant interviews (KIIs), existing data abstractions, and focus groups.

1. Biannual Program Inventory (BPI)—BHTCC Version
2. System-Level Assessment (SLA) KII—Court Personnel Version
3. SLA KII—Service Provider Version
4. SLA KII—Consumer Version
5. Concept Mapping—Brainstorming Activity
6. Concept Mapping—Sorting/Rating Activity
7. 18-Month Client-Level Abstraction Tool (18-Month Tool)
8. Comparison Study Abstraction Tool—Baseline Version
9. Comparison Study Abstraction Tool—6-Month Version
10. Comparison Study Abstraction Tool—18-Month Tool
11. Biannual Program Inventory—SE Version
12. Scalability/Sustainability Assessment (SSA) KII—Administrator Version
13. SSA KII—Service Provider Version
14. Employment Needs Focus Group (ENFG)—Employer Version
15. ENFG—Employment Specialist Version

In 1977, the National Institute of Mental Health (NIMH) created community support programs (CSPs) “to assist states and communities in improving opportunities and services for adults with seriously disabling mental illnesses” (Department of Health and Human Services [HHS], 1993, p.i). In the CSP model, community support systems provide a comprehensive system of care, including “not only mental health services but an array of rehabilitation and social services, as well: client identification and outreach; crisis response services; housing; income support and benefits; health care; rehabilitation, vocational training and employment assistance; alcohol and/or other drug abuse treatment; consumer, family, and peer support; and protection and advocacy.”

The BHTCC and SE programs espouse the supports of recovery and operationalize and implement them through adherence to the CSP model and its principles. The BHTCC program aims to bridge the gap in service provision created by the traditionally disparate criminal justice and mental health service systems. The program affords the opportunity to build collaborations between criminal courts, specialized treatment courts, and alternative programs to coordinate the screening, referral, and treatment of adults with behavioral health conditions while in the justice system. The SE Program seeks to increase self-sufficiency among individuals with behavioral health conditions by enhancing the capacity of States and local communities to help them acquire and maintain employment. SE program grantees are accomplishing this through the implementation of evidence-based supported employment approaches, which have been shown to help individuals achieve and sustain recovery. In 2014, SAMHSA awarded 17 BHTCC program grants to courts and 7 SE grants to States. The CSE will provide a comprehensive understanding of the following:

- Collaborations developed as a result of the programs
- Effect of collaborations on key outcomes
- CSP factors associated with consumer outcomes
- Recovery supports associated with consumer outcomes

Approval is being requested for data collection associated with 15 instruments and activities—ten to be conducted with BHTCC program grantees and five for administration with SE program grantees. (A description of each data collection activity can be found in Section A.2.b.)

## **1. Circumstances of Information Collection**

### **a. Background**

The CSP model is a central tenet of the BHTCC and SE Programs. The model acknowledges that receiving behavioral health services and supports is paramount to achieving an optimal quality of life for individuals with SMI co-occurring disorders living in the community. CSPs utilize systems of care to help adults with these behavioral health conditions recover, live independently and productively in the community, and avoid inappropriate use of inpatient services. The CSP philosophy states that services should be consumer-centered/consumer-empowered, culturally competent, designed to meet special needs, community-based, flexible, coordinated, accountable, strengths-based (Pennsylvania Department of Public Welfare, 2013). Further, CSPs include a focus on self-directed services, community approaches/collaborations that are coordinated and promote recovery, and meaningful involvement of individuals in recovery. Ultimately, CSPs are vehicles for transforming community, local, and/or State level mental health and substance use systems through enhanced coordination of service delivery across systems.

For some individuals, it is not until they have contact with the criminal justice system that their SMI or co-occurring disorders are identified. While the success of their transition back into the community is dependent upon recovery, resources for treatment in the traditional criminal justice system are limited. The BHTCC program aims to prevent and interrupt the cycle of offense and recidivism by establishing collaborations among local courts and diverting these individuals to appropriate treatment and services. BHTCCs are rooted in the history of “problem solving courts,” which began in the 1990s to address the needs of offenders that could not be addressed

in traditional courts (Bureau of Justice Assistance [BJA], n.d.-a). Until that time, the criminal justice system treated most individuals with a diagnosed mental illness the same as those without. Ideally, these courts use their legal authority to “forge new responses to chronic social, human, and legal problems” (Berman & Feinblatt, 2001). Initially, these problem-solving courts were limited to drug courts, but they have since expanded to include mental health/behavioral health, community, domestic violence, gambling, truancy, gun, and homeless courts (National Association of Drug Court Professionals, n.d.). Behavioral health courts have arisen in response to the overrepresentation of people with mental illness in the criminal justice system. It is reported that 15–20% of the correctional population has a serious mental illness, which is substantially higher than the general population (Lurigio, & Snowden, 2009). The current BHTCC program builds upon the first cohort of BHTCC grantees, funded between 2011 and 2014. The current program includes a focus on veteran populations and requires each collaborative to involve municipal courts. This recent approach combines previous and current SAMHSA funded criminal justice-treatment linkage programs with infrastructure planning and development activities to create new court and community networks to transform the behavioral health system at the community level.

Further, research has shown that SE helps individuals achieve and sustain recovery. SE allows individuals with disabilities, including those with behavioral health conditions, to function to the fullest extent possible in integrated and competitive work settings alongside those who do not have disabilities. Such integrated settings provide opportunities to individuals with disabilities to live; work; and receive health, social, and behavioral health services in the community. The goal of the SAMHSA’s SE Program is to support the development of statewide infrastructure to provide and sustain evidence-based SE programming for adults with behavioral health conditions. Through the program, State mental health authorities create and begin implementing strategic sustainability plans, which include components around workforce training, policy change, and sustainable funding. Grantees are also tasked with establishing two community-based SE pilot programs and creating a training program for professionals who support individuals with SMI, substance use, and co-occurring disorders to find competitive jobs. In addition, grantees must create a plan to scale the SE program statewide, including developing supportive policy, training a statewide SE workforce, establishing a Supported Employment Coordinating Committee (SECC), and developing a sustainable funding plan to continue services after the grant program ends. The expected outcome of the program is for states to have the necessary infrastructure in place to maintain and expand evidence-based supported employment (SE) programs throughout the state and increase the number of individuals with SMI, substance use, and with co-occurring disorders to obtain and retain competitive employment.

## **b. The Need for Evaluation**

In 2014, SAMHSA issued a request for task order proposals (RFTP) for the CSE with the following objectives:

- Conduct a cross-site process and intermediate outcome evaluation and disseminate findings for the BHTCC program and for the SE program
- Provide technical assistance (TA) and support for BHTCC and SE grantees to effectively meet the data collection requirements of the cross-site evaluation and the local evaluation

- Coordinate data collection and analyze, aggregate, and synthesize the data
- Disseminate findings

The purpose of the CSE is to (1) describe and assess BHTCC and SE grantee activities and procedures, including the intermediate or direct effects of the programs on participants; (2) document the application and sanctioned adaptations of BHTCC programs in the justice system and of the SE Program; and (3) design and implement plans to disseminate knowledge about how to replicate effective projects in other States, territories, tribal nations, and communities. The legal basis and authorizing law for conducting the CSE can be found in Section 290aa of the Public Health Services Act (42 U.S.C.241).

A government contractor will coordinate data collection for the evaluation and provide support for its local-level implementation. Each grantee is required to participate in the CSE. In this partnership, the contractor provides TA regarding data collection and research design for the evaluation, directly collects data, receives data from grantee data collection efforts, monitors data quality, and provides feedback to grantees. The CSE comprises separate BHTCC and SE Studies, each consisting of system- and client-level components. The BHTCC Study also includes a quasi-experimental comparison study. The mixed-method design of the CSE represents SAMHSA's desire to conduct and disseminate findings from a process and intermediate outcomes evaluation of the two programs. Findings will inform current grantees, policymakers, and the field about ways to transform the behavioral health system to cultivate resiliency and recovery, actively collaborate with and engage, and improve service delivery for individuals with serious mental, substance, and co-occurring disorders who are in recovery.

### **c. Clearance Request**

SAMHSA is requesting approval for a new effort entitled Community Support Evaluation. OMB clearance is requested for three years of data collection. The CSE is a multicomponent evaluation of two SAMHSA programs—the BHTCC and SE Programs—promoting recovery for individuals with mental, substance use, and co-occurring disorders. The CSE will allow SAMSHA to examine the degree to which (1) participants lives are improved as a result of the programs; (2) engagement/participation is enhanced among consumers, people in recovery, and their families; and (3) the programs are successfully implemented. Findings from the CSE will be used to inform policymakers and the field on critical aspects of future CSPs.

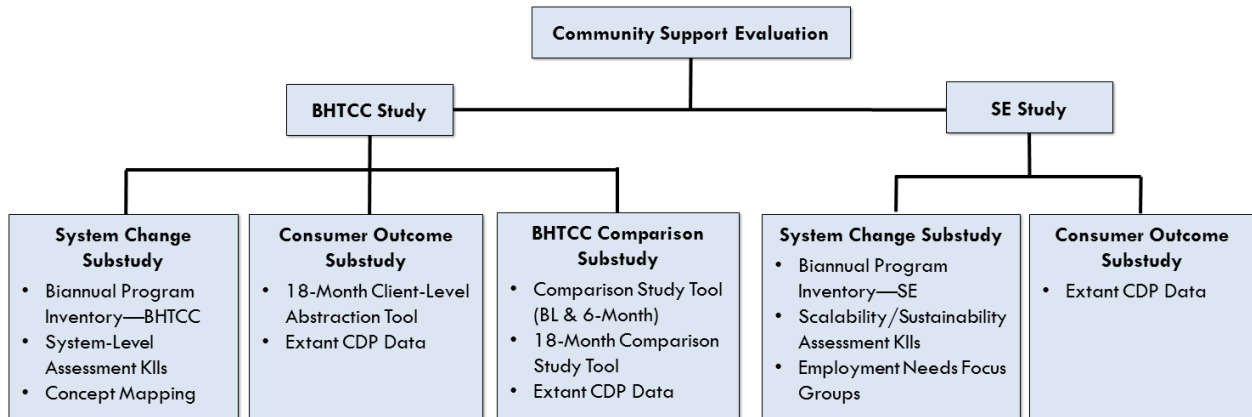
## **2. Purpose and Use of Information Collected**

### **a. CSE Overview**

The CSE comprises separate BHTCC Study and SE Studies and utilizes a mixed-method design to assess the process and intermediate outcomes of the two programs. Because the programs view collaboration and partnerships among key stakeholders (including consumers, peers, and family members) as essential, the evaluation incorporates a range of program participants and stakeholders either directly (as respondents/participants) or indirectly (via expert panel input on the evaluation design). Use of a participatory evaluation framework is essential to meeting the needs and goals of the CSE; specifically, understanding (1) the extent to which program implementation and consumer outcomes, partnerships and collaboration, and engagement of

individuals in recovery from mental and substance use disorders are achieved and (2) how the agencies or grantees contributed to the success of the program. Exhibit 1 depicts an overview of the CSE studies, substudies, and data sources. Additional details are provided in Section A.2.b.

### Exhibit 1. CSE Overview



### 1) BHTCC Study

The BHTCC Study consists of three substudies: system change substudy (SCS), consumer outcome substudy (COS), and comparison substudy (CS). Data collection activities will assess the characteristics of participants and key behavioral and functional outcomes, and recidivism, as well as the system-level capacity, change, and characteristics of BHTCCs. Exhibit 2 contains a matrix of the primary BHTCC questions and associated data sources. BHTCC Study components are described below and detailed descriptions of data collection activities are provided in Exhibit 5.

### Exhibit 2. BHTCC Study Questions and Data Sources

BHTCC Study Questions	Data Source						
	BPI-BHTCC	SLA KIIs	Concept Mapping	18-Month T-1	Comparison Study	Extant	Client-level
Does the collaborative model enhance access to treatment and recovery support for persons with mental illness, substance use disorders, and co-occurring disorders?	X	X	X				
Are different collaborative configurations associated with different service delivery and client outcomes (i.e., those with municipal courts or not)?	X			X	X		X
What are the advantages and disadvantages of a collaborative partnership program model versus a		X	X				

single problem-solving court model (i.e., drug courts)?						
How do the intra- and interagency characteristics of the collaboration impact client outcomes?		X	X	X		X

**BHTCC System Change Substudy**

The BHTCC SCS combines qualitative and quantitative data to gain an understanding of program implementation processes and associated system-level outcomes. Finding will include key stakeholders collaboration strategies and use the principles of CSPs to expand service capacity, improve access to services, and enhance infrastructure. There is a particular focus on management structure—how each community is collaborating with court staff to expand or better serve participants; the process for recruiting, screening, and retaining participants; the practices used to ensure treatment adherence and criminal justice compliance, as well as involvement of consumers in all phases of program planning and implementation. Grantees will be asked to report on trauma-informed programs and evidence-based practices being implemented and infrastructure development over time to understand how these activities evolve over the course of the program. Specific objectives to be addressed include the following:

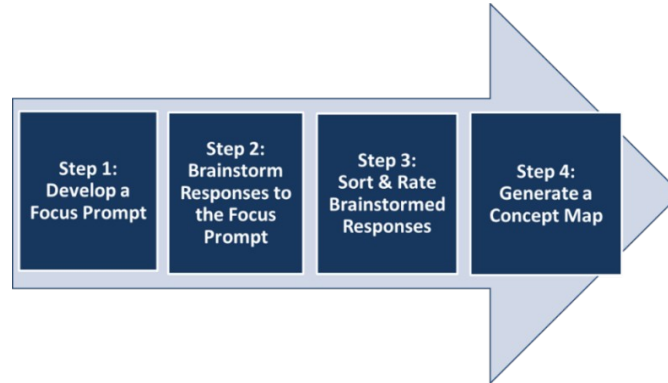
- Describe the system models, including management and staffing, for the BHTCC programs
- Determine the impact of interagency collaboration on service planning, delivery, and coordination
- Document the processes for participant recruitment, intake, and retention
- Define how consumer-driven practices are incorporated into the BHTCC programs

Data collection activities include: BPI–BHTCC Version, SLA KIIs (Court Personnel, Service Provider, and Consumer Versions), and concept mapping.

***Concept Mapping***

Concept mapping is a recognized tool that supports the interaction between evaluation practice, organizational learning, and community-level change. This mixed-method, participatory technique, which involves the brainstorming, rating, and sorting of ideas, incorporates two CSP principles—consumer-centered and consumer-empowerment. In total, four concept mapping exercises will be conducted as part of the SLA. The purpose of the exercises is (1) to gain an understanding of the dimensions of programming that are considered most crucial for program implementation (with involvement from key stakeholders) and (2) identify a roadmap for improving services. Concept mapping will integrate the perspectives of four stakeholder types—BHTCC peers, consumers, family members of consumers, and court personnel—some of whom otherwise may not have a voice in or advocate for what works well in these systems. The process affords them a voice, as well as equal footing with the evaluators and each other, in the collection, analysis, and interpretation of data. Participants will engage in brainstorming and sorting/rating activities at the local level as part of the process (see Exhibit 3). Information will be entered into Concept Systems software for analysis and map creation (see Section A.16.c, *Data Analysis Plan*).

### Exhibit 3. Steps in the Concept Mapping Process



### **BHTCC Consumer Outcome Substudy**

The BHTCC COS takes maximum advantage of client-level data from existing performance monitoring requirements to determine BHTCC participant outcomes, including functional, clinical, and program specific outcomes. In addition to the outcomes data provided through the CDP, data on program participants will be abstracted at 18 months to afford assessment of long-term outcomes related to recidivism (rearrests, recommitment, and revocations). Specific objectives to be addressed include the following:

- Document participants’ experiences and satisfaction with service delivery and program participation
- Assess the short-term programmatic and behavioral health outcomes for BHTCC participants
- Document the participants’ experiences with peer-based supports
- Determine what the short- and long-term criminal justice (recidivism) outcomes are for BHTCC participants

Data collection will occur via the 18-Month Tool.

### **BHTCC Comparison Substudy**

As an enhanced component of the COS, the comparison substudy involves compiling and analyzing data on a matched sample of up to 260 offenders not participating in the BHTCC program (130 from each comparison site) to understand the impact of BHTCC programs on client outcomes. For a subset of BHTCC grantees, it will be possible to identify adequate sources of comparison cases, such as subjects receiving regular services instead of enhanced services under service enhancement grants. Grantees proposing service enhancement were required to report the number of additional clients to be served for each year of the proposed grant. Similarly, grantees proposing service expansion were required to report on how the expansion would be achieved (e.g., reduction in waiting lists, partnering with a new agency to provide the specific services enhancement). This information will be used to identify areas where eligibility is currently exceeding service capacity and where recruitment from a waiting list is most achievable. In the event that a wait list approach is not feasible, a matched comparison study using individuals who are eligible but who opt out of services will be utilized (in no more than

two comparison sites). Comparison cases are subjects who, although eligible, are not receiving grant services for reasons unrelated to their possible outcome, such as a lack service provider capacity. For comparison cases, a reduced data protocol (reduced from client-level data gathered by BHTCC grantees for performance monitoring purposes) will be used to gather information at baseline and 6 months. Data collection activities include the Comparison Study Data Abstraction Tools (Baseline and 6-Month Versions) and the Comparison Study 18-Month Tool.

## 2) SE Study

The SE Study includes quantitative and qualitative mechanisms to understand outcomes of SE program participants, system-level assessments of service infrastructure, capacity, and delivery. Similar to the BHTCC Study, the SE Study comprises system change and consumer outcome substudies. Activities will assess program operations from the perspectives of consumers and employers, with emphasis on system needs for sustained models of SE. Exhibit 4 contains a matrix of the SE Study primary questions and relevant data sources. Study components are described below and data collection activity details can be found in Exhibit 5.

**Exhibit 4. SE Study Questions and Data Sources**

SE Study Question	Data Source			
	BPI-SE	SSA KIIs	ENFGs	Extant Client
How has the state-level collaboration been structured to enhance service planning, coordination, and delivery of services? How has it supported the scalability and sustainability of the supported employment program?	X	X	X	
What are the motivating factors associated with the SE project in each state? Do the motivating factors vary within and across each state?	X	X		
What actions have the state and local sites taken to provide sustainable and scalable organizational, policy, and financial resources to supported employment programs? How scalable and sustainable does their approach to supported employment appear to stakeholders?	X		X	
What program, contextual, and cultural factors were associated with participant outcomes?	X	X	X	X

### **SE System Change Substudy**

The SE SCS will examine how infrastructure is developed to support the full adoption of SE practices within each state and how states plan to sustain those practices over the long run. The SCS combines primary and secondary data to understand how key stakeholders collaborate to expand the service capacity of sites, improve access to and financing for services, and engage

employers, all while reflecting the principles of community support programs. Data collection activities include: BPI—SE Version, SSA KIIs (Administrator and Service Provider Versions), and ENFGs (Employer and Employment Specialist Versions). Specific objectives to be addressed include the following:

- Understand the state-level collaboration and infrastructure to enhance service planning, coordination, and delivery of services
- Assess the scalability and sustainability of the SE Program
- Document and assess the factors motivating adoption of the SE model in each state and variation of motivating factors across states
- Document the actions that state and local sites to ensure sustainable and scalable organizational, policy, and financial resources for Supported Employment programs

**SE Consumer Outcome Assessment**

The goal of the SE COS is to understand employment-related outcomes that consumers experience during and after their participation in the SE program. The SE COA does not involve data collection burden. Rather, client-level data from existing performance monitoring requirements will be analyzed to understand employment-related outcomes experienced by consumers during and after their participation in the SE program. Additional details can be found in Section A.16.c.

**b. Data Collection Activities and Methods**

Exhibit 5 provides a description of CSE data collection activities and methods by study component. (Note: Informed consents for all activities are location in Attachment P.)

**Exhibit 5. Data Collection Activities and Methods**

Activity	Description
<b>BHTCC System Change Substudy</b>	
Biannual Program Inventory– BHTCC	The BPI–BHTCC Version is a web-based survey that will capture infrastructure development and direct services that are part of the BHTCC programs. Data include the types of planning, infrastructure, and collaboration grantees are implementing; trainings conducted; and direct services offered as part of the program. The BPI takes 45 minutes to complete and will be completed by grantee evaluation staff twice yearly (April and October) over the grant period. See <i>Attachment A</i> .
System Level Assessment KIIs– Court Personnel, Service Provider, & Consumer	The SLA KIIs will be conducted with multiple stakeholders to assess collaboration strategies to expand or better serve participants; processes for recruiting, screening, and retaining participants; practices to ensure treatment adherence and criminal justice compliance; and involvement of consumers in program planning and implementation. Data include implementation processes/outcomes; service infrastructure, capacity, entry, and delivery processes; management

Activity	Description
Versions	<p>structure; reward and sanction models; trauma-informed practices; collaboration among BHTCC participants; and facilitators and barriers to collaboration.</p> <p>There are three versions of the SLA KIIs—each is tailored to the intended audience:</p> <ul style="list-style-type: none"> <li>▪ Court personnel (administrators, coordinators, judges, attorneys)</li> <li>▪ Service provider (case managers, BHTCC peer specialists)</li> <li>▪ Consumer (clients, family members)</li> </ul> <p>Grantee staff will assist with respondent recruitment by collecting consent to contact from potential participants and forwarding the forms to the contractor. The SLA KIIs will be conducted in grant years 2 and 4 via telephone or Skype and take 60 minutes to complete. The KIIs will cover the same information across years; however, the Year 4 KIIs also will ask for specific plans for future implementation. See <i>Attachments B (SLA KII Court Personnel Y2 and Y4); C (SLA KII Service Provider Y2 and Y4); D (SLA KII Consumer); and P (SLA KII Verbal Consent Script)</i>.</p>
Concept Mapping Brainstorming & Sorting/Rating Activities	<p>A total of three concept mapping brainstorming activities and four sorting/rating activities will be conducted with BHTCC stakeholders (peers, consumers, family members, service providers, and/or court personnel) as part of four Concept Mapping Exercises to be conducted (described below). The brainstorming and sorting/rating activities will occur through a web-based program (accommodations will be made for those without computer access [e.g., telephone or paper/pencil/mail]). All concept mapping exercises will be coordinated at the local level with assistance from the contractor.</p> <ul style="list-style-type: none"> <li>▪ <b>Brainstorming Activities</b>—For Concept Mapping Exercises 1, 3, and 4, participants will be asked to brainstorm as many ideas as they wish in response to a focus prompt about system-level change (e.g., “One way that this BHTCC collaborative provides support to consumers is...”). Participants will be given 30 minutes to brainstorm and will submit responses via web, telephone, or mail. See <i>Attachment E for brainstorming activity instructions</i>.</li> <li>▪ <b>Sorting/Rating Activities</b>—For Concept Mapping Exercises 1, 2, 3, and 4, local staff will ask participants to sort and rate the full list of ideas from the brainstorming activity in “any way that makes sense” to them at a later date (after brainstorming has occurred). Respondents will sort and rate the responses—once for importance and once for frequency—into groups and name them. Participants will be given 30 minutes to complete the sorting/rating exercise and</li> </ul>

Activity	Description
	<p>will submit responses via web, telephone, or mail. <i>See Attachment F for sorting/rating activity instructions.</i></p> <p><b><u>Description of Concept Mapping Exercises</u></b></p> <p>Each BHTCC grantee will generate a local concept map identifying the priority supports for recovery beginning in Year 2. In Year 4, varying numbers of grantees will participate in three concept mapping exercises to generate cross-site Keys to Recovery (KTR) maps to identify key recovery supports to inform SAMHSA of continued and needed resources to ensure delivery models that contain these key supports. It is expected that stakeholders will be asked to participate in no more than two of these three cross-site maps.</p> <ul style="list-style-type: none"> <li>▪ <u>Exercise 1—Local Concept Map (Brainstorming and Sorting/Rating)</u>: Beginning in Year 2, each grantee will identify and recruit up to 20 BHTCC stakeholders to participate in a local concept mapping exercise involving brainstorming and sorting/rating. The resulting information will be entered into Concept System software to generate a local map identifying the most important aspects of the grantee program that support recovery. These site-specific maps can be used by grantees to refine and improve program delivery to ensure these key recovery supports are in place; receive continued support; and assure additional focus and attention are provided to the supports that peers and consumers find most important. The local concept mapping exercises will take 30 minutes for brainstorming and 30 minutes for sorting/rating.</li> <li>▪ <u>Exercise 2—Keys to Recovery Map 1 (Sorting/Rating)</u>: In Year 4, all 17 BHTCC grantees will participate in a second sorting/rating of ideas brainstormed for the local concept mapping exercise. Grantee staff will develop a list of the most common ideas and up to 20 stakeholders from each participating grantee will be asked to sort/rate the list. The information will be used to generate a BHTCC Program cross-site concept map on the basis of input from the 17 sites. The KTR Map 1 sorting/rating activity will take 30 minutes to complete.</li> <li>▪ <u>Exercises 3 and 4—Keys to Recovery Maps 3 and 4 (Brainstorming and Sorting/Rating)</u>: In Year 4, two groups of up to 5 BHTCC grantees with a particular court structure or program focus (e.g., veterans' court and another BHTCC type of court model, such as key recovery supports addressing a specific aspect or type of severe mental illness) will participate in two concept mapping exercises to generate</li> </ul>

Activity	Description
	<p>KTR maps. The program focus will be determined after the initial site-specific maps have been analyzed. Up to 20 stakeholders from each grantee will participate in brainstorming and sorting/rating activities. Each will involve brainstorming (30 minutes) and sorting/rating (30 minutes).</p>
<p>BHTCC Consumer Outcome &amp; Comparison Substudies</p>	
<p>18-Month Client Level Abstraction Tool</p>	<p>The 18-Month Tool is an Excel-based tool that collects existing data on long-term client outcomes on recidivism. Data include (1) rearrest dates (from NCIC database), (2) recommitment dates (from State departments of corrections and local/county jails and corrections), (3) revocation dates (from State and local corrections), and (4) risk assessment quantitative score. Grantee staff will complete the tool at 18 months from the baseline period for any client enrolled in the BHTCC program. Beginning in year 2, grantees will upload all extracted data on a quarterly basis. In their final upload (last month of grant activity), grantees will include data for all clients not currently submitted including those enrolled less than 18 months. The 18-Month Tool will be completed by grantee evaluation staff using existing sources and takes 10 minutes to complete. See <i>Attachment G</i>.</p>
<p>Comparison Study Data Abstraction Tool-Baseline</p>	<p>The Comparison Study Tools are Excel-based tools that collect existing data on comparison cases (individuals who are not participating in the BHTCC program but are comparable in program eligibility) at baseline and 6 months. Baseline data include demographics and status of screening for co-occurring disorders, employment, and probation/parole. Respondents will include court staff (e.g., court clerks) at comparison courts who have regular interaction with clients during their involvement in the justice system. Respondents will complete the tool on the basis of (1) court paperwork and (2) information discussed during regular court-assigned interactions. No direct data collection will occur from clients. The Comparison Study Tool Baseline take 10 minutes to complete. See <i>Attachment H</i>.</p>
<p>Comparison Study Data Abstraction Tool-6-Month</p>	<p>The Comparison Study Tool 6-Month Tool is an Excel-based tool that collect existing data on comparison cases (individuals who are not participating in the BHTCC program but are comparable in program eligibility) at 6 months. Data abstracted through the 6-month tool include employment status, probation/parole status, services received (i.e., case management, treatment, medical care, after care, peer-to-peer recovery support, and education) and number of days services were received. Respondents will include court staff (e.g., court clerks) at comparison courts who have regular interaction with clients during their</p>

Activity	Description
	involvement in the justice system and will complete the tool on the basis of (1) court paperwork and (2) information discussed during regular court-assigned interactions. No direct data collection will occur from clients. The Comparison Study Tool 6-Month takes 10 minutes to complete. See <i>Attachment I</i> .
Comparison Study Data Abstraction Tool-18-Month	The 18-Month Tool—Comparison Study is the same as the 18-Month Tool but collects existing data on long-term outcomes on recidivism for comparison cases. Data include (1) rearrest dates (from NCIC database), (2) recommitment dates (from State departments of corrections and local/county jails and corrections), (3) revocation dates (from State and local corrections), and (4) risk assessment quantitative score. Court clerks from 2 comparison study courts will complete the tool at 18 months from the baseline period for comparison cases not enrolled in the BHTCC program. Beginning in year 2, comparison study courts will upload all extracted data on a quarterly basis. In their final upload (last month of grant activity), court clerks submit data for all comparison cases not currently submitted. The 18-Month Tool—Comparison Study will be completed by court clerks for comparison cases using existing sources and takes 10 minutes to complete. See <i>Attachment J</i> .
<b>SE System Change Substudy</b>	
Biannual Program Inventory-SE Version	The BPI-SE is a web-based survey that captures the infrastructure development and direct services that are part of the SE programs. Data include the types of planning that SE grantees and local implementation sites are implementing and activities and infrastructure developed as part of the project. The BPI is administered twice yearly (April and October) over the grant period and takes 45 minutes to complete at each administration. See <i>Attachment K</i> .
Scalability/ Sustainability Assessment KIIs- Administrator & Service Provider Versions	<p>The SSA KIIs will be conducted with various stakeholders to assess local SE program resources, infrastructure, outcomes, sustainability, and scalability from stakeholders. Data include changes in outcomes, workforce development, State-level collaboration, partnerships and policies, and scalability and sustainability.</p> <p>There are two versions of the SSA KIIs—each is tailored to the intended audience:</p> <ul style="list-style-type: none"> <li>▪ Administrator (project directors, agency directors, SECC members)</li> <li>▪ Service provider (local service provider from implementation site)</li> </ul> <p>The SSA KIIs will be conducted remotely by telephone and/or Skype technology in years 2 and 4 of the evaluation and take 60 minute to complete. The KIIs cover the same information across years; however,</p>

Activity	Description
	<p>Year 4 KIIs will follow up on how the infrastructure and activities taking place in Year 2 come to fruition. See <i>Attachments L (SSA KII Administrator Y2 and 4); M (SSA KII Service Provider Y2 and 4); and Q (SSA KII Verbal Consent Script)</i>.</p>
<p>Employment Needs FGs—Employer and Employment Specialist Versions</p>	<p>The ENFGs will be conducted to gather information about the needs and experiences of employment specialists, consumers, and employers as they relate to IPS principles and program goals. Data include local program implementation, the adoption of policies and practices for sustainability and scalability, and recommendations for program improvement and implementation best practices. ENFGs will be conducted with employment specialists and employers (who have and have not participated in the program). Specific topics are tailored to respondent type.</p> <ul style="list-style-type: none"> <li>▪ <b>Employment specialists</b> will discuss training received and techniques used to engage employers, the needs and experiences of clients and employers, facilitators and barriers to program implementation, and program scalability and sustainability.</li> <li>▪ <b>Employers</b> (e.g., hiring managers, supervisors) will discuss experiences and satisfaction with the program, factors that facilitate and pose barriers to their participation, and program scalability and sustainability.</li> </ul> <p>The ENFGs will be conducted virtually using a web-based platform (such as JoinMe) in years 2 and 4 of grant funding. The ENFG—Employment Specialist Version will last 90 minutes and the ENFG—Employer Version will take 60 minutes. See <i>Attachments N (ENFG Employer Version), O (ENFG Employment Specialist Version), R (ENFG Employer Informed Consent), and S (ENFG Employment Specialist Informed Consent)</i>.</p>

**c. Uses of Information Collected**

**1) Informing SAMHSA’s Strategic Initiatives**

In FY 2014, and based on accomplishments to date, SAMHSA updated its strategic plan, entitled *Leading Change 2.0: Advancing the Behavioral Health of the Nation 2015-2018* (Leading Change 2.0). Leading Change 2.0 identifies 6 strategic initiatives (SIs). In particular, the CSE is aligned with SI-1, Trauma and Justice, and SI-3, Recovery Support. Information collected through the CSE will help SAMHSA to assess these essential strategies aimed at influencing comprehensive change across the justice and behavioral health service systems, as well as assist SAMHSA in its aim to implement more rigorous evaluations of process, outcomes, and impacts of its initiatives.

### ***SI-3: Trauma and Justice***

- **Goal 3.1:** Implement and study a trauma-informed approach throughout health, behavioral health, and related systems. (*BHTCC Study*)
- **Goal 3.2:** Create capacity and systems change in the behavioral health and justice systems. (*BHTCC System Change Substudy*)

### ***SI-4: Recovery Support***

- **Goal 4.1:** Improve the physical and behavioral health of individuals with mental illness and/or substance use disorders and their families. (*BHTCC and SE Consumer Outcome Substudies*)
- **Goal 4.3:** Increase competitive employment and educational attainment for individuals with mental illness and/or substance use disorders. (*SE System Change Substudy*)
- **Goal 4.4:** Promote community living for individuals with mental and/or substance use disorders and their families. (*Community Support Evaluation*)

## **2) Advancing the Field**

Information gathered through the CSE will be useful to SAMHSA and its partners, other Federal agencies and administrators, current grantees, policymakers, and the field about ways to transform the behavioral health system to cultivate resiliency and recovery, actively collaborate with and engage, and improve service delivery for with serious mental, substance, and co-occurring disorders who are in recovery. Further, the focus of the CSE on assessing the process and intermediate outcomes of the BHTCC and SE Programs will contribute immensely to advancing the fields of recovery and resilience and expanding the evidence base. For example, information gathered through the CSE about the effectiveness of the BHTCC and SE Programs can be replicated in other States, territories, tribal nations, and communities. Information gathered also will be used to identify critical aspects of future CSPs.

Without this evaluation, Federal and local officials will not determine whether the BHTCC and SE Programs are having the intended impact on individuals with serious mental, substance use, and co-occurring disorder and their recovery; on the availability and competitiveness of their employment opportunities; and whether the grantees are meeting the individual goals of the programs.

## **3. Use of Improved Information Technology**

Every effort had been made to limit burden on individual respondents who participate in the CSE through the use of technology. Data collection instruments will be administered via the web and Skype. Below are descriptions of how the web-based data collection and management system, web-based programs, and Skype will be used for data collection.

### **a. Web-based Data Collection and Management System**

The contractor will work with SAMHSA to develop a web-based data collection and management system, the CSE Data System (CSEDS), on a SAMHSA-hosted website. The CSEDS will support the collection, management, and dissemination of data, as well as function as a centralized hub where program partners can locate comprehensive information. Features of

the CSEDS are described in Exhibit 6. The contractor will request virtual machines in the SAMHSA AWS GovCloud environment for system development, testing, staging, and production. The contractor will work with SAMHSA to certify and accredit the IT system; an IT plan and Information Systems Security Professional (ISSP) plan were submitted to SAMHSA on August 31, 2015. The contractor will follow all relevant SAMHSA, HHS, and Federal policies and regulations (including the HHS Automated Data Processing Systems Security Policy; the E-Government Act of 2002; the Federal Acquisition Regulation Clause 52-239-1; the HHS Information Technology General Rules of Behavior; and other applicable laws, regulations, and guidelines). The contractor complies with all information privacy and confidentiality regulations, including the Privacy Act of 1974. The contractor will conduct and maintain a privacy impact assessment (PIA) in accordance with HHS PIA guidance.

**Exhibit 6. Features of the CSEDS**

Feature	Description
Data Collection	The CSEDS support direct administration of web-based surveys, as well as direct entry of training, service delivery, collaboration, infrastructure development, implementation of evidence-based practices through the BPI. Client-level data collected from program participants in the CDP system and through the 18-month data abstraction tool will be uploaded and stored on CSEDS. All methods will incorporate various data quality checks.
Repository	During the design phase, the contractor will coordinate with SAMHSA to understand the structure and format of client-level and Infrastructure Development, Prevention and Mental Health Promotion (IPP) data collected and submitted by CSP grantees and design tables to accommodate these structures. Where feasible and desirable, data from these and other secondary data sources will be used to contextualize the process evaluation and to provide a data source for the outcome evaluation. Doing so will streamline data collection, minimize reporting burden on grantees and clients reached through these programs, and provide a standardized set of measures that can be used as explanatory and/or outcome variables in statistical analyses.
Response Monitoring	A response-monitoring feature will be built into the system to allow the contractor to monitor BPI data submissions. This feature will show the latest submission dates, enabling the TA team to follow up with grantees that are not submitting according to established timelines.
Evaluation Resources	All evaluation support materials, such as manuals, data dictionaries, data collection protocols, and instruments will be housed on CSEDS to ensure access by grantees. Additionally, any recordings of training webinars will be posted to CSEDS in the event that grantees need to train new staff or provide reviews to existing staff.

## **b. Web-based Programs**

Web-based programs will be used to facilitate group participation in focus groups and concept mapping. Concept mapping exercises also will be conducted via the web using Concept System software, which supports carrying out brainstorming, sorting/rating, and interpretation via a web-based program on personal computers. Conducting the ENFGs and concept mapping via the web will facilitate the participation of large numbers of stakeholders, mollify traditional time burden and travel costs associated with in-person data collection, and offer respondents flexibility to participate from convenient locations. Prior to conducting these activities, the feasibility of Web-based participation will be assessed and plans will be put in place to accommodate respondents who may not have computer access to participate by telephone or via another method.

Respondents to the ENFGs will participate virtually through a web-based platform, such as JoinMe. Conducting focus groups virtually introduces potential issues with regard to technology access and capabilities across the participants. To minimize issues related to internet connectivity speeds, while still providing some visual cues and opportunities for rapport building, participants will join the discussion orally but will not participate on camera. The online meeting platform will, however, be equipped with features that will enable them to visually indicate to the group that they would like to speak (e.g., a “raise hand” feature in the platform). The virtual platform may also enable participants to share information that they would not be willing to voice aloud, as it affords the ability for participants to use a built-in instant messaging system to share a private message with the moderator to read to the group. While participants will not participate on camera, the group moderator will appear on video in order to build rapport and enable the moderator to more effectively guide the discussion.

## **c. Skype/Web-based Videoconferencing**

The SLA KIIs and SSA KIIs will be conducted with individuals via Skype or another web-based videoconferencing platform. Skype is a web-based software application that allows users to have spoken conversations while also viewing one another by webcam and chatting via instant message. Conducting the KIIs via Skype rather than telephone will facilitate the ability of interviewers to build rapport with respondents. In addition, utilizing Skype technology will alleviate the time and costs to travel to participate in the interviews in person and allow respondents to participate from a location of their choosing.

## **4. Efforts to Identify Duplication**

The current BHTCC program builds on the accomplishments of a first cohort of BHTCC grantees funded by SAMHSA between 2011 and 2014 by combining previous and current SAMHSA funded criminal justice-treatment linkage programs with infrastructure planning and development activities to create new court and community networks to transform the behavioral health system at the community level. A key difference in the BHTCC Program second funding cohort is that each collaborative must involve municipal courts. In addition, veterans are a population of focus.

The CSE team, in developing the data collection activities and updated design for the evaluation, conducted a literature review to avoid duplication in data collection activities and the use of similar information. The specific primary data to be collected for the CSE does not exist elsewhere. An earlier evaluation of the first cohort of the BHTCC was conducted; however, consumer outcome data was limited to 6 months. The current data collection utilizes existing administrative data to supplement requirement GPRA data to inform criminal justice and other offender outcomes. In addition, there are several studies that have been conducted of alternative treatment courts; however, these studies are typically single-site and conducted as part of research supported through the Department of Justice. Thus, the focus of these parallel efforts may be on implementation of justice programs as opposed to treatment and recovery. The 18 Month Abstraction Tool, as well as the Comparison Study Abstraction Tools, utilize existing information gathered through program and administrative data or information already gathered through interactions of adult justice populations not gathered through the existing client-level GRPA reporting. The BPIs, SLA KIIs, Concept Mapping, SSA KIIs, and ENFGs are specific to the CSE and are not collected elsewhere.

## 5. Impact on Small Businesses or Other Small Entities

Some data collection activities involve individuals from public agencies, such as the mental health and criminal justice systems. Respondents to the SLA KIIs and SSA KIIs, Concept Mapping, and ENFG–Employer Version may be employed by small businesses or other small entities; however, these data collections will not have a significant impact on the agencies or entities.

## 6. Consequences if Information Collected Less Frequently

The rigor of the CSE design and its ability to answer the primary evaluation questions are dependent on the frequency of the data collected. Additionally, because the CSE is aligned with the foci of the BHTCC and SE Programs, the frequency with which data collection activities are administered is critical to SAMHSA’s overall assessment of the programs. Exhibit 7 describes the consequences if data are collected less frequently.

**Exhibit 7. Consequences If Information Collected Less Frequently by Activity**

Activity	Rationale
BPI–BHTCC & BPI–SE Versions	Grantees will be required to complete the BPI upon the receipt of OMB approval and on a twice-yearly basis thereafter. Collecting this information biannually is necessary to document progress related to grantee infrastructure development and program goals. The consequences of collecting the BPI less frequently include losing the ability to track and assess change over time related to these factors.
SLA KIIs & SSA KIIs	The SLA and SSA KIIs will be conducted twice with key stakeholders in grant years 2 and 4. The timeline for KII administration toward the beginning and end of the BHTCC and SE grant periods is intentional to

Activity	Rationale
	capture and assess change over time as it relates to progress toward program goals and infrastructure/capacity development. If the KIIs are conducted less frequently, it will not be possible to capture change over time, fidelity to program plans, and infrastructure development service enhancements/expansions.
Concept Mapping	Concept mapping will be conducted with a range of program stakeholders, including court personnel, service providers, and consumers as part of the participatory approach to the CSE. Exercises will be conducted in grant years 2 and 4 to coincide with full implementation of the BHTCC program and allow for greater understanding of the most important aspects of the BHTCC that support recovery from these multiple perspectives. Two Year 4 exercises will include new brainstorming of the most important aspects of the BHTCC program from a subset of grantees who are purposefully selected based on preliminary findings on key consumer outcomes (e.g., program court models including veterans courts, offender inclusion criteria, geographical setting). Conducting concept mapping less frequently will negatively impact the degree to which the CSE implements a participatory approach and incorporates the perspectives and opinions of consumers.
18-Month Client Level Data Abstraction Tool	The 18-Month Tool will capture long-term recidivism for BHTCC participants and comparison substudy controls not otherwise collected through other measures. If these data are not collected for BHTCC participants, it will not be possible to assess their long-term outcomes. Further, the longitudinal implementation of the Comparison Study Tool and 18-Month Tool serve as the basis for the BHTCC Comparison Study. Collecting this information less frequently will impair the rigor of the quasi-experimental design and the ability to assess and fully understand the impacts of the BHTCC Program.
Comparison Study Tool —BL, 6-Month and 18-Month	The longitudinal implementation of the Comparison Study Tools at BL, 6 months, and 18 months serve as the basis for the BHTCC Comparison Study. If these data are not collected, it will not be possible to compare short- and long-term outcomes for BHTCC and non-BHTCC participants. Collecting this information less frequently will impair the rigor of the quasi-experimental design and the ability to assess and fully understand the impacts of the BHTCC Program.

## 7. Consistency with the Guidelines of 5 CFR 1320.5(d)(2)

The data collection fully complies with the requirements of 5 CFR 1320.5(d) (2).

## 8. Consultation Outside the Agency

### a. Federal Register Notice

SAMHSA published a notice in the *Federal Register* on December 21, 2015 (80 FR 79349), soliciting public comment on this study.

### b. Consultation Outside the Agency

Two steering committees (BHTCC and SE) were established for the CSE. Feedback on the data collection instruments and protocols, as well as overall evaluation design, were solicited from the steering committee; SAMHSA/CMHS Contracting Officer's Representative (COR) and Alternate COR; the SAMHSA Center for Behavioral Health Statistics and Quality Evaluation Desk Officer; the evaluation contractor; SAMHSA grantee project officers; and grantee representatives, including project directors and local evaluators. BHTCC and SE Study-specific webinars were conducted to review the details of the evaluation and the proposed data collection for review and comment. Based on the feedback from the steering committee and other reviewers described above, modifications were made to the instruments, evaluation questions, and evaluation protocols. Organizations and individuals that reviewed the data collection activities are listed in Exhibit 8.

#### Exhibit 8. Consultation outside the Agency

Name/Title	Contact Information
Robin Davis, PhD Principal Investigator/Project Director	ICF International 3 Corporate Square, NE Suite 370 Atlanta, GA 30329 <a href="mailto:robin.davis@icfi.com">robin.davis@icfi.com</a> 404-321-3211
Christine Walrath, PhD	ICF International 40 Wall Street, Suite 3400 New York, NY 10005 <a href="mailto:Christine.Walrath@icfi.com">Christine.Walrath@icfi.com</a> 646-695-8154
Samantha Lowry, MS BHTCC Study Manager	ICF International 9300 Lee Highway Fairfax, VA 22031 <a href="mailto:Samantha.Lowry@icfi.com">Samantha.Lowry@icfi.com</a> 703-251-0368
Emily Appel-Newby SE Study Manager	ICF International 9300 Lee Highway Fairfax, VA 22031 <a href="mailto:Emily.Appel-Newby@icfi.com">Emily.Appel-Newby@icfi.com</a>

Name/Title	Contact Information
	703-225-2409
Lucas Godoy Garraza, MA Senior Statistician	ICF International 40 Wall Street, Suite 3400 New York, NY 10005 <a href="mailto:Lucas.GodoyGarraza@icfi.com">Lucas.GodoyGarraza@icfi.com</a>
Megan Brooks, MA Data Manager	ICF International 3 Corporate Square, NE Suite 370 Atlanta, GA 30329 <a href="mailto:Megan.Brooks@icfi.com">Megan.Brooks@icfi.com</a> 651-330-6085
Janeen Buck Willison, MSJ Evaluation Advisor	Urban Institute 2100 M Street NW Washington, DC 20037 202-261-5746 <a href="mailto:jbuck@urban.org">jbuck@urban.org</a>
Janine Zweig, PhD Evaluation Advisor	Urban Institute 2100 M Street NW Washington, DC 20037 518-791-1058 <a href="mailto:jzweig@urban.org">jzweig@urban.org</a>
Steven Belenko, PhD Evaluation Advisor	Consultant Temple University- Department of Criminal Justice 1115 Polett Walk 5 <sup>th</sup> Floor Gladfelter Hall Philadelphia, PA 19122 215-204-2211 <a href="mailto:sbelenko@temple.edu">sbelenko@temple.edu</a>
Carrie Petrucci, PhD, MSW	EMT Associates, Inc. 818.667.9167 <a href="mailto:carrie.petrucci@gmail.com">carrie.petrucci@gmail.com</a>
<b>BHTCC Steering Committee</b>	
Michael Endres, PhD	Office of Program Improvement and Excellence for the State of Hawaii Department of Health P.O. Box 3378; Honolulu, HI. 96801-3378 808-586-4132

Name/Title	Contact Information
	<a href="mailto:michael.endres@doh.hawaii.gov">michael.endres@doh.hawaii.gov</a>
Joan Gillece, PhD	SAMHSA National Center for Trauma Informed Care <a href="mailto:Joan.Gillece@nasmhpd.org">Joan.Gillece@nasmhpd.org</a>
Honorable Stephen Goss, JD	Dougherty Judicial Circuit Superior Court 225 Pine Avenue, Room 222 Albany, Georgia 31701 <a href="mailto:judgestevegoss@bellsouth.net">judgestevegoss@bellsouth.net</a> 229-434-2683
Tara Kunkel, MSW	National Center for State Courts 300 Newport Avenue Williamsburg, VA 23185 757-259-1575 <a href="mailto:tkunkel@ncsc.org">tkunkel@ncsc.org</a>
Margaret Baughman Sladky, PhD	Begun Center for Violence Prevention Research and Education at Case Western University 11402 Bellflower Rd. Cleveland, OH 44106 216-368-0160 <a href="mailto:margaret.baughman@case.edu">margaret.baughman@case.edu</a>
Jana Spalding, MD	Arizona State University 500 N. Third St., Ste. 200 Phoenix, AZ 85004 602-496-1470 <a href="mailto:Jana.Spalding@asu.edu">Jana.Spalding@asu.edu</a>
Doug Marlowe, PhD	National Association of Drug Court Professionals 1029 North Royal Street, Suite 201 Alexandria, VA 22314 610-299-7480 <a href="mailto:dmarlowe@nadcp.org">dmarlowe@nadcp.org</a>
<b>SE Steering Committee</b>	
Sean Harris, PhD	Recovery Institute 1020 South Westnedge Avenue Kalamazoo, MI 49008 269.343.6725 <a href="mailto:sharris@recoverymi.org">sharris@recoverymi.org</a>

Name/Title	Contact Information
Crystal Blyler, PhD	Mathematica Policy Research, Inc. 1100 1st Street, NE, 12th Floor Washington, DC 20002-4221 202.250.3502 <a href="mailto:cblyler@mathematica-mpr.com">cblyler@mathematica-mpr.com</a>
Jonathan Delman, PhD, JD	Technical Assistance Collaborative 31 St James Avenue Suite 950 Boston, MA <a href="mailto:jdelman@tacinc.org">jdelman@tacinc.org</a>

## 9. Payment to Respondents

The CSE uses a participatory evaluation approach and requires the participation of individuals beyond grantee program staff, such as consumers and employers. Consequently, remuneration is suggested for respondents who are not directly affiliated with the BHTCC and SE programs at the time of their participation as compensation for the associated burden, potential inconvenience of participation, and any related costs (e.g., transportation, mobile phone minutes or data, compensation for time). The CSE also involves longitudinal data collection. Remuneration is a standard practice in longitudinal studies partly because respondents are typically not directly affiliated with the program being evaluated. Given the use of longitudinal data collection and the hard-to-reach nature of these populations, compensation will be provided to respondents of the following activities: SLA KII–Consumer Version (\$10) and the ENFG–Employer Version (\$50). Respondents to other data collection activities are primarily staff of the BHTCC and SE programs or close affiliates. Therefore, no remuneration is planned for those activities.

## 10. Assurances of Confidentiality

To ensure the privacy of data compiled for the protection of human subjects, the data collection protocol and instruments for the CSE will be reviewed through the contractor’s institutional review board (IRB) prior to the collection of covered or protected data. The contractor’s IRB holds a Federal wide Assurance (FWA00000845; Expiration, April 13, 2019) from the HHS Office for Human Research Protections (OHRP). This review ensures compliance with the spirit and letter of HHS regulations governing such projects. All protected data will be stored on the contractor’s secure servers in the manner described in the IT Plan and IT Data Security Plan submitted to SAMHSA on August 31, 2015. In addition, the secure web-based data collection and management system, the CSEDS, will facilitate data entry and management for the evaluation.

CSE respondents will be selected on the basis of their roles in the BHTCC and SE Programs. Descriptive information will be collected on respondents, but no identifying information will be entered or stored in the CSEDS. For the SLA KIIs and SSA KIIs, grantee staff will collect consent to contact from potential participants and forward the forms to the contractor. All hard copy forms with identifying information will be stored in locked cabinets;

contact information will be entered into a password-protected database accessible to the limited number of individuals who require access (selected contractor staff such as data analysts and administrative staff for administering the incentives). These individuals have signed privacy, data access, and data use agreements. Identifying information (e.g., name, e-mail address) collected to facilitate the administration of surveys, interviews, and focus groups will not be stored with responses. Further, datasets will be stripped of any identifying information prior to use by data analysts. Once final data collection is complete and incentives have been distributed (as appropriate), respondent contact information will be deleted from the database and the hard copy forms will be destroyed. Data collection activities requiring the collection of identifying information and specific procedures to protect respondent privacy are described in Exhibit 9.

**Exhibit 9. Procedures to Protect Respondent Privacy**

Activity	Rationale
BPI- BHTCC & BPI-SE	Information to complete the inventories will be directly entered into the web-based system. To access the system, respondents receive an individual username and password to protect their privacy and no identifying information is requested on the inventories.
SLA KIIs, SSA KIIs, & ENFGs	Identifying information for respondents to the SLA KIIs, SSA KIIs, and ENFGs will be necessary to facilitate the administration of the interviews and focus groups. Contact information will be limited to affiliations, names, email addresses, and telephone numbers and will be entered into and maintained in a password-protected database. KIIs will be audiotaped and transcribed for analysis. Audio files will be destroyed once transcription is complete and respondent names will be redacted from transcripts. Although the individual’s identifying name will not be used in any reports, reports and datasets will contain the name of BHTCC or SE program. Although unlikely, it is possible that an individual may be identifiable when reporting results. Respondents are informed of possible identification in the consent language at the start of the activity.
Concept Mapping	Local grantees will take primary responsibility for coordinating and conducting concept mapping. However, identifying information for some concept mapping participants may be necessary for the contractor to facilitate participation, depending on the recruitment and implementation methods used. Contact information will be limited to name, email address, and/or telephone number and will be entered into and maintained in a password-protected database.

## 11. Questions of a Sensitive Nature

Respondents will not be asked any questions of a personally sensitive nature. The subject matter of the BPIs, SLA KIIs, Concept Mapping, SSA KIIs, and ENFGs will be limited to the perceptions of planning and implementation activities among key stakeholders of the grants.

## 12. Estimates of Annualized Burden Hours and Costs

Clearance is being requested for 3 years of data collection for the Community Support Evaluation for 17 BHTCC and 7 SE Program grantees (24 grantees total). Exhibit 10 describes the burden and costs associated with CSE data collection activities and Exhibit 11 describes burden by respondent type. The cost was calculated based on the hourly wage rates for appropriate wage rate categories using data collected as part of the National Compensation Survey (BLS, 2014) and from the U.S. Department of Labor Federal Minimum Wage Standards.

**Exhibit 10. Estimated Annualized Burden Hours and Costs  
(Across the 3-Year Clearance Period)**

Type of Respondent	Instrument	Number of Respondents	Responses per Respondent	Total Number of Responses	Burden per Response (hours)	Annual Burden (hours)	Hourly Wage Rate (\$)	Total Cost (\$)
<b>BHTCC Study</b>								
Project Evaluators	Biannual Program Inventory BHTCC Version	17	2	34	0.75	26	36.72	955
Court Personnel	SLA KII Court Personnel Version	23	1	23	1	23	62.21	1,410
BHTCC Service Providers	SLA KII Service Provider Version	23	1	23	1	23	22.03	499
Consumers	SLA KII Consumer Version	12	1	12	1	12	7.25	87
Project Evaluators	18-Month Tool	17	1	17	5.4	92	36.72	3,378
Court Clerks	Comparison Study 18-Month Tool	2	1	2	5.4	11	17.05	188
Court Clerks	Comparison Study Tool BL Version	2	1	2	7	14	17.05	239
Court Clerks	Comparison Study Tool 6-Month Version	2	1	2	7	14	17.05	239
BHTCC Stakeholders	Concept Mapping Brainstorming Activity	180	1	180	0.5	90	24.69	2,222

Type of Respondent	Instrument	Number of Respondents	Responses per Respondent	Total Number of Responses	Burden per Response (hours)	Annual Burden (hours)	Hourly Wage Rate (\$)	Total Cost (\$)
BHTCC Stakeholders	Concept Mapping Sorting/Rating Activity	294	1	294	0.5	147	24.69	3,629
<b>SE Study</b>								
Project Directors	Biannual Program Inventory SE Version	7	2	14	0.75	11	32.56	342
Administrators	SSA KII Administrator Version	14	1	14	1	14	56.35	789
SE Service Providers	SSA KII Service Provider Version	14	1	14	1	14	22.03	308
Hiring Managers	ENFG Employer Version	28	1	28	1	28	30.09	203
Employment Specialists	ENFG—Employment Specialist Version	28	1	28	1.5	42	29.58	1242
<b>Total</b>		462 <sup>a</sup>		687		561		15,730

### Exhibit 11. Annualized Summary Burden by Respondent Type

Respondents	Number of Respondents	Responses/Respondent	Total Responses	Total Annualized Hour Burden
<b>BHTC Study</b>				
Project Evaluators	17	3	51	118
Court Personnel	23	1	23	23
BHTCC Service Providers	23	1	23	23
Consumers	12	1	12	12
Court Clerks	2	3	6	39
BHTCC Stakeholders	294	1.612	474	237
<b>SE Study</b>				
Project Directors	7	2	14	11
Administrators	14	1	14	14
SE Service Providers	14	1	14	14
Hiring Managers	28	1	28	28

<sup>a</sup> Total respondents represents unduplicated count of: project evaluators, BHTCC stakeholders, and court clerks.

Respondents	Number of Respondents	Responses/ Respondent	Total Responses	Total Annualized Hour Burden
Employment Specialists	28	1	28	42
Total	462		687	561

### 13. Estimates of Annualized Cost Burden to Respondents or Record Keepers

There are no startup, maintenance, or operational costs associated with the CSE.

### 14. Estimates of Annualized Cost to the Government

CMHS has planned and allocated resources for the management, processing and use of the collected information in a manner that shall enhance its utility to agencies and the public. Including the Federal contribution to local grantee evaluation efforts, the contract with the contractor, and Government staff to oversee the evaluation, the annualized cost to the Government is estimated at \$1,674,392. These costs are described below.

Assuming an annual cost of no more than 20% of grant awards for performance measurement and assessment, the annual cost for the BHTCC grant level is estimated at \$69,628. These monies are included in the grant awards. Each SE State grant allocates up to 20% of the total award and 15% of each subgrant award (to 2 local behavioral health agencies) for data collection, performance measurement, and performance assessment for an annual total of \$256,000 per SE grantee. It is estimated that participation in the CSE will require 20% of grant funds set aside for these purposes.

SAMHSA funded the CSE contract to conduct the evaluation for 17 BHTCC and 7 SE grantees for 5 years (i.e., base year and 4 option years) at a value of \$ \$4,935,908. Assuming that all option years are funded, the estimated average annual cost of the contract will be \$987,182. This covers expenses related to developing and monitoring the CSE including, but not limited to, developing the evaluation design and instrumentation; developing training and TA resources (i.e., manuals, training materials, etc.); conducting in-person or telephone training and TA; monitoring of grantees; traveling to grantee sites and relevant meetings; and analyzing and disseminating data activities. In addition, these funds will support the development of the web-based data collection and management system and fund staff support for data collection. It is estimated that CMHS will allocate 0.25 of a full-time equivalent each year for Government oversight of the evaluation. Assuming an annual salary of \$80,000, these Government costs will be \$20,000 per year.

### 15. Changes in Burden

This is a new data collection.

## 16. Time Schedule, Publication, and Analysis Plans

### a. Time Schedule

The time schedule for implementing the CSE is summarized in Exhibit 12. A 3-year clearance is requested for this project.

**Exhibit 12. Time Schedule**

Activity	Timeframe
Begin data collection for 17 BHTCC and 7 SE grantees	1 month after OMB clearance (expected April 2016)
Biannual Program Inventory – Baseline <ul style="list-style-type: none"> <li>▪ BHTCC grantees complete the BPI-BHTCC</li> <li>▪ SE grantees complete the BPI-SE</li> </ul>	May 2016
Begin data abstraction for the 18-Month Tool <ul style="list-style-type: none"> <li>▪ 17 BHTCC grantees begin completing the 18-Month Tool for program participants (ongoing)</li> </ul>	May 2016
Begin data abstraction for BHTCC Comparison Substudy <ul style="list-style-type: none"> <li>▪ 2 BHTCC grantees begin completing the Comparison Substudy Tool and 18-Month Tool (ongoing)</li> </ul>	July 2016 (ongoing)
KIIs and Employment Needs FGs – Administration 1 <ul style="list-style-type: none"> <li>▪ Conduct SLA KIIs with BHTCC stakeholders</li> <li>▪ Conduct SSA KIIs and ENFGs with SE stakeholders</li> </ul>	May-August 2016
Concept Mapping Exercise #1 – Local Concept Maps	May 2016 – April 2017
Biannual Program Inventory #2 <ul style="list-style-type: none"> <li>▪ BHTCC grantees complete the BPI-BHTCC</li> <li>▪ SE grantees complete the BPI-SE</li> </ul>	October 2016
Biannual Program Inventory #3 <ul style="list-style-type: none"> <li>▪ BHTCC grantees complete the BPI-BHTCC</li> <li>▪ SE grantees complete the BPI-SE</li> </ul>	April 2017
Biannual Program Inventory #4 <ul style="list-style-type: none"> <li>▪ BHTCC grantees complete the BPI-BHTCC</li> <li>▪ SE grantees complete the BPI-SE</li> </ul>	October 2017
Concept Mapping Exercises #2–4: Keys to Recovery Maps	March 2018 – July 2018
Biannual Program Inventory #5 <ul style="list-style-type: none"> <li>▪ BHTCC grantees complete the BPI-BHTCC</li> <li>▪ SE grantees complete the BPI-SE</li> </ul>	April 2018

Activity	Timeframe
KIIs and Employment Needs FGs – Administration 2 <ul style="list-style-type: none"> <li>▪ Conduct SLA KIIs with BHTCC stakeholders</li> <li>▪ Conduct SSA KIIs and ENFGs with SE stakeholders</li> </ul>	March 2018 – July 2018
Biannual Program Inventory #6 <ul style="list-style-type: none"> <li>▪ BHTCC grantees complete the BPI-BHTCC</li> <li>▪ SE grantees complete the BPI-SE</li> </ul>	October 2018
Biannual Program Inventory #7 <ul style="list-style-type: none"> <li>▪ BHTCC grantees complete the BPI-BHTCC</li> <li>▪ SE grantees complete the BPI-SE</li> </ul>	April 2019

## **b. Publication Plans**

Dissemination of evaluation findings across the life of the CSE to SAMHSA, HHS, and key stakeholders will be a priority. Reporting and dissemination will include quarterly progress reports, annual evaluation reports, annual briefings on evaluation findings, and ad hoc reports and presentation products (via special requests). The contractor also will submit a State-level grantee report on Year 1 activities for the BHTCC. Although the contractor is not contractually required to publish findings from the CSE in peer-reviewed articles, examples of journals that would be appropriate vehicles for publication include the following:

- Community-Based Public Health: Policy and Practice
- Community Mental Health Journal
- Criminology
- Evaluation and Program Planning
- Journal of Disability Policy Studies
- Journal of Rehabilitation
- Journal of Substance Abuse Treatment
- Journal of Vocational Rehabilitation
- Justice Quarterly
- The Justice System Journal

## **c. Data Analysis Plan**

Data collected through the CSE components will be analyzed to address key evaluation questions (see Section A.2.a). Analysis plans for each study are described below.

### **1) BHTCC Study**

#### **BHTCC System Change Substudy**

SLA analyses will focus on characterizing service expansion and enhancement over the grant cycle, as well as the level and characteristics of the collaboration, particularly, between the local courts and the local community treatment and recovery providers. Consistent with the focus of

the study and taking into account the limited number of grantees, the SLA quantitative analysis will focus on providing an accurate and rich description of system processes resulting from the implementation of the programs, rather than emphasizing the identification of statistically significant differences or the use of elaborate statistical models. A full understanding of these system-level processes will be reached through the systematic analysis of qualitative information particularly on the program stakeholder's perception of results, as well as barriers and facilitators of success.

Information gathered through SLA will be used to describe the developmental status of systems and to examine differences among communities in their system development. Quantitative data are determined from items linked to framework indicators. System-generated variables from CSEDS will allow the tracking of when infrastructure development, activities, coordination of services, and the provision of direct services are first entered into the BPI. These data along with mean ratings will be used to examine how systems develop, are developing, and are sustaining their program on the basis of key system principles. Together, these data will allow for the understanding of how the BHTCC programs develop over time (i.e., What are the first things most BHTCC grantees do? What are the common activities implemented in the second year of the grant? What are the developments that occur later in the funding period? What are staff attitudes about collaboration, the value of TIC, and evidence-based practices?).

Qualitative data will provide in-depth information useful for interpreting quantitative findings, describing which features of the system enhance its development, and identifying key indicators that facilitate successful program implementation. After the KIIs and data abstraction, data collectors on the evaluation team will collaborate to write a descriptive, comprehensive, and synthesized report of the findings from the data collected. Thematic analyses of qualitative data in the narrative reports will be conducted using ATLAS.ti software according to a set of defined codes that are assigned to segments of the text. Data collected through the BPI, concept mapping, and KIIs will be triangulated to support a more thorough understanding of system change mechanisms. Results will be compared and contrasted with results of the SLA measure related to the level of grantee program development in relation to key system principles and elements of the core evaluation data, including consumers served, services and supports provided, ability to engage multiple partners, and collaborative activities. The SLA KII guides involve questions specifically designed to elicit information about fidelity to the CSP model across BHTCC grantees. Qualitative analysis will examine the level of fidelity to these principles within each grantee's service implementation through content analysis, code application and consensus-building across the coding team.

### ***Fidelity***

Once the interviews have been thematically coded, members of the qualitative analysis team will review data from all respondents within each grantee to assess agreement across respondents (e.g., if consumers and court personnel agree on the extent to which BHTCC services are culturally relevant), and the overall perceived fidelity to each principle. Then, the qualitative team will compare across grantees to determine the most appropriate scoring system in order to maximize variation. The form that the scoring system takes will depend upon the content of the qualitative data. For example, if some CSPs are met by all grantees, while other CSPs are met by some grantees but not others, scoring would involve classifying grantees into two groups: those

who incorporate the principle and those who do not. Alternatively, if all grantees are working towards the CSPs but they differ substantially in the progress they have made towards achieving the principles, scoring would consist of a Likert scale where grantees are scored according to the amount of success they have achieved in incorporating each principle. Fidelity to the CSPs will be examined in KII data from Year 2 and Year 4 to explore the possibility of examining change over time, in the event that grantees show progress in the CSPs throughout the course of the grant. The qualitative analysis team will work in collaboration with the quantitative analysis team during the scoring process to ensure the data are integrated across components. For more information on how these scores will be used quantitatively, see *Linking Data from Two Levels of the BHTCC Study*.

### **Concept Map Generation**

Information generated through the facilitated brainstorming and subsequent sorting and rating procedures for concept mapping will be entered into Concept Systems software. Multidimensional scaling and cluster analysis will be applied to generate a series of concept maps that identify the most important BHTCC components that support recovery from the perspectives of BHTCC stakeholders. Through the analysis, themes of recovery support will be generated. The final number of general themes or “clusters” in the concept map will be determined by the evaluation team in conjunction with SAMHSA and with input and interpretation from our BHTCC grantees, taking into account the conceptual ideas and the average ratings of each cluster (i.e., grouping of concepts related to BHTCC components that support recovery). Concept maps will reduce the brainstormed ideas (i.e., those generated through the facilitated training session) to three to six groups or conceptual themes.

Concept maps on priority supports for recovery will be produced in Years 2 and 3 of the evaluation and will be site specific. These maps will identify the most important aspects of the BHTCC that support recovery (from varied BHTCC perspectives). Program sites can use these maps to refine and improve program delivery to ensure these key recovery supports are in place and receive continued support, as well as that additional focus and attention are provided to those supports that peers and consumers find most important. In Year 4 of the evaluation, the final concept maps will be developed through cross-site analysis of mapping activities to yield Keys to Recovery maps that identify core components of BHTCC to support recovery within BHTCC roles across BHTCC grantees. Thus, concept maps will be generated for court personnel (judges, attorneys, administrators), treatment providers (case managers, service/treatment providers), and consumers (participants, peer supports, families). These latter maps can be used to identify key recovery supports from various BHTCC program stakeholders that can inform SAMHSA of continued and needed resources to ensure delivery models that contain these key supports.

### **BHTCC Consumer Outcome Substudy**

To determine the outcome of program participation among individuals with behavioral health conditions served by the BHTCC, ICF will rely on client-level data from existing performance monitoring requirements. In addition, information collected through 18-Month Client-Level Abstraction Tool will afford the assessment of long-term outcomes related to recidivism (rearrests, recommitment, and revocations). To take advantage of the information, specialized analytical techniques will be needed. These techniques take into account both the longitudinal

and hierarchical organization of the data. Furthermore, it is anticipated that missing data, particularly arising from attrition, will require specialized treatment.

For the COS, two approaches are proposed that are appropriate to the analysis of longitudinal data: (1) “marginal” models using Generalized Estimating Equations (GEE), and (2) mixed-effect models (also called hierarchical, or multilevel models). Both approaches are adequate in the presence of repeated observations from the same individuals that are not necessarily independent. Both approaches can be used to test the existence of change over time in the variables of interest (mental health issues, employment status, time in prison) while accounting for the possible correlation over time within individuals. In addition, and unlike paired *t* test and other techniques for the analysis of “balanced” experiments, the proposed approaches can use all the available information (not only cases with complete follow-up) and account for observed differences between cases with complete and incomplete follow-up information (such as differences in demographic characteristics).

### ***Longitudinal and Multilevel Data***

Some basic characteristics that must be taken into account in the analysis. Essentially, a set of measures is repeatedly obtained over time from each client. In turn, clients receiving service from certain organizational entities (e.g., a mental health agency) presumably shared characteristics. These features introduce correlation between observations that turns inadequate the most classical analytical approaches, such as ordinary regression or analysis of variance.

Several alternatives exist to deal with the longitudinal correlation, including, in particular, the use of GEE or the use of mixed-effect models (also called multilevel or hierarchical models). Mixed-effect models involve more realistic assumptions about patterns of missing data (see below), but are also more demanding in terms of parametric assumptions. GEE, on the other hand, can be considered a semiparametric approach, in the sense that a full specification of the correlation structure is only needed on a “provisional” basis, while inference remains robust to these specifications.

The correlation of observations among clients within the same provider organizations presents additional challenges. The limited number of grantees favors inferential approaches that consider each grantee as a stratum, rather than a cluster (i.e., a unit from sample of a larger set of potential grantees).<sup>b</sup> The influence of client’s heterogeneity across grantees on their performance can still be explored, particularly, through the inclusion of grantee level fixed-effects.

### ***Missing Data***

Missing data are a pervasive issue in evaluation research, particularly in longitudinal studies. It is anticipated this will be an important issue in the context of longitudinal client-level information. For example, the ATCC evaluation reports that 24% of participants with baseline information did not have 6 months of follow-up information (Stainbrook & Hanna, 2014).

Traditional analytical techniques such as paired *t* test and others developed for the analysis of balanced experiments cannot handle cases with missing information. The analysis proceeds by simply discarding these incomplete observations (restricting the analysis to the subsample with

---

<sup>b</sup> While both GEE and mixed-effect models can deal with cross-sectional correlation, they require a large number of clusters (e.g., above 50) to provide valid inference, more clusters than are anticipated in the present application.

complete follow-up information). Although not always acknowledged, this strategy is inefficient (in the sense that it does not use all the information available) and relies on very strong assumptions about the missing data mechanism. In particular, it would be a valid strategy only if participants with missing follow-up information do not differ systematically from those with complete information.

In contrast, current longitudinal data analysis techniques, as those proposed for this evaluation, can handle missing data more efficiently, without discarding cases with missing follow-ups. They also can incorporate more realistic assumptions about the reasons for the missing data. Specifically, the two techniques proposed, “marginal” models fitted with GEE and mixed-effect models, can use the available information from all participants, regardless of the number of follow-ups completed.<sup>c</sup> In the case of mixed-effect models, systematic differences between participants with complete and incomplete follow-up information are readily taken into account, including differences in baseline values of the response variable (such as differences in mental health or substance use problem or employment at baseline). In the case of GEE, additional adjustments are required before the main analysis is performed to address these potential differences. It is proposed, in particular, to rely on inverse probability weights developed by separately modeling the propensity of each observation to be missing as a function of the observed covariates. All the approaches described can be said to rely on ‘imputation’, in the sense that observed data is used to infer something about the data that is not available. Unlike traditional single imputation, however, these methods take into account the uncertainty associated with this inferential step.

### ***Long-Term Outcomes***

The COS also will incorporate secondary information on a limited set of outcomes collected using the 18-Months Client-Level Abstraction. This dataset will contain information on every rearrest, recommitment, and revocation occurring during the 18-month period since program intake, including the date of occurrence. While it is possible to divide this follow up period into discrete intervals (such as six months periods); a more natural approach would involve focusing on the time to the first event and between subsequent events directly. This type of analysis is known as survival analysis. Semi-parametric models for survival analysis, such as Cox regression, have a long tradition, particularly on biostatistics. For the case of recurrent events, extension that account for possible longitudinal correlation within individual are available via robust inference (GEE) or using mixed-effect models (known also as frailty models in survival analysis). Comparing outcome across subgroups defined by client characteristics (e.g. gender, race-ethnicity) will be possible. In addition, and thanks to the source of the data and data collection procedure, comparison of outcomes between subjects graduating from the program with those who did not complete the program will be particularly informative. It is not anticipated that incomplete follow up information will be related with program engagement or program completion, as could be the case for data collection procedures relying on an interview with the participant.

---

<sup>c</sup> This is a data imputation method that uses existing data to fill in missing observations with values predicted by imputation model.

## **BHTCC Comparison Substudy**

The BHTCC CS will incorporate information from non-BHTCC participants from two sites—screened eligible but were not included and did not participate in the BHTCC—who otherwise would have participated, given limits on space. While it is proposed that control cases should be recruited among subjects who are eligible to receive program services, it is not anticipated that random assignment will be used to determine participation. As a consequence, participant and control cases may differ in many relevant characteristics save for eligibility criteria.

The most widespread approach in observational studies to control for measured confounding variables is to include as many as possible in a linear regression. This strategy has some important limitations. A practical limitation is given by the number of parameters, which is possible to estimate with a given sample. A more important limitation relates to the need to specify the shape of the relationship between the confounding variables and the outcome. Since previous knowledge is not always available or specific enough, these specifications tend to be based on assumptions, and the conclusions of the analysis are dependent on the tenability of such assumptions. Propensity score matching, tackles the difference between intervention and control samples before the main analysis, modifying the sample so as to increase the comparability right from the onset. The approach generally relies on an auxiliary regression (typically a logistic regression): an indicator of group membership is regressed on a set of measured confounding variables. The results from this auxiliary regression are then used to adjust the sample. The adjustment can be implemented in different ways, such as dropping certain observations or weighting observations. The aim, however, remains the same: after the adjustment, intervention and control samples should become similar regarding the set of confounding variables (i.e., the groups should be balanced on those covariates).

In some cases, the application of propensity score techniques relies on the availability of covariate information on a large pool of potential control cases, for example, 2- to 4 times the size of the participants' sample. In this situation, propensity score matching techniques can be used to select a subsample of the most similar cases on the basis of the observed covariates. While such a scenario offers many advantages, propensity score techniques can also be used in situations in which the control sample is relatively small, for example, of the same size than the participant sample. Specifically, it is proposed to rely on subclassification or stratification of the propensity score (Rosenbaum, & Rubin, 1984). With this technique, a limited number of subclasses are identified (usually using the quintiles of the estimated propensity score) with relatively similar propensities. The number of participants and control cases in each subclass are not necessarily similar; for example, quite typically, there are fewer control cases than participants in the subclass with the highest propensity. Estimation of the difference in change is performed separately for each subclass. Overall, results are obtained by averaging subclass results using the proportion of participants in each subclass as weights. The technique is akin to *matching with replacement* which is the recommended approach when there are very few relevant comparison units (Dehejia & Wahba, 2002). While this scenario is less ideal than the initial one, propensity score techniques still offer advantages over traditional covariate adjustment using multiple regression techniques.

## **Linking Data from Two Levels of the BHTCC Study**

A two-pronged strategy will be used to explore the linkage between system-level variables (derived from sources such as the SLA KIIs or the BPI) and the individual-level outcomes (derived from extant client-level performance monitoring data or 18-Month Data Abstraction Tool).

- Site-level measures of performance (e.g. proportion of clients with a rearrests, recommitment or revocation) adjusted by differences in the composition of the client in each site (particularly baseline criminogenic risk) can be estimated with reasonable precision taking advantage of the moderate sample size of clients by site.
- Whenever feasible, quantitative ordinal scores representing the level of fidelity to community support principles on various domains will be derived from the quantitative and qualitative analysis in SLA.

SAMHSA acknowledges the analytical challenges involved in the proposed design, because of the numerous, varied, and often unmeasurable factors linking system-level changes to client-level outcomes. To overcome these challenges, an accurate and thorough description of the processes required to build and sustain the programs and how the decisions made at the systems level about service delivery, service array, and involvement of key stakeholder organizations will be provided. To further address this challenge, information collected directly from program participants will be used, including the types of service they are receiving, clinical and behavioral functioning, involvement in criminal behavior, and overall satisfaction with program participation.

Analysis of existing and newly collected data will determine system-level changes, as well as client-level outcomes, to examine differences across subgroups of grantees on the basis of adherence to program principles and/or implementation strategies (e.g., financing, workforce development, collaboration, partnership). For example, examining the comparative influences of the various approaches sites have to implementation (e.g., service expansion/enhancement, screening and assessment practices, use of trauma-informed care and system development [quantified through the SLA] on client-level outcomes).

Implementation approaches used by communities or groups of communities have differential impact on program participants or subgroups of program participants also will be explored. By disaggregating the samples on various community (geographic location, strategy) and client-level characteristics (gender, age, race/ethnicity, veteran status), it is possible to investigate the relationship among implementation strategies, service utilization patterns, and other client outcomes over time (e.g., clinical and functional outcomes, satisfaction with service experience).

A challenge to analyzing system-level variables in conjunction with individual-level outcomes is the relatively small number of sites implementing each program, which limits the statistical methods that can effectively estimate significant differences. While the two approaches proposed for analyzing individual-level data in the COS can incorporate site-level covariates, they rely on large numbers of grantees to provide valid inference at that level. Instead, SAMHSA proposes to aggregate individual-level outcomes at the grantee level, after accounting for differences in the mix of clients. This alternative result in valid inference; however, this approach is not anticipated to be particularly powerful given the small number of sites. Nevertheless, the differences in average outcome by site can be related with system-level variables through qualitative analysis

supported by straightforward techniques, such as cross-tabulations, to suggest rather than test hypothesis.

## **2) SE Study**

### **SE System Change Substudy**

The analysis of the SE SCS will focus on characterizing infrastructure development, specifically, policy change and capacity development through the implementation of training activities, as well as sustainability planning. Consistent with the focus of these studies and taking into account the limited number of grantees in both programs, the system-level quantitative analysis will focus on providing an accurate and rich description of multi-level changes resulting from the implementation of the project, rather than emphasizing the identification of statistically significant differences or the use of elaborate statistical models. Further, a full understanding of these multi-level changes will be reached through the systematic analysis of qualitative information, particularly on the program stakeholder's perception of results, as well as barriers to and facilitators of success.

Quantitative and qualitative data will be used to describe the developmental status of systems; furthermore, data will be used to examine differences among communities in their system development. Quantitative data are derived from Biannual Program Inventories using items linked to framework indicators. System-generated variables from CSEDS will allow for the tracking of when infrastructure development and planning and various activity implementation is first entered into the BPI. Time-based analysis, along with mean ratings and additional quantitative analysis, will examine how systems develop, are developing, and are sustaining their program based on key system principles. This analysis allows us to understand how a SE project develops over the grant period (i.e., What are the most commonly developed/implemented activities during start-up? What are common activities in the second grant year?).

Qualitative data will provide in-depth information that can be used for interpreting quantitative findings at the state level, describing which features of the system enhance its infrastructure, and identifying facilitators and barriers of successful program scale-up and sustainability. Once interview data are collected and transcribed, members of the evaluation team will collaborate to write a descriptive, comprehensive, and synthesized report of the findings from the data collected for each state. These thematic analyses of qualitative data are conducted from the narrative reports using ATLAS.ti, a qualitative analysis software, according to a set of defined codes that are assigned to segments of the text. Data collected through the document review, program inventory, ENFGs, and SSA KIIs will be triangulated to support a more thorough understanding of scalability and sustainability mechanisms. After developing a comprehensive understanding of the themes within each state, the evaluation team will engage in cross-state comparisons with the goal of identifying patterns in the motivations, facilitators, and barriers for scale-up and sustainability among SE grantees.

Further, the perspectives of employment specialists and employers will be incorporated through the analysis of ENFG data. Qualitative analysis will be used to gain a comprehensive understanding of and identify key themes and trends within the perspectives of employment specialists and employers related to training, employer engagement, facilitators and barriers to

program participation, the factors most critical to sustaining consumer and employer participation in the SE program, and overall program recommendations. Also summarized will be employer perceptions about their experience being recruited by SE program staff, the process of hiring SE participants, the continued involvement of job coaches once a SE program participant is hired, as well as barriers and facilitators to the employer's participation.

### **SE Consumer Outcome Substudy**

To determine the outcome of program participation among individuals with behavioral health conditions served by the SE programs, SAMHSA will rely on the extant client-level performance monitoring data. The existing performance monitoring system for SE includes a limited number of program-specific, client-level outcome measures at follow-up, such as employment status and receipt of competitive wages, beyond more general functional and clinical outcomes. Additional measures for job trajectory, job retention, and wages trajectory are not currently collected, but could be incorporated in the analysis if additional program-specific measures beyond those required for all programs are incorporated into performance monitoring data.

To take advantage of the information, specialized analytical techniques will be needed. These techniques take into account both the longitudinal and hierarchical organization of the data. Further, it is anticipated that missing data, particularly arising from attrition, will require specialized treatment. Two approaches were proposed that are appropriate to the analysis of longitudinal data: (1) "marginal" models using GEE, and (2) mixed-effect models (also called hierarchical, or multilevel models). Both approaches are adequate in the presence of repeated observations from the same individuals that are not necessarily independent. Both approaches can be used to test the existence of change over time in the variables of interest (e.g., mental health issues, employment status, receipt of competitive wages) while accounting for the possible correlation over time within individuals. In addition, and unlike paired *t* test and other techniques for the analysis of "balanced" experiments, the proposed approaches can use all the available information (not only cases with complete follow-up) and account for observed differences between cases with complete and incomplete follow-up information (i.e., differences in demographic characteristics).

### ***Longitudinal and Multilevel Data***

The existing client-level performance monitoring systems have some basic characteristics that must be taken into account in the analysis. Essentially, a set of measures is repeatedly obtained over time from each client. In turn, clients receiving service from certain organizational entities (e.g., a mental health agency) presumably share characteristics. These features introduce correlation between observations which renders inadequate the most classical analytical approaches, such as ordinary regression or ANOVA.

Several alternatives exist to deal with the longitudinal correlation including, in particular, the use of GEE or the use of mixed-effect models (also called multilevel or hierarchical models). Mixed-effect models involve more realistic assumptions regarding patterns of missing data (see below), but are also more demanding in terms of parametric assumptions. GEE, on the other hand, can be considered a semiparametric approach, in the sense that a full specification of the correlation structure is only needed on "provisional" basis, while inference remains robust to these specifications.

The correlation of observations among clients within the same provider organizations presents additional challenges. The limited number of grantees favors inferential approaches that consider each grantee as a stratum rather than a cluster (i.e., a unit from sample of a larger set of potential grantees).<sup>d</sup> The influence of clients' heterogeneity across grantees on their performance can still be explored, particularly, through the inclusion of site-level fixed-effects.

### ***Missing Data***

Missing data are a pervasive issue in evaluation research, particularly in longitudinal studies. It is anticipated that this will be an important issue in the context of longitudinal, client-level information collected through performance monitoring systems. For example, the ATCC evaluation reports that 24% of participants with baseline information did not have 6 month follow-up information (Stainbrook, & Hanna, 2014).

Traditional analytical techniques such as paired *t* test and other techniques developed for the analysis of balanced experiments cannot handle cases with missing information. The analysis proceeds by simply discarding these incomplete observations (i.e., restricting the analysis to the subsample with complete follow-up information). Although not always acknowledged, this strategy is inefficient (i.e., it does not use all the information available) and relies on very strong assumptions about the missing data mechanism. In particular, it would only be a valid strategy if participants with missing follow-up information do not differ systematically from those with complete information.

In contrast, current longitudinal data analysis techniques, as those proposed for this evaluation, can handle missing data more efficiently, without discarding cases with missing follow-ups. They also can incorporate more realistic assumptions about the reasons for the missing data. Specifically, the two techniques proposed, "marginal" models fitted with GEE and mixed-effect models, can use the available information from all participants, regardless of the number of follow-ups completed. In the case of mixed-effect models, systematic differences between participants with complete and incomplete follow-up information are readily taken into account, including differences in baseline values of the response variable (such as differences in mental health or substance use problem or employment at baseline). In the case of GEE, additional adjustments are required before the main analysis is performed to address these potential differences. It is proposed, in particular, to rely on inverse probability weights developed by separately modeling the propensity of each observation to be missing as a function of the observed covariates.

### **Linking Data from Two Levels of the SE Study**

It is proposed to explore the linkage between system-level variables (derived from either the SSA KIIs, BPI, or the Employment Needs FGs) and the individual-level outcomes (derived from the existing performance monitoring systems) using a two-pronged strategy. On the one hand, site-level measures of performance (e.g., percentage of clients employed six months after enrollment) adjusted by differences in the composition of the caseload in each site can be estimated with reasonable precision taking advantage of the moderate sample size of clients by site. On the other hand, whenever feasible, quantitative ordinal scores representing the level of fidelity to

---

<sup>d</sup> While both GEE and mixed-effect models can deal with cross-sectional correlation, they require a large number of clusters (e.g., above 50) to provide valid inference, more clusters than are anticipated in the present application.

community support principles on various domains will be derived from the quantitative and qualitative analysis in SCS based on the SSA KIIs, BPI, and Employment Needs FGs.

The contractor acknowledge the analytical challenges involved in the proposed design, because of the numerous, varied, and often unmeasurable factors linking system-level changes to client-level outcomes. It is proposed that providing an accurate and thorough description of the processes required to build and sustain the programs and how the decisions made at the state level about service delivery and service array (from the SSA KIIs and the BPI) and involvement of key stakeholder organizations (in particular employment specialists and employers through the Employment Needs FGs) is the first step to overcoming this challenge. Existing and newly-collected data will be used to conduct analyses of system-level changes to examine differences across subgroups of grantees on the basis of adherence to program principles and/or implementation strategies (e.g., financing, workforce development, collaboration, partnership). As an example, the comparative influences of the various approaches that grantees have to implementation (e.g., cross-agency integration, funding strategies, and sustainability planning) and system development (quantified through the SSA KIIs) on client-level outcomes will be examined.

The contractor will explore whether implementation approaches used by communities or groups of communities have differential impact on program participants or subgroups of program participants. The moderate sample size of clients per grantee, should afford relatively precise estimates of site ‘performance’ disaggregated by client-level characteristics (e.g., gender, age, race/ethnicity). The limited number of sites, on the other hand, should limit the possible disaggregation community-level characteristics. The comparison across sites, nevertheless, can suggest patterns in the relationship among implementation strategies, service utilization, and other client outcomes over time (e.g., clinical and functional outcomes, satisfaction with service experience).

## **17. Display of Expiration Date**

All data collection instruments will display the expiration date of OMB approval.

## **18. Exceptions to the Certification Statement**

This collection of information involves no exceptions to the Certification for Paperwork Reduction Act Submissions.