# Evidence-Based Practice in Community-Based Social Work: A Multi-Media Strategy

Contract HHSN271200800027C Final Report





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Contract HHSN271200800027C Final Report October 7, 2009 Center for Social Innovation Newton, Massachusetts

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## **Executive Summary**

In response to the pressing need for wider implementation and dissemination of evidence-based practices (EBPs) in homeless service settings, the Center for Social Innovation, LLC (C4SI) responded to a request for proposals from the National Institute of Mental Health (NIMH) to provide webbased training for social workers on EBPs. The Small Business Innovation Research (SBIR) contract (HHSN271200800027C) was awarded in September 2008, and Phase One of the project was completed in September 2009.

For the Phase One pilot, we selected Critical Time Intervention (CTI). CTI is listed on the National Registry of Evidence-Based Programs and Practices (www.nrepp.samhsa.gov). It is one of the few EBPs designed specifically for people experiencing homelessness. While NIMH has supported seminal research evaluating the impact of CTI on people transitioning from shelters into housing, a gap persists between the growing body of evidence supporting the efficacy of CTI and its widespread use in homeless service settings. To begin bridging this gap, C4SI partnered with the nation's leading CTI researchers, Dan Herman and Sally Conover at Columbia University, to design and implement a web-based training curriculum.

We recruited 27 participants for the pilot study. Participants represented 21 agencies in 12 states, and included 9 individuals in each of the following categories:

CLINICAL SOCIAL WORKERS
SOCIAL WORK SUPERVISORS
OTHER SOCIAL SERVICES STAFF (outreach workers, peer counselors, case managers)

Our project team consisted of a principle investigator, two CTI experts, a distance education specialist, a social worker with extensive experience in the homelessness field, a graphic/web designer, and a project assistant. The work was guided by an advisory group comprised of academic and clinical social workers, consumers, trainers, and distance educators (see Appendix 1).

The team developed an eight-week curriculum. We divided the knowledge and skills associated with CTI into four two-week modules:

Module 1. Basics of CTI Module 2. The CTI Team Module 3. CTI in the Real World

Module 4. Implementing CTI in Your Agency

Each module consisted of five core components:

- 1. Self-paced module lesson
- 2. Online discussion forum
- 3. Live webcast
- 4. Optional virtual office hours
- 5. Assignment and quiz

Throughout the course, we utilized a case-based approach to learning. We developed the story of "Michael" and used this case to emphasize core elements of CTI. This report includes Michael's story.

From March 16-May 19, 2009 we tested the online course, providing participants with technical training and support, coaching and feedback on content, and opportunity for peer-to-peer interaction. By the time they had completed the course, participants not only had the opportunity to gain new knowledge and skills related to CTI, but also had completed an implementation plan for developing a CTI program in their communities.

Evaluation of Phase One involved a series of pre- and post-course written evaluations and telephone interviews with each participant to measure:

**SATISFACTION**—overall experience with the web-based CTI course, materials, and instructors:

**LEARNING**—knowledge gained based on participation in the course;

**BEHAVIOR**—extent to which new knowledge and skills have been applied to an individual's practice; and

**RESULTS**—whether participants are making efforts to implement CTI in their organizations and communities.

## Key findings:

93%

of participants completed the course

shared what they learned about CTI with their colleagues within 30 days of

**72%** affirmed or increased their interest in learning EBPs

completing the course

stated that the course changed the way they work with people experiencing homelessness

actively began to implement CTI in their agencies within 30 days of completing the course

While our results are based on a small-scale pilot of the intervention, they suggest that our overall approach to the course had positive impact. Our approach combined depth of knowledge among trainers, skills-based and practical approaches to learning, new technologies, and significant opportunity for social networking and small group work. This approach is based on the realities of adult learning that people learn best not from isolated, one-shot training, but from sustained contact with new material and with peers who are also attempting to apply new knowledge and skills to their work in the real world. The "community of practice," which emerges from a course such as this, is as important as content or technology in determining the longterm impact of the intervention.

The purpose of this report is to describe the web-based CTI course in detail, outline findings from the evaluation, and explore implications for Phase Two of the project.



Michael is 57 years old and has been homeless for almost 15 years. He has moved from streets to camps to abandoned buildings and shelters when it's too cold to stay outside. He doesn't like being around crowds of people and doesn't like being told to stand in line and wait. He has been staying at the same shelter for several weeks because at least he is out of the weather, doesn't have to watch his back every minute, and can lock up his things.

When he was younger, Michael was in the Army, but things didn't work out so well. He went to Vietnam for one tour, but before his second tour, he was drinking a lot and getting into fights—with fellow soldiers, with guys in bars, with girlfriends. Finally, in a fit of rage he punched out his sergeant and was dishonorably discharged. An Army psychiatrist told Michael that he was "a problem drinker" and that he was "antisocial." In the years after the war, he picked up other labels: bipolar, PTSD, drunk, bum, lazy, crack-head, homeless.

Long ago he burned bridges with his mother and his sister, borrowing money that he never paid back, not always shooting straight about where he was living or working. They still live across town, but because Michael has had so many relapses and so many angry tirades, they've had enough. They will occasionally take his calls, but nothing more. No money, no rides, no place to crash.

Michael goes to the free clinic every once in a while—for a bad cut or an infected foot. But even though he knows he has high blood pressure and that his pop died young of a heart attack, he doesn't take meds and doesn't go to the doctor unless he absolutely has to. And psych meds? Forget it. Bipolar or not. PTSD or not. No meds. Michael's been in and out of the psych hospital so many times, he's lost count. He's had psychiatrists and case managers enough for 10 lives.

He still drinks everyday, but sobers up enough to get into the shelter most of the time. He's not using crack anymore ("that stuff will kill you"). He tried detox, AA, halfway houses, all of it. Some things worked for a while, but nothing lasted.

But he's sick of living on the streets. Tired of being tired. Tired of getting mugged. Tired of hoofing it all over town just to get a meal and a pair of socks. Being at the shelter has given Michael a little time to stop and think. And now he has a real opportunity. A couple of days ago in the courtyard he was talking with a case manager about an opening at a new housing complex—for people to get off the streets, pay a third of their income for rent, and have their own sweet little pad with a kitchenette. After so long, it's starting to sound pretty nice...a place of his own with a couple of pots and a rice cooker and a poster of John Coltrane on the wall...pretty nice.

## Specific Aims

In September 2009, the Center for Social Innovation began a Small Business Innovation Research (SBIR) contract supported by the National Institute of Mental Health. The project, Evidence-Based Practice in Community-Based Social Work: A Multi-Media Strategy, involved six specific aims:

- Develop and evaluate prototype training manuals and curricula that are tailored to the specific needs of social work practitioners.
- Develop and evaluate interactive programs designed to be adjunctive and/or stand alone modules to help train social work clinicians in delivering an established evidence based therapy intervention.
- 3. Develop and evaluate companion web-based support (e.g., online registration for credit, updates, help desk, tests and resources).
- 4. Develop evaluation criteria (satisfaction, intent to use, knowledge, attitudes) and strategy for assessing the program/tools.
- 5. Develop standards for certification.
- 6. Develop and evaluate follow-up/refresher training modules.

This section of the report outlines our response to these specific aims. Action steps and time line can be found in the Project Work Plan (Appendix 2). Because the work evolved quickly over the course of the project, the team worked with the NIMH Project Officer to adapt the work plan to meet the needs of participants and realities of the time line. For example, due to the need for 90-day follow up interviews with participants, we agreed not to develop a refresher module during Phase One, but instead to focus on meaningful evaluation of progress towards implementing Critical Time Intervention. With the exception of aim six (follow-up/refresher training modules), all other specific aims were achieved and are described below.

#### The Problem

Evidence-based practices are not fully utilized in homeless service settings. Yet this is where they are often most needed. People experiencing homelessness may suffer from mental illness, addiction, trauma, and medical problems. Practitioners serving them work in shelters, street outreach settings, drop-in centers, and other sites, often isolated from strong peer support and mentoring. Continuing education can be difficult to access due to limited resources for travel and staff coverage. Burnout is common. Turnover is high. Given the recent economic recession, providers are being asked to do more with fewer resources. In the face of these challenges, the need for evidence-based interventions is tremendous. Yet traditional one-shot training through conferences and workshops have had limited impact on dissemination and uptake of EBPs.

## Our Response

New technologies and emerging approaches to online learning have expanded the potential for training homeless service providers in EBPs and providing longer-term support as EBPs are implemented. Online training, however, has too often been limited to static, didactic modules that practitioners "go take," then complete a quiz and receive continuing education credits. Real knowledge acquisition and behavioral change are rare.

Our goal was to create a learning environment in which participants could learn from one another, not just from course materials or expert trainers. Building on the Community of Practice model (Lave and Wenger, 1991), we attempted to support "a group of people who share a concern or a passion for something they do, and who learn how to do it better as they interact regularly" (Wenger, 2006, para.3). Our vision is to foster communities of practices among homeless service providers around a range of EBPs. For this pilot project, we selected Critical Time Intervention (CTI).

#### Why CTI?

Critical Time Intervention is a time-limited case management model designed to support people who are transitioning from homelessness into housing. The ninemonth intervention has three phases, with clinical support tapering off as formal and informal supports in the community to grow. Practitioners work with clients on a focused set of issues, which may include mental health support, money management, and substance use issues. CTI was originally developed and tested by researchers and clinicians at Columbia University and New York State Psychiatric Institute with significant support from the National Institute of Mental Health and the New York State Office of Mental Health. The model is currently being broadly applied and tested in the U.S. and abroad. The body of evidence to support the effectiveness of CTI is growing, and CTI is now listed on SAMHSA's National Registry of Evidence-Based Programs and Practices (www.nrepp.samhsa.gov). Additional information about CTI is available at www.criticaltime.org.

To develop the web-based course described below, we partnered with CTI experts at Columbia University. Dan Herman and Sally Conover were instrumental in developing course materials, facilitating key components of the course, and providing ongoing support to course participants.

## Who Participated?

Center for Social Innovation staff actively recruited social workers and other social services staff serving homeless populations in agencies across the United States. The primary method of recruitment was a series of "email blasts" (see Appendix 3) sent to individuals who had participated in past C4SI trainings and others identified by the Advisory Group. Interested individuals were asked to provide contact information including job title and credentials, organization name and location, and a description of the population they serve. This initial outreach effort resulted in 200 applicants by the deadline, and more than forty others who sent inquiries after the deadline had passed. Applicants came from 109 agencies in 32 states.

> Nearly half of participants have been providing direct care to homeless populations for at least 5 years; the overall average was 5.4 years and ranged from less than one year to twenty years. The social work supervisor group had the least experience providing direct care to homeless persons (4 years, compared to clinical social workers with 6.3 years and other social services staff with 6 years). Work settings included clinics, day shelters and drop-in centers, transitional housing programs, mental health and substance use programs, veterans programs, prisons, home visiting programs, and domestic violence shelters. Roughly two-thirds of participants (n=17, 63%) work in agencies that require individuals to be currently homeless or at risk of homelessness to receive services. Nearly as many (59%) work in agencies that serve primarily homeless persons. One in five (22%) work in organizations that primarily serve individuals from rural areas or small towns.

## **Participant Characteristics**

#### N=27

14-27			
		#	%
Gender			
	Female	26	94
	Male	1	4
Ethnicity			
	White	18	67
Afric	an American	4	15
	Hispanic	3	11
	Asian	2	7
Direct Care to Populations (Y		ı	
		15	56
	ears–Career)		56 3Ø
	ears—Career) <5 Years	15	
Populations (Y	ears—Career) <5 Years 5-10 Years	15 8 4 ence in	30
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Populations (Y	ears—Career) <5 Years 5-10 Years 11+ Years Average experie	15 8 4 ence in	30
Populations (Y	<pre>ears—Career)     &lt;5 Years     5-10 Years     11+ Years Average experie direct care is 5.4</pre>	15 8 4 ence in 4 years	30 14
Populations (Y	<pre>&lt;5 Years      &lt;5 Years      5-10 Years      11+ Years Average experie lirect care is 5.4  t Role      &lt;5 Years</pre>	15 8 4 ence in 4 years	30 14
Populations (Y	<pre>cars—Career)     &lt;5 Years     5-10 Years     11+ Years Average experie lirect care is 5.4  t Role     &lt;5 Years     5-10 Years</pre>	15 8 4 ence in 4 years	30 14 56 30

Figure 1

CTI training participants were selected from the original list of 200 applicants through a multistage, systematic random sampling process. The master list was ordered according to date of application submission. Applicants who were clearly not working with homeless or underserved populations were removed from the list. Remaining applicants were sorted into three subgroups by title/role to correspond roughly to the three primary roles of the CTI team:

## CLINICAL SOCIAL WORKERS

providing services in homeless service settings (to correspond with the CTI Field Worker);

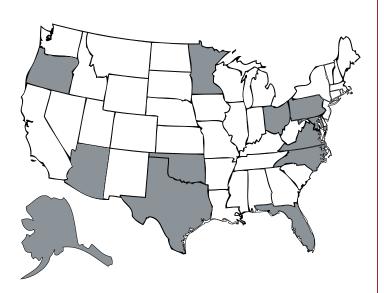
#### SOCIAL WORK SUPERVISORS

in a position to train and mentor staff (CTI Supervisor); and,

#### OTHER SOCIAL SERVICES STAFF

providing care to people experiencing homelessness (CTI Worker).

We also created 3 "agency-teams"—agencies with 3 participants each, for a total of nine (9) participants. A random number obtained from a random number generator was then used to select the remaining 18 participants, or 6 within each of the three subgroups. No duplicates from the same agency were allowed for this process. We then contacted the 27 selected applicants to determine their continued interest and availability for the training. All 27 accepted the invitation to participate.



Participants represented a diverse group of practitioners serving homeless populations across the U.S.
Participants represented 21 agencies from twelve different states: Alaska, Arizona, Florida, Maryland, Minnesota, North Carolina, Ohio, Oklahoma, Oregon, Pennsylvania, Texas, and Virginia.
One-third self-identify as a non-white ethnic group, including African American (15%), Hispanic (11%), and Asian (7%). Twenty-six were female and one was male (see Figure 1).

4 Average
# of years participants
have provided direct
care—ranged from
less than one year to
twenty years

63% Roughly two-thirds of participants work in agencies that require individuals to be currently homeless or at risk of homelessness to receive services

5 9 % Nearly as many participants work in agencies that serve primarily homeless persons

**22%** One in five participants work in organizations that primarily serve individuals from rural areas or small towns



## **Course Overview**

The pilot CTI course was delivered entirely online and lasted for eight weeks. The goal of the course is not just to teach homeless service providers knowledge and skills related to CTI, but also help them begin to implement Critical Time Intervention within their agencies. Course material is divided into four modules. The first two modules focus on the basics of CTI, including the skills needed for working on a CTI team. Modules 3 and 4 are designed to support participants to begin implementing CTI in their agencies.



## Module 1. Basics of CTI

Participants learn the core skills for Critical Time Intervention, including definition, principles and phases of CTI, how CTI became an evidence-based practice, and who is involved in CTI. Topics include: definition, principles, phases of CTI, who is involved, and evidence for CTI.

# Module 2. The CTI team

The second module focuses on the role of CTI team members within each of the three phases of CTI. Topics include: therapeutic stance, clinical areas of intervention, engagement, assessment, goal setting, and basic intervention.

## Module 3. CTI in the Real World

Module 3 explores challenges and provides solutions for implementing Critical Time Intervention in community settings, addressing issues such as how to implement the practice in nontraditional settings such as streets and shelters, and how to address difficulty in continuity with clients who are in crisis and who move frequently. Participants work through case-based scenarios to gain insights in how to address challenges to implementation. We cover how to start a CTI program, and include case based scenarios for implementing CTI in the community.

#### Module 4.

## **Implementing CTI in Your Agency**

The fourth module equips participants to implement CTI in their agencies. Particular focus is paid to achieving fidelity to Critical Time Intervention, measuring outcomes, and evaluating the learner's skill in implementing the practice.

Figure 3 Module Lesson



Each module included several core components, all of which are accessible through the course web site at:

www.center4si.com/learning

Figure 2

Course Web Site

#### 1. Module Lesson

A self-directed, online presentation with voice narration and accompanying materials (case studies, handouts, and pod casts) covers core information for each module.

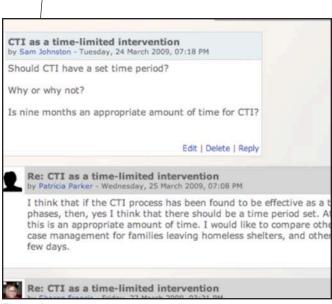


Figure 4
Online Discussion

# 2. Online Discussion

Each module has an accompanying online discussion related to the lesson. The discussion does not happen in real time but is asynchronous (like email, where people can post comments and read replies on their own time on the discussion board). The discussion lasts for the entire two weeks of the module. Participants are encouraged to access the lesson

are encouraged to access the lesson early so they can actively participate in the online discussion. Participants are required to post a minimum of three times to the online discussion during each module.

todule One - Basics of CT Participants will learn the cor including definition, principle became an evidence-based p Topics will include: definition involved, and evidence for C Module One - Basics of Critica Module One Online Presen Module One Quiz Module One Discussion Module One Assignment Module 1 Quiz and Assignr Module Two Module Two - Critical Time Int Module Two Online Presen Module Two Quiz Module Two Discussion Module Two Assignment hree CTI in the Rea

#### 3. Live Webcast

At the end of each module, a scheduled webcast brings participants together to reinforce learning objectives and provide opportunity for peer-to-peer interaction. We utilize live breakout groups that allow participants to share assignments and receive feedback from trainers and other participants.

## 4. Optional Office Hours

s and phases of CTI, how CTI

Time Intervention

nent Feedback

ervention Skills

22 unread posts

tation

I World

ractice, and who is involved in C

, principles, phases of CTI, who is

Sally Conover of Columbia holds virtual "office hours" once during each module so participants can ask her specific questions about CTI and how it relates to their particular clients or service settings.

## 5. Assignment and Quizzes

Each module has an assignment
that must be completed by the end
of the module. In modules 1
and 2, the assignment is
e skills for Critical Time Interv
completed individually.

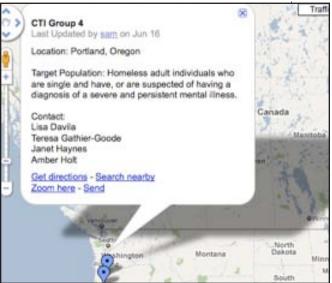
Trainers provide written feedback to each participant on each assignment. In module 3 and 4 assignments focus on implementing CTI. These assignments are completed in small groups of 4-5 people. At the end of module 3, each group has an opportunity to receive feedback from another small group on their preliminary CTI implementation plan, then

present a final CTI implementation plan to the larger group at the end of module 4 (see Figures 5 and 6 for maps of project workgroups). Each module also contains a short module quiz that tests knowledge of module content.



Figure 5
Workgroups for
CTI Implementation Plans

Figure 6
Sample Workgroup for
CTI Implementation Plan



## **Course Schedule**

The pilot course followed a clearly defined schedule. The first module began with a kickoff webcast, and each module concluded with a webcast. Within the two-week time frame for each module, participants were required to complete all work for that module, including the online lesson and quiz, assignment, and participation in the online discussion.

Week of March 16th	Pre-course technology training
March 24th, 1-2 PM EST	Kickoff webcast
March 31st, 1-2 PM EST	Module 1 office hours (optional)
April 3rd, 5 PM EST	Module 1 assignment due
April 7th, 1-2 PM EST	Module 1 live webcast
April 14th, 1-2 PM EST	Module 2 office hours (optional)
April 17th, 5 PM EST	Module 2 assignment due
April 21st, 1-2 PM EST	Module 2 live webcast
April 28th, 1-2 PM EST	Module 3 office hours (optional)
May 1st, 5 PM EST	Module 3 assignment due. Draft 1 of CTI
May 5th, 1-2 PM EST	Module 3 live webcast
May 12th, 1-2 PM EST	Module 4 office hours (optional)
May 15th, 5 PM EST	Module 4 assignment due. Final draft of CTI
May 19th, 1-2 PM EST	Module 4 live webcast. Presentation of CTI implementation plans

			rch 2			
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April 2009								
Sun	Mon	fon Tue Wed Thu Fri						
			1	2	3	4		
5	6	7	8	9	10	11		
12	13	14	15	16	17	18		
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May 2009								
Sun	Mon	n Tue Wed Thu Fri						
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3	4	5	6	7	8	9		
10	11	12	13	14	15	16		
17	18	19	20	21	22	23		
24	25	26	27	28	29	30		
31	1	2	3	4	5	6		

## **Course Requirements**

In order to complete the course, receive a certificate of completion, obtain 24 hours of social work continuing education credits, and receive a \$400 stipend for participation, participants were required to fulfill the following course requirements:

#### For each module:

Complete the quiz

Post at least three times to the online discussion

Participate in a live webcast

Complete the module assignment

Share assignments with others during live webcast

In addition participants were required to:

Participate in a pre-course training to become familiar with technologies used in the training

Participate in a live kickoff webcast on March 24th



## Fostering a Community of Practice

The use of new technologies has made it possible to foster relationships for learning among colleagues who were separated by geography and time constraints. In communities of practice, learning is a social process.

Learning happens through social interactions in various ways. One learns to become part of the community and understand how the community impacts him or her. In practice, one learns through working with peers to apply theories, ideas and tools to daily work. Through experience, one learns by taking what is learned and making it personally and professionally meaningful. Finally, in developing a sense of belonging, one learns to become a central member of the community of practice with knowledge, relationships and experiences that are highly valued by other members, especially newer members of the community of practice (Wenger, 1998).

## Learning as Becoming

In order to help students become part of the community of practice from the beginning, we created an orientation packet (see Appendix 4) and offered live small group webcasts with one-to-one follow-up to teach the technology required for the course. We assigned each participant to one of four course facilitators who would check in with them regularly throughout the CTI course. Finally, course participants were encouraged to share who they were with one another by creating profiles on the course web site.

## Learning as Doing

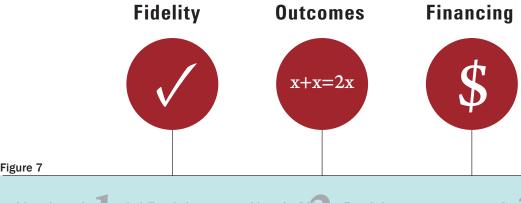
To foster learning by doing, the major course assignment was an implementation plan for CTI in an agency. Participants completed this assignment in groups of 3-4 so they could learn from one another's experience. The assignment was completed over four weeks and included a first draft, a second draft, and a live webcast presentation to course participants and trainers at the end of the course. Each group received written and verbal feedback from a course facilitator and from other participants. Additionally, each group could assess the strengths and weaknesses of its own implementation plan based on a rubric (see Figure 7) that outlined criteria for a successful implementation plan.

## Learning as Experience

We attempted to make learning a meaningful experience by providing opportunity to engage with peers, offering close contact with facilitators, and making course content relevant to the real world. Throughout the course, we wove in a case study about a man named Michael, a CTI consumer. Michael's story was built to provide a real life scenario for course participants to follow and consider how CTI can be used to address issues. We also developed interviews with experienced members of CTI teams to help participants learn what each CTI team member actually does.

## Learning as Belonging

Fostering this way of learning in the community of practice is still underway as most practitioners who took the CTI course are beginning to implement CTI. Our hope is that they will become central members of a community of practice around CTI. This cross-agency peer-support is essential as participants roll out CTI teams.



## Needs substantial Revisions

A is done but

B & C are not

A is done but either B or C are not

## Needs Minor Revisions

## Accepted

- A. Clearly identifies target population
- B. Gives rationale for this choicec. Describes how this choice meets
- c. Describes how this choice meets community needs

x+x=2x

- A. Identifies location for team
- B. Gives rationale for this choice
- c. Describes how choice meets clients' need for safety and non-confrontational environment



- A. Identifies CTI services & treatment areas
- B. Gives brief description of them c. Describes how you would engage & assess in these areas

#### **Review Tool for Module 4**

Select one of the choices on the continuum from "Substantial Revisions" to "Accepted." For a rating of "Accepted" all three criteria are met; for "Needs Minor Revisions," the 1st must be met and either the 2nd or 3rd are met; and for "Needs Substantial Revisions," only the 1st criterion is met.

#### **Fidelity Criterion**

- A. Develops a plan to work with CTI expert in adjusting the fidelity scale items to the site.
- B. Identify who will assess fidelity and how they will be trained
- C. Identifies data sources for assessing fidelity (e.g., CTI chart notes, observations, staff interviews)

#### **Outcomes Criterion**

- A. Identifies long term outcomes that relate to reduced homelessness for CTI clients
- B. Identifies measures of continuity of care
- C. Identifies measures of discontinuity of care

#### **Financing Criterion**

- A. Creates a budget for CTI team staff time
- B. Includes in budget CTI resources needed for CTI team (e.g., training, cell phones for CTI workers)
- C. Includes in budget small expenditures that might come up related to working with the client and/or the community linkages



Michael is sitting at a picnic table in the courtyard of the shelter, when a case manager from the housing program approaches. She introduces herself as Sylvia and asks if she can join him. Michael wonders what she wants. He's a little suspicious, but lets her sit down anyway. He's seen Sylvia downtown with a backpack giving out peanut butter sandwiches and clean socks. He's also heard from others on the street about this new housing program, so he decides to ask her about it.

Sylvia tells Michael that she works with the CTI team, helping people move from the streets into housing. The team connects people with services like help managing money and paying rent, or help cutting back drinking—but none of these things are required to get into housing.

Michael hesitates, then says, "I don't need nobody in my business." "It's not really like that," Sylvia says. "The housing would be all yours. The team is there to work with you to make sure you don't lose your housing, and to focus on the things you want to focus on." Over the coming weeks, Michael goes through the process of getting connected with

Sylvia and her team. They identify an apartment in a complex owned by Sylvia's agency, and Michael moves in. He doesn't have to pay anything up front, but once he has income, he'll pay 30% for rent. He doesn't qualify for VA benefits because of the dishonorable discharge, but he plans to apply for SSI.

Sylvia comes by a couple times a week, usually with another CTI person. They often bring bags of groceries with lots of rice. One day, she and the other CTI person ask Michael if he would be interested in seeing a psychiatrist who works with their team. Michael stands up quickly and begins pacing the room. At first he's mumbling and Sylvia has a hard time understanding what he's saying. Then he shouts, "Get the hell out of here and don't come back!"

They leave the apartment quickly. Michael slams the door behind them. They still hear him shouting. Through the door they hear the sound of furniture being knocked over. They stand at the door wondering what to do next.

## **Evaluation**

## **Objectives & Methods**

This exploratory study investigates how a diverse group of 27 social service practitioners learned the evidence-based Critical Time Intervention (CTI) model through a web-based interactive technology, and how they incorporated learning into their practice with homeless clients. The study aims to identify factors most likely to influence acquisition and retention of knowledge and short and long-term behavior change. These factors will inform a more rigorous comparative study in Phase 2 of the project.

As a framework for evaluation, we chose the Kirkpatrick Model (1959, 2006), which measures outcomes at four levels—Reaction, Learning, Behavior, and Results. It is among the most accepted and enduring models of training evaluation (Abernathy, 1999; Alliger, Tannenbaum, Bennet, Traver, & Shotland, 1997; Kaufman & Keller, 1994). The Reaction level of the Kirkpatrick Model examines participant satisfaction with training. Learning focuses on knowledge participants have gained. Behavior concerns the extent to which new knowledge and skills have been applied to an individual's practice. Results focus on the ultimate outcomes of a training program.

Changes at the Behavior and Results levels are best studied over the long-term. Given our relatively short-term follow-up of three months, this evaluation focuses on immediate changes that have taken place in participants' practice and identifies anticipated changes and potential barriers to implementation of CTI.

Methods used in this study are consistent with its exploratory intent: observation and tracking, surveys, and telephone interviews. We compiled both quantitative and qualitative data elements to describe the experiences of these practitioners and any response patterns that emerge. Interview protocols consisted of a set of common questions asked of all participants, and supplementary questions customized according to participant roles represented by the three subgroups (clinical social workers, social work supervisors, and other social services staff). Thus, analyses of findings describe patterns and anomalies in both cross-group and within-group responses as they pertain to study questions. We paid special attention to any patterns or notable differences in results among the three study groups, and report those within the text of this section. Findings which differed for agency-team participants, compared with non-agency-team participants, are also described.

In keeping with the exploratory nature of this study, interviews and observations completed prior to the training informed issues or questions to be investigated following the training. Data collection occurred in three phases:

Pre-Training (March 2009)
Post-Training (May/June 2009)
Follow-up (August 2009)

All pre-training interviews and surveys were completed with the entire group of 27 participants. Because two participants did not complete the training, all post-training assessments report on findings from 25 participants.

Cambridge Health Alliance granted the study an exemption from a human subjects review by the Institutional Review Board and all participants reviewed and signed a consent form before completing any of the evaluation activities.

This section, which reports evaluation findings, follows the four-part Kirkpatrick framework.

## **Reaction & Satisfaction**

Overall, participants reported being "very satisfied" with the CTI training, with an average score of 4.2/5.0 on a scale ranging from 1 "not at all satisfied" to 5 "extremely satisfied." Satisfaction did not vary between the study groups. Only one of the 25 participants reported a 3 or "somewhat satisfied" rating, and no one responded below 3. Similarly, asked to rate the training on a scale of 1 (poor) to 5 (excellent), participants assigned scores ranging from very good (4.4) for the adequacy of technical support to excellent (4.8) for usefulness of the ideas, techniques and skills, and for their increased understanding of CTI. Participants also expressed high levels of satisfaction with the four facilitators, particularly on knowledge of the topic (4.8/5.0) and their use of relevant examples (4.7) (see Figure 8).

Figure 8

_	1	Not Satisfied—	Extremely Satisfied <b>5</b>
Overall Average			4.2
Rate Overall Response			•
Useful ideas, techniques, and skills were presented			4.8
The adequacy of technical support			4.4
The activities enhanced my learning experience			4.6
My understanding of the topic was increased			4.8
This training met my expectations			4.7
Satisfaction with Facilitators			<b>A</b>
Was easy to follow and used relevant examples			4.7
Was knowledgeable about the topic			4.8
Held my interest			4.6
Encouraged active participation			4.6

N=25, Scores are averaged across all four facilitators Sources: Post-Training Interview; Post-Training Survey

A majority (68%) reported that the amount of time required to complete the training was "about right." This varied between the study groups, however, with just half of the social services staff (compared with 88% of the clinical social workers) finding the time requirement satisfactory. In some cases, the training was too spread out and they would have preferred to have a shorter time period with more intensive participation. Others disagreed. As one participant put it: "if it was condensed it would have been overwhelming." Several participants commented that it was difficult for them to carve out time to take the training while maintaining work responsibilities, but that they were prepared for this because the time requirement was made clear ahead of time.

## **Training Features**

We asked participants to comment on each of the individual training features, including what they found effective in engaging them in learning about CTI, what they did not find constructive, and suggestions for modifications. Below is a brief summary of comments on each feature.

#### Modules

Almost all participants liked the self-paced module presentations, finding the content excellent and well organized. They especially appreciated the mix of audio and visual methods and the downloadable PDF handouts. Many commented that their ability to complete the presentations at their own pace assisted them in learning the material (e.g., "I liked that it was on my own time, that I could speed it up or slow it down or pause it if I wanted."). The case study, which runs throughout the four modules, added an "element of reality" for several participants as well: "I liked hearing the parts about the client. To hear an actual case made it more real."

A small number of participants expressed technology-related frustrations in the beginning, such as difficulty hearing the audio or downloading the PDF files, but noted that these problems were quickly fixed. Several wished they could have had a printed manual of content prior to taking the course, both to allow them to preview all of the modules at once and to relieve the need to take notes.

#### Quizzes

The brief quiz at the end of each training module garnered mixed reactions. Participants understood the quizzes as a means to assess comprehension of the module content, so they appreciated questions that tested key lessons or principles and conversely

did not like questions they considered "nit-picky" or "semantic" in nature. They liked the opportunity to correct questions they initially had wrong, and having the rationale regardless of a correct or incorrect answer. Comments included:

"[The quizzes were] a good test of whether I was absorbing the information"

"They actually made [me] understand CTI because if I missed a question it would make me go back to the presentation and review. They were helpful to me in

my learning process."

Even while participants understood the purpose of the quizzes, though, several participants found them unnecessary and too much like "busywork," particularly because they thought their reading comprehension was already being tested in the assignments.

"The online discussion board gave us more time and allowed to get to a deeper level."

### Webcasts

All participants said they enjoyed the webcast discussions with their colleagues and training facilitators and generally found them helpful.

They specifically liked the opportunity to hear other participants share their perspectives and to pose questions of their own:

"I like the idea of having that personal contact."

"Hearing other peoples' viewpoints was helpful."

"Those were pretty cool."

This interaction was better achieved in smaller breakout group discussions than in the larger groups, in part because they were more comfortable talking with a smaller group and in part because the discussions were more focused:

"I liked the breakout because it was a smaller group, and there was much more dialogue that happened during those sections." Many expressed frustration with the time required for everyone to log on at the beginning of webcasts and to address any technological glitches. These abated over time as everybody became more comfortable with the webcast process and knew what to expect. Notably, the frustrations were less with the technology itself than with the lost time.

While they expressed appreciation for the idea of webcasts as a means to interact, several also found it awkward. Without seeing each other's faces or knowing their fellow participants personally, some found it difficult to know when best to raise questions or make a comment:

"I've never done online training before.

It was difficult to connect with the trainers because I never saw them. Sometimes I didn't know who was talking because of that. I would really prefer streaming or stored video attached to it."

Spontaneity was further stifled by the logistical necessity to have participants muted to keep down background noise, thus requiring individuals to unmute themselves manually every time they wanted to share a comment or question. Those who were especially shy in this context found solace in the breakout groups where it "was smaller and more familiar."

#### **Discussion Board**

Most participants had a "take-it or leave-it" attitude toward the online discussion board. As with webcasts, they generally liked the idea of the discussion boards more than the boards themselves. The most common positive responses about them were that they enjoyed reading perspectives of their fellow participants and getting into more depth on certain topics. Following are typical positive comments:

"I really liked that—being able to follow people's line of thinking."

"Those were very, very interesting, because you got to hear opinions from rural and city, and

everybody's experience was so different."

"It did give me the sense of not being on my own, and gave suggestions about resources."

"The online discussion board gave us more time and allowed to get to a deeper level."

The somewhat subdued positive attitude, though, suggests that if it had not been a course requirement to post on the discussion board, there may have been less action on the site. A few participants, in fact, expressly acknowledged that they either did not fulfill the requirement and/or would not have done so had it not been required:

"It was quite simplistic and not that useful."
"I didn't feel like a discussion really got going, like people were just going through the motions."

## Individual & Group Assignments

Participants found assignments very constructive in teaching them CTI content. The group assignments were most highly lauded for the opportunity they provided to apply knowledge of the CTI model to their own agency settings. Typical comments include:

"They really enhanced my understanding and learning—applied what I learned from the modules."

"Definitely made me feel like I was walking away with some real knowledge."

"By doing the implementation plan, it makes you think about how you are going to do this—it makes it real."

"Definitely helped me learn CTI. It put everything together for me."

In terms of process, participants liked the independence and self-paced nature of the individual assignments and receiving personal feedback (see "Facilitators" section, below). The requirement for non agency-team participants to complete the group assignment (development of

	Self Ro	ed Assi	gornents West	asts Odit	ues Office	z Hours	usion Boards	kators	
Helped Learn CTI	18	12	4	3	3	2	2	SES	terview
Helped Develop Community		7	4		2	8		RESPON	Figure 9 N=25 Source: Post-Training Interview Multiple Responses Accepted
Should Be Eliminated				6	2	6		# OF	Figure 9 N=25 Source: Po Multiple Re

#### Themes

Four themes emerged clearly from participant comments about training features and from their suggested changes. These overlapping themes include:

#### Independent Learning

In addition to the clear message of appreciation for the self-paced nature of the module presentations, many participants also wanted to have a complete manual with all of the modules in advance of the training so they could skip ahead if they wanted. They liked being able to review materials to correct quiz answers and expressed a desire to have webcast sessions recorded for later review. Some disliked the requirement to post on the discussion board if they felt they had nothing new to contribute. And while they liked the independence to work on individual assignments at their own pace, they disliked relying on others to complete group assignments.

#### Applied Knowledge

Training features that enabled participants to apply their understanding of CTI to their own agency and role were especially well-received. Examples include positive reactions to the assignments and appreciation for individualized feedback on assignments, as well as access to facilitators in office hours, webcasts, and discussion boards.

### Desire for Challenge

Participants appreciated being treated as professionals and suggested ways to make the training even more challenging. For example, they asked for additional references so they could learn more about issues raised in the modules, and for more substantive questions to be posed in webcasts and on the discussion boards. Similarly, they were most critical about features they felt were not sufficiently challenging or was just "busy work." For example, they disliked "nit-picky" quiz questions, knowing the specific grading criteria on assignments, and not having sufficient time for substantive learning during webcasts.

#### Opportunities to Interact

While the desire for self-paced, independent learning is clear, participants also wanted more opportunities to interact with and learn from peers. They liked the opportunities provided by webcasts and discussion boards, but wanted more information about other participants prior to participation. Suggestions included seeing faces during webcasts if possible, addressing logistical barriers that detract from spontaneity, and enhancing discussion board profiles to include more detail about the participants' roles and agencies. As one participant stated, "It was difficult to connect with the trainers because I never saw them."

an implementation plan) was at times problematic. Some of the frustrations included scheduling times to discuss the assignment with participants living in other time zones; making up a "virtual" agency rather than basing the plan on their own; and depending on persons they did not know or had difficulty contacting to help complete the assignment.

#### **Facilitators**

Facilitators provided participants with general support, feedback on the assignments, and personal access to respond to questions or concerns. While participants appreciated all of these roles, they most frequently commented about the facilitators' individualized feedback, which they found constructive and thought provoking. Typical reactions included:

"Easy to contact, and always gave good feedback."

"It was incredibly constructive, and gave me a better understanding of what the CTI model would look like, and to think about things in different ways."

"Gave me things to think about."

"Good, positive reinforcement."

#### Office Hours

Just over two-fifths (44%) of the participants participated in at least one of the optional office hours sessions. All found them very helpful.

"If we were lost, we were found during office hours."

"It was helpful to have that extra time to ask questions about what wasn't clear."

Non-attendees frequently commented that they appreciated knowing they had the option to attend if they had a need:

"I liked that it was available."

"It was nice knowing it was there."

Attendance varied somewhat by subgroup, with two-thirds (66%) of social work supervisors saying they did not attend. This compares to 50% in each of the other subgroups.

## **Ranking of Training Features**

Participants were asked which training features contributed most to their learning and understanding of the CTI model (see Figure 9). They most frequently mentioned the self-paced learning modules, often in conjunction with the assignments. Each of the features was named by at least two participants, though, indicating the diversity of learning needs and preferences. Asked which of the features helped them develop a sense of community with the other participants, about half said none of them did, but about one-third (n=8 or 32%) named the online discussion boards and over one-quarter (n=7 or 28%) thought completing the group assignments did. Four said webcasts and two participants found community in the office hours. Among those who said none of the training features contributed to their sense of community, several said they had connected with at least one other participant and thought relationships would strengthen had the training gone on longer.

Asked which of the training features should be eliminated from future trainings, a majority said none, arguing that even if it did not help them personally, they saw the value to others. Of those who did think a feature should be eliminated, about one-quarter (n=6 or 24%) named the online discussion board and/or the quizzes, and two said the office hours (though they had not attended them).

## Learning

In addition to assessing what knowledge participants gained during this training, the qualitative approach to this evaluation enabled us to explore what factors seemed to influence acquisition and retention of the material. We were especially interested in the extent to which interactional technology and access to peers were influential factors. The first part of this section provides contextual information about participants' awareness and use of evidence-based practices (and CTI, if applicable) in their work, experiences and interest in training, and perceived barriers to obtaining knowledge and skills they need to do their jobs well. The second section summarizes knowledge gained during the CTI training and key learning themes or factors.

## **Pre-Training:** Awareness & Use of EBPs

Approximately three out of four (78%) participants reported familiarity with the term "evidence based practice" prior to the training; the others either had heard of it but were not sure what it meant (19%), or had never heard of it (4%). The "other social services staff" subgroup had lower levels of awareness about EBPs (56%) when compared with the clinical social worker (78%) or social work supervisor (100%) groups. Overall, the majority (n=19 or 70%) said they were currently using EBPs in practice and

could name specific examples. Most commonly named EBPs were Motivational Interviewing and Cognitive Behavioral Therapy. Asked in an open-ended manner to name any barriers they encountered when trying to learn about EBPs, two-thirds (n=18 or 66%) said "none." A few (n=4) or 15%) said they did not feel they had sufficient time, and five participants (19%) said they did not experience barriers in learning about EBPs but

expressed a need for a more applied approach, as opposed to simply learning from a book:

"I want to feel confident enough to know if I'm using them right."

"I want to see exactly how it's implemented in other agencies. Sometimes we have questions and difficulties, and I want to know how others are dealing with those."

"It would be better if there were more followups where you worked on them with clients. I would learn better if it was an ongoing thing where you incorporate it into your job."

## **Pre-Training:** Training Experience & Interest

"The whole

concept had

a think-tank

format,

learning

Just half (n=13, or 48%) of these 27 social service professionals had ever taken some form of online training. Of the three subgroups, the other social services staff reported the least online experience

> (n=2, or 22%). A large majority of all participants had participated in training at conferences (n=24, 88%) and/or in their workplace (n=25, 93%). Asked which of these training venues worked most effectively for them, a majority (n=19, 70%) named conferences. The primary reason for naming conferences the most effective venue was the access to diverse perspectives: "you're learning from people you don't see every day;" and, "the different perspectives...is very stimulating." They also found it useful to be physically away from

ences: "I'm not worried about what I have to do for the job." About one-quarter (26%) of participants named workplace-based training as the most effective, though most of these were in the other social services staff subgroup. Reasons for preferring this venue included the direct relevance and specificity to their own job and setting ("Where you actually implement what you learn"; "When you're at conferences...you just get bits and

pieces."). Just one participant found online training the most effective, citing convenience as the key reason.

We asked those participants who had experience with online training to discuss what they liked and disliked about the format. They most liked the flexibility and convenience of online training, both in terms of physical location and timing ("you can do it in your pajamas, day or night") and at the pace that worked best for them. Primary reasons for disliking their past online training experience were the lack of interaction with other participants and the counterpoint to its convenience: "You're still vulnerable to things that can distract you in the workplace."

Only five of the thirteen who had taken online training said it involved a network of peers learning together; however, just two of the five said they were engaged enough with those peers to say they had learned more as a result. Stated differently, just two of the 27 participants had a positive interactive learning experience in an online training prior to the CTI training.

It is not surprising, then, that only two participants (7%) said a key factor drawing them to apply to this CTI course was that it was online. Rather, when asked in an open-ended manner what inspired them to apply for the course, four-fifths of participants (n=22 or 81%) said they wanted to learn how to better serve their homeless clients:

"There's just not that much training on homeless populations, so it seemed a good fit." "A good way to get some more tools

to serve the community."

Peer involvement was the primary draw for five participants (19%):

"The opportunity to hear from others around the country."

"The whole concept that it had a think-tank format, where you're learning collaboratively."

A large majority (n=23, 85%) of these professionals reported that they actively seek out new training opportunities to improve skills. They

	#	%
Experiences with training venues		
Conferences/professional meetings	24	89%
Offered in the workplace	25	93%
Online	13	48%
Most effective venue		
Conferences/professional meetings	19	70%
Offered in the workplace	7	26%
Online	1	4%
Actively seek out new training opportunities? (Yes Only)	23	85%
Barriers in learning about or accessing training		
Cost	14	52%
Time	3	11%
No barriers	10	37%
Prefer to learn about new trainings by e-mail (Yes Only)	22	81%
Predisposition to Learning		
Applying what I've learned in practice and learning from my mistakes	10	37%
Teaching and learning from colleagues	9	33%
Being mentored by someone who is more expert than I am in the profession	8	30%

Figure 10, Training Experience, N=27 Source: Pre-Training Interview (multiple responses accepted)

typically learn about new trainings through e-mail announcements or communication from colleagues. Asked how they prefer to learn about new training, a majority (n=19, 70%) named e-mail even if they had limited computer access: "My time is so limited if a training would come around, it would be nice to get an e-mail about it." Some named other preferred modes, including internet searches (n=3), in-person contact from supervisors/colleagues (n=2), and mailed flyers (n=2). The most frequently mentioned barrier to accessing training was cost (n=14, 52%), not just of the training itself, but costs of being away from work, travel, lodging, and other arrangements such as babysitting or pet care.

We also asked, prior to the training, their preferred method of learning. Though approximately evenly distributed across the three methods provided, the largest group (37%) preferred to learn by applying

#### **Themes**

#### **Knowledge Gained**

Participants were not asked to rate their knowledge of the specific learning objectives for the training before it started, though pre-training interviews revealed that most of the participants had very little knowledge or understanding of CTI before taking this training. From the knowledge assessments done following the training, it is clear they had achieved overall high levels of confidence and transferability of the knowledge they obtained, though this was slightly lower for module four, especially compared with module one.

#### Importance of Peers

Prior to the CTI training, a majority (n=19 or 70%) of participants indicated a preference for attending trainings at conferences, primarily because they offer a chance to hear and learn from others in the field. Yet cost is a barrier to attending and participating in conferences. (Note: The question about barriers was asked in an open-ended manner. Frequencies may have been higher if asked about their experiences with specific barriers). Experience with online training, while low overall, only included access to a network of peers for five participants. Just two of these had a positive interactive experience with peers during previous online training. After completing the CTI training, we asked participants whether having access to a network of colleagues during this training increased their learning and their ability to retain what they learned. Eighty-four percent said yes. Just two participants said it did not and two said maybe.

In sum, the desire to interact with peers is based on training experiences at professional meetings and drives a preference for this training venue. The value of peer contact in building confidence in what they learn and retain is clear, but access to training opportunities which offer this are rare and frequently not accessible because of cost and logistical barriers. Comments about the CTI training included:

"I learned more. I liked the interactive aspect with the instructor and hearing about how others handle the situations."

"Yes... it becomes more of a doable thing when you talk with others about how they overcome roadblocks. It gets you to process more in the training."

"It's good to have that support around me to bounce off ideas and not feel like the whole world is on my shoulders—share the problems, share the burdens, share the issues."

Asked whether they would continue to communicate with peers met during the training, about one in four (n=6 or 24%) said they probably would, especially once they were further along in implementing CTI.

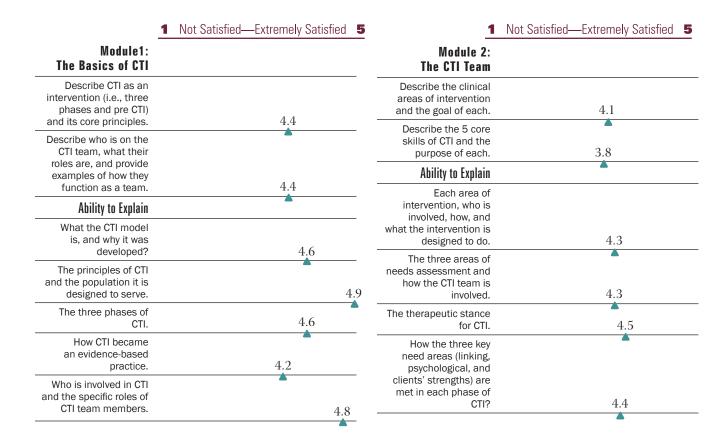
#### Role of Instructional Technology

Though many of these providers had minimal experience with online training, the instructional technology used for this training did not stand in the way of anyone's completion or success. Several expressed trepidation about their ability to navigate the technology required for the training, but were pleasantly surprised to learn it was not a barrier. Two participants who were most fearful commented after the training:

- "I had not been in school in 20 years and I was excited and scared in the beginning, but [my facilitator] put me at ease. Because of this class I will be taking more classes online."
- "I had never taken an online class, but I'm looking forward to doing it now!"

The technology was clearly not a barrier to participant learning, and the self-paced elements of the training were advantageous over traditional classroom/lecture formats. Yet some potential advantages of this innovative model were unrealized during this pilot test of the training. Enhancements to those features designed to facilitate effective interaction between peers and facilitators could greatly improve the possibility that the technology will help fulfill the need and desire for that level of support and community of practice in both the short and long-term.

The desire for "applied knowledge," a strong theme described earlier, is echoed throughout participants' comments about the value of peers networking during training. It is also reiterated in questions designed to assess their predisposition to learning through a community of practice, when participants said they prefer to learn by "applying what I've learned in practice" and "teaching and learning from colleagues."

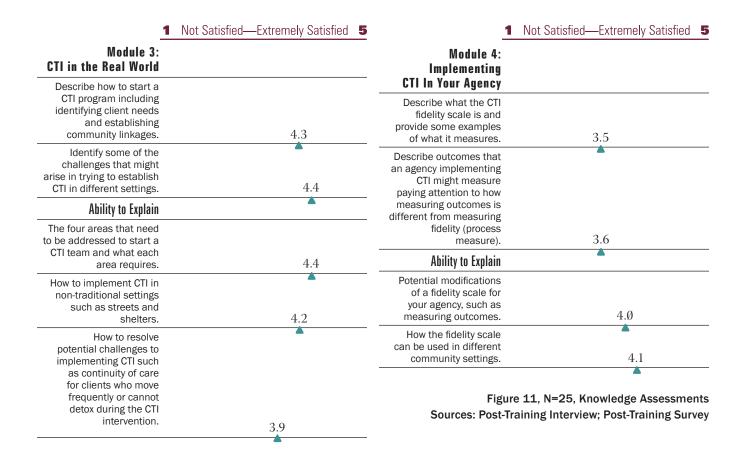


what they learned in practice and learning from their mistakes, followed by one-third who best learned by interacting with colleagues. See Figure 10 for detailed responses.

## **Post-Training Learning Assessment**

Participant knowledge of CTI was measured after the training both in writing on a Post-Training Survey (immediately after the training) and verbally in the Post-Training Interview (within one month of the training). See Figure 11 for a summary of these knowledge measures.

We measured learning objectives from each of the modules to determine participants' level of confidence in how well they had learned the information and their ability to explain to others what they had learned. On the whole, they averaged between "very confident" and "extremely confident" on all modules, and from "very good" to "excellent" on their ability to explain the objectives. Scores on both scales were highest overall for the first module (Basics of CTI) and lowest for the fourth module (Implementing CTI in Your Agency). In assessing confidence, the social work supervisor subgroup scored highest on all objectives, and the other social services staff the lowest.



## **Behavior & Results**

As noted above, the extent to which a training participant has applied the knowledge from a training or determination of other impacts of training are best determined longitudinally. This evaluation more practically measured changes the participants intend to make in practice, and plans they made for implementation of CTI—again with an emphasis on those factors most likely to affect their willingness and capacity. Because these changes were assessed at one-month and again at three-months after the conclusion of the training, we can comment on potential trends.

Within one-month following their participation in the CTI training, participants shared the following:

#### Interest in EBP

Nearly three-quarters (n=18or 72%) said participation in the CTI training reaffirmed their existing interest in learning more about EBPs and/or enhanced it:

"Definitely—I'm much more open and willing to hear about EBPs."

## Sharing Knowledge

All but one participant (n=24 or 96%) had already shared their new knowledge about the CTI model with other colleagues within a month of completing the training.

## **Effects on Daily Work**

Four out of five participants (80%) reported that "what or how they do their job" would change as a result of their participation in this training and learning about the Critical Time Intervention model. For many, learning about the CTI model represented something of a paradigm shift.

Sample comments included:

"Before the training we were talking about the need to do a better job of transitioning people, but we didn't have a context for how to change our boundaries, and how to structure that transitioning."

"Definitely made me look at things differently...
I've gotten a lot better about hooking [my clients] into the community."

"By doing the

implementa-

tion plan, it

makes you

think about

how you are

going to do

this—it makes

"My focus has shifted toward how I can keep [clients] in the housing."

"I have more of a presence of mind. I appreciated the way they talked about the client-centered, transference and counter-transference, and motivational interviewing—already I've tried to be more mindful of those in my work."

"I definitely learned a lot in terms of general philosophy, and a better way to work with people."

"I'm trying to be more phaseoriented, more structured with things. And encouraging staff to partner with ad develop those relationships in the community, rather than just staff-client."

"I find I'm moving away from a doing-for model to a doing-with model; I find I'm talking more about 'how are you going to make this transition for the client." Another comment reflected excitement about the CTI model: "I think it's fantastic. It's dead on. The more I do this work the more I think the attitude that I just need to help these clients for as long as they want is actually a disservice to them. I think it's fantastic when something comes along that says no, there really is evidence that client self-sufficiency needs to be your goal. The more I see of that in the field, the happier I am and the more hopeful I feel for my clients that they won't

be stuck in an institutional mindset."

## Implementation of CTI

Before the training, just one-fifth (22%) thought they would help their agency implement CTI after the training was completed. After the training, four-fifths (80%) were actively working with others in their agency to find ways to implement CTI. Many were using the implementation plans they had co-developed with peers during the final group assignment. While several participants named funding and/or staffing as a potential barrier to successful

implementation of CTI at their agency, they had begun to seek funding and figure out staffing options within one month of the training's end.

Providers have...

Results of the CTI Training (One Month Follow-Up)

9 6 % shared what they learned about CTI with their colleagues

**72%** affirmed or increased their interest in learning EBPs

80% changed the way they work with homeless people

80% begun actively working to implement CTI in their agency

#### **Themes**

Two key factors emerged as important to participants' interest in and willingness to implement CTI as a result of this training. Both add depth to factors described earlier.

#### Importance of the Team

While access to a peer network affected participants' satisfaction with the training and their capacity to learn and retain what they learned from it, it appears that working closely with peers from their own agency is important in determining whether they will apply what they have learned. As noted earlier, nine of the participants were deliberately selected into three "agencyteams," with three participants (one from each subgroup) from each agency. These participants completed the training individually, with the exception of the final group assignment: development of an implementation plan for CTI. All nine of these individuals (100%) said that participating in the training with colleagues from their own agency gave them a better sense of how CTI would work within their own agency, and 100% reported it more likely that their agency will actually implement CTI. Among the remaining participants, deliberately selected from separate agencies, 100% said

it would have made a difference on both of these counts if they had taken the training with at least one other colleague from his/her agency. The primary reasons given for the importance of these intra-agency peers were the value of sharing ideas about what they were learning with others who shared their organizational setting and population, and of making it easier to "sell" the merits of implementing CTI to other colleagues and administrators. They also noted it was far easier to collaborate on developing the implementation plan due to logistical reasons and relevance.

#### Implementation Plan

Another key factor, related to the importance of the team, is the implementation plan participants were required to complete for their final assignment. This exercise forced participants to apply what they had learned about the CTI model to their own unique contexts, and gave them a clear idea of what concrete, practical steps would need to be taken to successfully implement CTI.

"We're definitely using the training in a very concrete way to turn it into action."

"We used the implementation plan to be specific about it in our agency."

## Three-Month Follow-Up Survey Results

Ninety days after the course was completed, we administered an online survey to participants. Fourteen of the 25 participants completed the survey (56% response rate). Responses are outlined below.

# What barriers or challenges remain to implementing CTI?

Financial; waiting for grants.

Agency is not doing well financially,
There is no money and we are under staffed.

Time. We've needed to have a formal meeting about how we will implement this in all three programs.

We have a pre-existing program that cannot adopt CTI completely due to funding but we are working to integrate some of the principles of CTI.

I have been unable to determine how to get funding for a CTI program at my agency.
Basic challenges of implementing new programming—resources, staff training, buy-in.

# Would you benefit from technical assistance or additional support in implementing CTI?

Make support available as situations occur. Usually the questions present themselves rather than be outwardly apparent.

I'm not quite sure. We are probably getting a pro-bono evaluation done by one of the universities here. It might be nice to have some cti-related measures in it. Also, it would be nice just to be able to run some design questions by someone for this new pilot grant project that we are getting.

I would like to have access to others who have adapted the cti model to the population I work with. I know that there have been some writings that address this, but direct access to those in the field would be desirable.

Help in getting funding or guidance on whom we can request funds from.

Access to webcasts, etc. for training and review.

Would you recommend this training to other providers or agencies, if it seemed appropriate?

100% said yes

Have you contacted any of the individuals you met during the training?

o/14 said yes (0%)

Suggestions for recruiting individual providers or other agencies to participate in future CTI training?

Continue to emphasize the direct impact it can have on homeless populations.

Through homeless service providers, department of human services offices could distribute information to the various organizations.

North Carolina contact LMEs as they have all the power.

I think you find someone who has the power to implement. You need people who are working intensively for a limited amount of time with clients.

I think that there should be a combination of trying to get participants who work for a cti program but haven't been trained as well as targeting programs such as shelters that looking to develop a program based on cti

Advertise through the National Association of Social Workers

It would be beneficial for agencies to be able to train multiple people at the same time. dcf is a great way to look for people to train in cti.

Would you be willing to share updates about your efforts in implementing CTI at your agency?

10/14 said yes (71%)

Other comments about your experience with the CTI training?

The training was well presented and well thought out. It is an idea my agency is interested in; the main concern now is the money with which to implement a program such as this.

I continue to believe in this practice and use some of the principles daily.

We have been conducting cti for several years. This was great information for me and my team. Thanks.

The training was Great.

It was very useful for us. It pointed out areas in which we were deficient that were important areas to focus on.

Even though I have not been able to implement in this setting (parents with young children), I do continue to seek ways to integrate the model into my work, and I have been more alert to the needs of the homeless population, as well as local, state and national legislation and policy.

No, I just hope that someone could guide me on actually implementing a team. I know the program would be extremely beneficial, I just need to be able to show where the funding would come from.

## **Evaluation Summary**

The providers who participated in this training all work with homeless populations in their daily work, but they came from a wide variety of service settings and geographical environments, and with varying years of direct work experience. About half had no online training experience, and almost none of those who did had positive experiences with it. The majority was familiar with and/or using EBPs in their work, but knew little about the Critical Time Intervention model prior to taking this CTI training.

By closely documenting their experiences before, during, and after participation in this innovative online training course, this exploratory study has uncovered some compelling findings and guidance for future development. Given the small sample size, these findings are suggestive rather than conclusive, but nevertheless represent strong themes worthy of further investigation.

Participants who completed this training were extremely satisfied with its content and process, and expressed strong confidence in the knowledge they had gained about Critical Time Intervention. This was especially clear for social work supervisors and clinical social workers, who had greater understanding and experience with evidence-based practices prior to the training. But it also appears that the potential for improving quality of care to people experiencing homelessness using this interactional model of training is also strong, even with a diverse, dispersed group of providers with little or no experience in online training. One month after completing the training, a large majority reported they were doing their jobs differently as a result, had shared their new knowledge with peers and others in their communities, said they had affirmed or increased interest in learning about evidence-based practices, and were actively working to implement CTI in their agencies.

Two interrelated factors affecting the overall impact of the training on these providers emerged from this evaluation:

**Interaction:** Appreciation for consistent support throughout the training from peers and facilitators, and a desire for this support throughout the implementation process.

**Application:** The strong desire to learn not just about the EBP, but also about how they can directly apply it to their own work and the populations they serve.

These providers work in challenging jobs, trying to serve individuals with multiple, complex needs. Many agencies serving homeless populations are small, relatively isolated, and lack resources to offer strong training support. These providers actively seek directly relevant training on the issues they confront in their work, but it is rare, and issues of cost and time can be barriers. They seek access to peers and mentors working in comparable settings to hear others' experiences and perspectives, learn effective strategies, trouble-shoot difficult cases, and benefit from social and emotional support. They are eager to learn more about evidence-based practices, but to implement EBPS such as CTI in their agencies will require strong collegial support. They need access to peers and mentors who can assist them in implementing the EBP without compromising fidelity.

This evaluation has revealed that the CTI community of practice training model has potential to offer homeless service providers the expertise and support they need to succeed in implementing CTI. It also raises important research questions that will require more thorough investigation, which will be discussed in the following section of this report.

Prior to the training, 70% of participants named face-to-face conferences as their preferred method of accessing training and professional development. This suggests that people value human contact as an important component to learning new knowledge and skills and implementing new practices. While online training cannot replace face-to-face human interaction, new technologies allow improved connection among peers and instructors. Phase 1 of this project attempted to address questions of peer-to-peer learning and networking—through breakout groups in webcasts, interactive office hours, small group assignments, participant profiles on the course website, and online discussion forums. In Phase 2, these efforts can be expanded and augmented by other approaches to cultivate relationships among participants.



Since their last home visit with Michael, Sylvia and Maria have been worried. After Michael moved into the apartment, the two CTI workers had been checking in with him two or three days each week, bringing him groceries, cleaning supplies, and other things for his new place. Things were going well. Then, before the last visit, Sylvia and Maria discussed whether or not Michael would be ready to talk about his mental health issues. They weren't sure, but decided that they had developed enough trust with him that they could ask him about seeing the psychiatrist.

Maria suggested that they bring it up in a low-key, non-threatening way, making it clear that it wouldn't be a program requirement—just that the psychiatrist was available if Michael ever wanted to meet with him. But as soon as Sylvia mentioned the word "psychiatrist," Michael became agitated, started pacing the floor, cursed at them, and told them to get out.

That afternoon back at the office, Maria and Sylvia weren't sure what to do. They had thought they were doing the right thing by letting Michael know about available services, but now they weren't so sure. It was Tuesday, and the CTI team meeting wasn't until Friday morning, but this couldn't wait. They went into the office of their clinical supervisor, Denise, and told her what happened. Denise suggested they hold an impromptu team meeting with everyone who was around that afternoon,

including the field coordinator, who happened to be in the office. At the team meeting, Sylvia discussed what had been going on with Michael. Maria described in detail his behavior at the last home visit.

After describing the situation, Sylvia was clearly upset: "We're trying to be so client-centered, you know?" She paused. "But he's got some really serious stuff going on, and if we don't help him deal with his mental health problems, he's going to end up on the streets again...I mean, if we don't do it, I'm not sure who will." She became quiet and tearful as she finished: "It's just so frustrating. I don't know what to do."

Rather than jumping in with all the answers about how to proceed, Denise, the supervisor, asked the team for suggestions. At first the team was quiet also, then began offering one suggestion after another: "Give him a couple of days, then go back with some more groceries and don't bring up the mental health stuff unless he does." "Why don't you wait until next week, then go back and ask him if he's willing to discuss health generally—then you can deal with physical and mental issues slowly?"

The group came up with many ideas. In the end, the team decided that Maria and Sylvia would go back before the end of the week, ask Michael how he's doing, ask him what he wants to focus on right now...and take it from there.

# **Next Steps**

Lessons learned from Phase 1 of this project suggest that web-based training may be an effective way to equip homeless service providers to implement evidence-based practices. The results, however, are limited by the small study sample (n=27) and the lack of follow-up beyond 90 days with Phase 1 participants.

While the online CTI training was well received and a large number of participants (80%) seem to be taking steps towards implementing the practice in their agencies, many questions remain. Phase 2 of the project will build on the work of Phase 1 to refine the curriculum and technology and to explore important research questions regarding the acquisition of knowledge and skills, long-term implementation, and the role of a community of practice in disseminating EBPs.

A Phase 2 Research Study will evaluate the effectiveness of both courses using the same framework in Phase 1 evaluation, assessing participants' Reaction, Learning, Behaviour, and Results. However, the primary emphasis in Phase 2 research will be on the most unique aspect of this project, the role of the Community of Practice in aiding diverse groups of homeless service providers to implement CTI and to sustain fidelity to the model over time. This section provides a brief overview of possible Phase 2 research questions and methodologies.

While the online CTI training was well received and a large number of participants (80%) seem to be taking steps towards implementing the practice in their agencies, many questions remain. Phase 2 of the project will build on the work of Phase 1 to refine the curriculum and technology and to explore important research questions regarding the acquisition of knowledge and skills, long-term implementation, and the role of a community of practice in disseminating EBPs.

In terms of refining the curriculum and technology, the team has discussed the possibility of dividing course material into two segments: introductory and advanced. We will consider offering an introductory CTI course to a large number of participants to cover basic definitions, treatment approaches, and how a CTI team functions. Participants interested in pursuing more in-depth training to support implementation of CTI will be recruited to participate in an "Advanced Skills in CTI" course focused on deeper acquisition of clinical skills, fidelity to the model, and challenges to funding and implementing CTI.

Phase 2 improvements in technology will include:

- Integration of brief video interviews with CTI clients and practitioners
- Improved course web-site with stronger social networking capacity, possibly through integration of Facebook and Twitter

Streaming video during live office hours and webcasts

Better live web-meeting technology to minimize technical problems and allow more peer-to-peer interaction

These Phase 2 improvements will focus on providing opportunity for human interaction—among peers and between participants and instructors. Improved video conferencing capacity will help build a sense of connection, as will integration of social networking through the course website. Additionally, we will consider designing more assignments to be completed in pairs or groups in order to foster peer learning. We will also explore the possibility of requiring office hours rather than making them optional. This venue provides a less formal opportunity for participants to interact with instructors and each other.

Another important issue to be addressed in Phase 2 is the question of "scalability." In other words, what is the ideal number of participants in the CTI course. If we explore the direction described above of dividing the material into an introductory

course and an advanced course, the two offerings would likely have differing capacity. For example, if the "Introduction to CTI" is primarily self-directed with minimal instructor support and interaction, this course could reach hundreds of participants during Phase 2 of the study. The advanced course, on the other hand, will focus on instructor-participant interaction and peer-to-peer learning, and will therefore be smaller in scale with perhaps 50 participants in the course at any given time. Those participating in the advanced skills course will also be encouraged, or even required, to participate as agency teams with other staff from their organization.

Finally, Phase 1 began to explore the importance of a community of practice in the acquisition of new skills and knowledge and in long-term implementation of EBPs. Phase 2 will focus on cultivating a community of practice through ongoing peer support, learning, and interaction. We will utilize the expertise of Phase 1 participants to shape the course in Phase 2. For example, we will consider contracting with high performing Phase 1 participants to function as peer mentors or faculty for Phase 2.



# Issues for Phase 2 Research

As noted previously, CTI training modules for Phase 2 of this project would be developed into two separate trainings: Introduction to CTI will be oriented toward individual providers and the basic content knowledge necessary to understand the CTI Model; and the more advanced CTI Implementation focused on applying knowledge of the CTI Model by implementing it in a specific agency population. A Phase 2 Research Study will evaluate the effectiveness of both courses using the same framework in Phase 1 evaluation, assessing participants' Reaction, Learning, Behaviour, and Results. However, the primary emphasis in Phase 2 research will be on the most unique aspect of this project, the role of the Community of Practice in aiding diverse groups of homeless service providers to implement CTI and to sustain fidelity to the model over time. This section provides a brief overview of possible Phase 2 research questions and methodologies.

# Potential Phase 2 Research Questions

Phase 1 evaluation has generated various questions for further study. These can be grouped into the areas of provider support, community of practice, and resource investment. Potential Phase 2 research questions include:

# Provider Support

What are the specific kinds of supports providers need once they begin the implementation process?

- What does this support-needs profile look like for individuals in the different roles: Supervisor vs. CTI Worker vs. Field Coordinator?
- To what extent are these supports dictated by characteristics of agency service models, service delivery context, populations served, educational background and experience of staff, or type of transition (e.g. prison discharge, street to housing)?

What support needs are common to all groups across agencies?

What factors affect the kinds of support individual providers need? The intensity of that support?

- Does agency administration advocate for team and model?
- Are the agency's rules and culture supportive or obstructive?
- Are there any external structural supports or barriers to successful implementation (e.g. funders, auditors)?

Which of those supports are most critical to the successful implementation of CTI (as in fidelity to the model)?

# Community of Practice

What elements are key to the initial development of a community of practice (COP) for providers interested in implementing CTI?

- What mode of communication works best for initial relationship-building (e.g. face-toface vs. video-conferencing)?
- What kinds of activities are more or less effective in launching and nurturing a strong COP (e.g. group projects/assignments vs. individual-level activities)? Which should be driven by trainees vs. facilitator/ trainers?

# What elements are key to sustainability of a community of practice over time?

- What modes of communication works best for sustaining communication and relationships over time?
- What is the relative importance of resources such as: access to content-knowledge experts, refresher courses or check-ins, site visits? What (if any) are the effects of organizational or geographical context?

How are those elements affected by the number of providers in the COP? By the disciplines/roles of individuals in the community? By similarities and differences between members of the COP?

#### Resource Investment

- Based on description of the elements needed for a successful community of practice (above), what resources are necessary to put into developing and sustaining a community of practice? What costs are associated with the various elements?
- What is the optimal trainer/student ratio? The optimal amount of time trainers need to invest at the beginning and on an ongoing basis?

Another issue that merits further exploration is the degree to which we should focus on highly specific practices and components of a model vs. broader functional and conceptual issues that leaves more room for the practitioner to adapt the practice to his or her setting.

## Methods

This longitudinal study will use multiple methods to examine the three categories of research questions: provider support, community of practice, and resource investment.

# **Participants**

While individual providers from agencies serving populations experiencing homelessness will be recruited to participate in the Introduction to CTI training course, teams of providers from within the same homeless service agencies will participate in the CTI Implementation course. These providers will have completed the Introduction Course and/ or exhibit mastery of introductory knowledge about the CTI model. An agency-readiness assessment checklist will also be completed and reviewed to determine viability for implementation of the CTI model. Providers also will be matched as closely as possible to their future role on the CTI Team (Field Coordinator, Supervisor, CTI Worker) to enable us to assess distinct needs and practices of these subgroups in the COP and implementation processes.

We will test the intervention with a much larger sample size than Phase 1, applying for OMB clearance for the study. We will use power analysis to determine the exact number of teams necessary

Figure 12	Topics	Sample Outcomes
Provider Support	Support-needs profile Factors affecting support needs	Decreased staff burnout Improved staff retention Positive changes in roles/responsibilities within the organization
Community of Practice	Elements key to development of a COP Elements key to sustaining COP	Improved team climate Increase in effective peer problem-solving for barriers to implementation Substantive COP interactions over time (e.g. sharing failures and best practices, mentoring of newer members) Consistent fidelity to the CTI model over time
Resource Investment	Costs associated with COP	Equivalent or lower costs associated with delivery of COP-supported training compared with face-to-face training (e.g. through train-the-trainer capacity-building) Equivalent or lower costs associated with CTI training with COP supports compared with CTI training with passive supports

to participate in the Experimental and Control Groups to draw statistically significant conclusions about differences between Groups and within and between subgroups.

Study Approach and Anticipated Outcomes In addition to the information gathered during Phase 1 of this project, we will accumulate existing intelligence from Community of Practice studies, research on implementation of evidence-based practices, and an expert group panel comprised of providers and researchers well-versed in these content areas to inform the Phase 2 Study Design. This study will build upon an existing body of literature demonstrating the effectiveness of communities of practice for capacity-building in both for-profit and non-profit sectors (Lave and Wenger, 1991; Brown and Duguid, 1991; Wenger, 1998; Wenger, McDermott and Snyder, 2002; Archibald and McDermott, 2008; Sweeny and Holmes, 2008; Clark and Hammer, 2008; Correia and Davis, 2008; Moore, 2008; Johnston, 2009).

Given our potential research questions, we can anticipate some sample outcomes (see Figure 12) that will be of interest. Outcomes will be assessed at provider, organizational, and (to a lesser extent) systems levels. Secondary analysis of client-level outcomes will be used to inform other outcomes as appropriate. For example, client outcomes will be reviewed to help us understand the relative success of CTI Team providers in implementing CTI. Validated instrumentation will be used where available. Additionally, the Team Climate Inventory may be used to assess effectiveness of team interactions before and after the CTI course (Anderson and West, 1994).

#### Study Design

We plan to employ an experimental design to assess the impact of the Community of Practice on these outcomes. Once participants have completed the Introduction to CTI Course and undergone assessment to determine their appropriateness for the CTI Implementation training, teams will be randomly assigned into one of two versions of

the training. Our initial intelligence-gathering efforts (described above) will inform which specific elements we will vary within these two versions of the training. In general, however, we anticipate the primary distinction between the Experimental Group (CTI Training with COP-supports) and the Control Group (CTI Training with passive supports) to be the overt and active emphasis on the COP elements during and following the training. For example, while both Groups will learn the COP concept and be introduced to methods for building a COP amongst themselves, only the Experimental Group will be required to apply those methods during the training (e.g. online discussion boards; office hours; peer collaboration on assignments; case-based learning with peers). Support for nurturing the COP will also vary between the groups. The Experimental Group will be required to participate in regularly scheduled webcasts (with training facilitators' involvement phasing out over time) following the training, while Control Group trainees will be offered passive support through access to discussion boards on the C4SI website. We will then compare the two groups on study outcomes.

# **Analysis**

The research hypotheses will be tested with multinomial logistic regressions. The primary focus will be on testing the relative impact of the CTI Training with COP-supports (Experimental Group) compared to the CTI Training with passive supports (Control Group) on the effectiveness of implementation of CTI and the sustainability of the Community of Practice over time. Additional analysis will be conducted to determine whether the role the provider plays on the CTI Team has differential effects on the outcomes.

# Dissemination

Findings from Phase 1 of this project will be disseminated in a variety of ways. First of all, the team presented in July 2009 at NIMH's Mental Health Services Research Conference in Washington, DC. We are actively exploring other calls for papers and workshops to share these findings at other national conferences. Additionally, the team is in the process of identifying at least two journals to publish Phase 1 findings: one in the social work or behavioural health literature and one in the e-learning arena. We believe it is important to bridge the gap between technology studies and behavioural health, and we will do this by publishing in both arenas. We will also share findings on the Critical Time Intervention website, SAMHSA's Homelessness Resource Center website, and the C4SI website. Finally, we are considering development of a brief that described the web-based CTI course and our Community of Practice approach as a marketing tool for Phase 2 and, ultimately, for commercialization of the product.

Likewise, Phase 2 findings will be published in the behavioural health and e-learning literature, presented at conferences, and packaged as marketing material to sustain the future of the project.

# Commercialization

Participants were asked prior to the training to estimate what they might be willing to pay for a training they considered useful. Over half said too many factors play into the decision—such as the training duration, location, and access to organizational support to cover costs—to feel knowledgeable enough to set a price. Based on previous experiences with trainings, though, the remaining participants named costs ranging from \$40-\$300; the average estimate was \$176. Once the training was completed, we asked participants what they thought would be a

fair amount to ask providers to pay for this online CTI training. This time  $^4/_5$  (80%) of participants estimated between \$75-\$1,500, with an overall average of \$369.

During Phase 2 we will explore a full-range of commercialization questions, including marketing strategy, pricing, partnership with CTI experts, and ongoing costs to upgrade content and technology.

We see the web-based CTI course as the first in a series of training opportunities on EBPs for homeless service providers. As such, we will use the framework and infrastructure developed for this course and begin to partner with experts in other EBPs to construct similar courses.



Seven months have passed. After the difficult encounter when Michael got angry and told the CTI workers to leave his apartment, things had smoothed out a bit. Sylvia and Maria—the CTI workers—kept coming by once or twice a week. Michael was fine discussing most things cooking, cleaning, going to a job coach, paying rent, applying for SSI. He was even open to talking about his drinking, and had cut back from 8-10 drinks every day to about three. A couple of months ago, Michael had reluctantly agreed to meet with a psychiatrist, but only because it might help him get approved for SSI benefits. He let Sylvia and Maria know that he still wasn't going to take medications, but he would keep seeing the doctor if it meant he might have steady income down the road once his SSI application had been approved. That still might take some time, but the process was underway.

In the meantime, Sylvia had been asking Michael about reconnecting with his mother and sister. He told her that he wanted to see them again, but he didn't think they would want to. After many phone calls, Sylvia was able to set up a meeting at the CTI office with Michael, his mother, and his sister. He had not seen them in months, and he was nervous. But Sylvia was sitting to one side of him and Maria to the other, when his mom and sister walked in. He stood up. His sister looked angry, but his mother came right toward him, gave him a big hug and said, "It's good to see you baby."

Michael told them about his apartment. He told them he was drinking a lot less, and that he's "trying to get it together." Sylvia and Maria explained that the CTI program would be ending in a couple of months, and that they were trying to make sure he had a lot of support in place.

Sylvia and Maria had also connected Michael with a case manager at their agency who could continue working with him after CTI was finished. Most of the pieces were in place, but they still worried that the transition would be tough. Even though things had sometimes been rocky, they wondered how he would do through yet another transition. But as they moved through the last phase of CTI, they saw a lot less of him. His mother and sister came by to visit more often. He was seeing his new case manager once every couple of weeks. He kept now monthly appointments with the psychiatrist—still no meds, but a lot of talk and a lot of support.

CTI was working just like it was supposed to—it had begun intensely with Sylvia and Maria seeing him several times a week, but as it came toward the end, many other supports were in place. Michael was reconnecting. He was stably housed. And he seemed happy. At the end of most days, he would kick back in his apartment and listen to "Kind of Blue." He'd open a beer, then another, then maybe one more...but never more than three.

# References

# **Abernathy, D.(1999).**

Thinking outside the evaluation box. *Training and Development*, *53*(2), 19-23.

# Alliger, G., Tannenbaum, S., Bennett, W., Traver, H., & Shotland, A. (1997).

A meta-analysis of the relations among training criteria. *Personal Psychology, 50*(2), 341-358.

## Anderson, N.R., West, M.A. (1994).

The Team Climate Inventory Manual and Users' Guide, Assessment Services for Employment, NFE-Nelson, Windsor.

# Archibald, D., and McDermott, R. (Nov/Dec 2008)

Benchmarking the Impact of Communities of Practice. *KM Review, 11*(5), 16-21.

## Brown, J., and Duguid. P. (1991)

Organizational Learning and Communities of Practice: Toward a unified view of working, learning, and innovation.

Organizational Science, 2 (1), 40-57.

# Clark, K., Hammer, M. (November-December 2008).

Communities of Practice: The VDOT Experience. *KM Review, 11*(5), 10-15.

# Correia, A. and Davis, N. (2008).

Intersecting Communities of Practice in Distance Education: The Program Team and the Online Course Community. *Distance Education, 29* (3), 289-306.

# Johnston, C. S., (2008).

Establishing a community of practice in a blended learning program for health and mental health professionals. An examination of Global Mental Health: Trauma and Recovery Mastery Certificate Program. *Unpublished doctoral dissertation.* Harvard University, Graduate School of Education, Cambridge, MA.

# Kaufman, R., & Keller, J. (1994).

Levels of evaluation: Beyond Kirkpatrick. *Human Resource Development Quarterly, 5*(4), 371-380.

# Kirkpatrick, D., & Kirkpatrick, J. (2006).

Evaluating training programs: The four levels.

San Francisco: Berrett-Koehler Publishers, Inc.

#### Kirkpatrick, D. (1959).

Techniques for evaluating training programs.

Journal of the American Society for Training and
Development, 13, 3-9.

# Lave, Jean, and Wenger, Etienne. (1991).

Situated learning: Legitimate peripheral participation. Cambridge: Cambridge University Press.

# Moore, B. (September 2008).

Using Technology to Promote Communities of Practice (CoP) in Social Work Education. *Social Work Education*, *27*(6), 592-600.

# Seaman, M. (2008)

Birds of a Feather? Communities of Practice and Knowledge Communities. Curriculum & Teaching Dialogue, Vol. 10 Issue 1/2, p269-279.

# Sweeney, B., and J. Holmes (2008).

Work and Life in the Clearcut: Communities of Practice in the Northern Ontario Tree Planting Industry. *The Canadian Geographer 52*(2), 204-220.

# Wenger, E. (1998).

Communities of practice: Learning, meaning, and identity. Cambridge, UK: Cambridge University Press.

## Wenger, E. (2006)

Retrieved from Etienne Wenger's web site on June 18, 2007: http://www.ewenger.com/theory/index.htm.

# Wenger, E., McDermott, R., and Snyder, W. M. (2002).

Cultivating Communities of Practice.
Cambridge, MA: Harvard Business School Press.

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Deliverables	Timeline	Action Steps	Comments
Develop and evaluate prototype training manuals and curriculum that are tailored to the specific needs of social work practitioners.	10/2008	Submit draft work plan and meet with NIMH Program Officer and Contract Specialist to review statement of work.	C4SI purchased WebEx, a web conferencing technology, for the online curricula, webcasts, blog, registration and meetings. The CTI online curriculum will be linked directly to the Homelessness Resource Center, an interactive web site that utilizes Web 2.0 technology and social media tools to create a national hub of peer networking, continuing education, and resources for the homeless service provider community. Users participating in the CTI interactive online training will have access to the entire HRC knowledge base— an extensive online library of resources for homeless service providers.
	11/10/2008	Submit 1st monthly report and final project work plan	
	11/2008	Convene Advisory Board and Columbia University team via conference call to review project objectives and obtain input.	
	12/2008	Hire project staff: Distance Educator and Project Assistant.	
	12/2008	Obtain training for IHAT staff on Critical Time Intervention (CTI) by Columbia University.	
		Review current CTI training materials developed by Center for Urban and Community Services (CUCS).	
	12/10/2008	Submit 2nd monthly report.	
	1/10/2008	Develop draft website/interactive plan for online CTI curricula, obtain feedback from Advisory Board, and refine as needed. Submit to NIMH for review with 3rd monthly report.	
	1/2009	Complete recruitment of 27 participants from the Health Care for the Homeless and Migrant Clinicians' Networks—9 licensed social workers who are supervisors, 9 licensed social workers and 9 non-licensed staff providing supportive services.	
Develop and evaluate interactive programs designed to be adjunctive and/or stand alone modules to help train social work clinicians in delivering an established evidence based therapy intervention.	2/10/2009	Submit draft prototype manual/curricu-	The framework for the qualitative research
	2/2009	lum including PowerPoint presentations, audio podcasts, self-assessments, and supplementary reading material along with 4th monthly report.	design is based on the work of Kirkpatrick (1959), which provides a comprehensive view of a training program's impact. This approach measures outcomes at four levels—Reaction, Learning, Behavior, and Results.

Deliverables	Timeline	Action Steps	Comments
	2 - 6/2009	Convene Advisory Board meeting via conference call to discuss implementation of curriculum.	The framework is therefore used to inform the content of interviews and discussions. For example, the semi-structured telephone interviews and the focus group
		Administer interactive online training curriculum consisting of 4 modules, each completed over a two-week period by all participants.	
	3/10/2009	Submit 5th monthly report.	will include questions
	4/2009	Conduct "Principles of CTI" webcast for participants and Advisory Board.	relating to Reaction, Knowledge, Behavior, and Results.
	5/2009	Conduct "Core CTI skills" webcast for participants/Advisory Board.	
	7- 8/2009	Survey post-training knowledge, skills, and attitudes and conduct post-training interviews with all participants.	
Develop evaluation criteria (satisfaction, intent to use, knowledge, at-	2/2009	Develop online blog to provide opportunity for interactive discussion and support among participants and CTI team.	CTI-specific content will be included within these domains. For ex- ample, the Knowledge level might include a prompting question such as, "could you de- scribe the process you will use to aid a client in maintaining his/her entitlements?" Specific CTI questions will be developed in consultation with Dan Herman, Columbia University and CHPS to ensure key compo- nents are captured in the evaluation.
titudes) and strategy for assessing the program/	3/2009	Create online registration	
tools.	4/2009	Embed help desk feature into curricula.	
	1/2009	Conduct pre-training focus groups with each of the three groups and interview each individual to assess their knowledge, skills and attitudes, and practice of EBPs.	
	3/2009	Develop and implement strategy to collect the following data:	
		Participant satisfaction with key elements of the training, including content areas and interactive technologies	
		Knowledge gained as a result of the training—examined both by asking about content ("What are some of the key concepts of CTI?" "Could you describe the process you'll use to work with clients around money management?") and by asking for a self-assessment of learning ("What did you learn from the training that you didn't know previously?")	
		Changes the participant has made to his/her practice based on the training (for example, new techniques applied or degree to which practice is being implemented)	

Deliverables	Timeline	Action Steps	Comments
		Changes the participant intends to make to his/her practice;	
		Context in which CTI is implemented (for example, supervisory support)	_
		Barriers to implementation of CTI	
		Other evidence-based practices in which participants have received training and the degree to which they are being implemented	
		Likelihood of using other evidence-based practices	_
	4/10/2009	Submit draft evaluation/outcome criteria with 6th monthly report	
	5/10/2009	Submit evaluation plan with alpha test with 7th monthly report	•
	6/10/2009	Submit 8th monthly report	
	8/10/2009	Submit draft alpha test report with 10th monthly report	
Develop standards for certification		Create standards and plan for CEUs through Association of Social Work Boards and/or the National Association on Social Workers	
	7/10/2009	Submit draft standards of certification	
Develop and evaluate follow-up/refresher training modules and their scheduling.	8/2009 9/10/2009	Submit refresher module plan/schedule with 9th monthly report	
	9/2009	Administer refresher module to 27 participants.	
	9/2009	Conduct follow-up survey of use of EBP in practice.	
	9/10/2009	Submit refresher alpha test report	
		Analyze and report results to Advisory Board.	
	9/10/2009	Conduct project presentation with Government Project Officer in Bethesda, MD.	

Deliverables are in bold



# FREE Online Training Opportunity for Homeless Service Providers!

The Center for Social Innovation (formerly the Institute on Homelessness and Trauma) has launched a new initiative to provide online training on **evidence-based practices**. Funded by the National Institute of Mental Health (NIMH), this pilot training will strive to improve care by equipping homeless service providers with new knowledge and skills. Our first course focuses on **Critical Time Intervention** (CTI), an evidence-based practice designed to connect people experiencing homelessness with community support to help during times of transition (e.g., discharge from prison, shelter, or the hospital). The Center for Social Innovation is pleased to be partnering with Dan Herman and Sally Conover at Columbia University to provide this training.

# Who should apply?

The audience for this pilot training course includes:

- Clinical social workers providing services in homeless or migrant service settings
- Social work supervisors who are in a position to train and mentor staff or take on social work students
- Other social services staff providing care to people experiencing homelessness (case managers, peer specialists, outreach workers, and others)

#### How much will it cost?

The training will be provided **FREE OF CHARGE**. In fact, participants will be paid a small stipend for their time and efforts. Continuing education credits for the course are pending.

#### When will it take place?

The target dates for the 8-week training course will be March-April 2009.

## What should I expect?

The course will cover CTI principles, evidence for CTI, phases of the intervention, and core skills for implementation. You will need access to a computer with internet capability, and a telephone for conference calls. Some components of the training you will complete on your own time, some will be scheduled webcasts.

You should allow 3-4 hours per week to participate in the course. This time will be spread over the course of the week and includes self-directed online study, webcasts with CTI experts, online discussion, and team projects.

# How can I apply?

Deadline for application is January 31st, 2009. Space is limited. For more information on the project, or to apply, please contact Tara Vary at the Center for Social Innovation: (617) 467-6014 or <a href="mailto:tvary@center4si.com">tvary@center4si.com</a>.



# March 6, 2009

# Dear CTI Training Participant,

Hello and welcome to the Center for Social Innovation's **Online Training on Critical Time Intervention** (CTI).

We are excited to work with you over on this new training in CTI. The staff at the Center for Social Innovation is pleased to partner with Columbia University to provide this training. In order to make sure the training is be grounded in the real world work of CTI, we also been working with the staff of the very first CTI projects.

To prepare you for the weeks ahead, we have put together this orientation packet. Please read this information carefully. The packet includes:

- Our Approach to Teaching and Learning
- Course Overview
- Course Schedule
- Course Requirements
- Evaluation Information
- A letter to give to your supervisor or agency director to explain the course
- Technology Requirements

In the days ahead, we will also be asking you to email us a picture of yourself and a short one paragraph bio so we can create an online booklet that will help you know a little more about one another.

As we advertised in the recruitment for the training, there will be a stipend for all those who complete the training and meet all of the requirements. The stipend of \$400 will be available to you after the course to recognize the time commitment and effort you put into participating in the training. You must discuss with the supervisors of your agency whether the stipend will be paid to you directly or to your agency. Your agency policy will determine this.

We will be in touch in the coming days with more information. Please hold the dates and time expectations set out in this orientation packet.

Sincerely,

# The Training Team at the Center for Social Innovation

189 Wells Avenue Newton Massachusetts, 02459 Tel: 617.467.6014

# **Our Approach to Teaching and Learning**

The goal of this training is to create a learning environment in which **we all learn from one another**, not just from the course materials or the trainers. Each of you has experience that is important in thinking about how an agency—your agency—can implement CTI in the real world, with real people.

The benefit of having this training online is that you can **connect with colleagues across the country over a long period of time**. We hope that you will continue to stay connected and work with one another to implement CTI after the training is over. We will provide ways for you to do that.

We have structured many parts of the training to help you learn from your colleagues. We start each module with self-paced presentations that you access on your own and complete on your own time over the course of two weeks. While this first part you do on your own, all other requirements for each module allow you to learn from other participants and the training team. At the end of each module, we have a live webcast scheduled at a fixed time. In these webcasts, you meet with trainers and participants, share your module assignments and get feedback on your work. There are also online discussions that will last for the two weeks of each module. These will not be "live" like the webcasts, but will be held in an online forum where you can go at a time that suits you, read other people's comments about the module, and post your comments and replies. That way, you can think about the content you are learning in each module with others, and see how they are thinking about it too. Finally, the major assignment for the training will be an implementation plan for CTI, which you will develop with three other participants in the training. We will guide you through this assignment and provide you with tools and strategies needed to work effectively as a group.

It is important that this training is meaningful to you and adds value to your work. This training provides an opportunity for you to use a new approach that has proven effective in reducing homelessness and integrating people into the communities where they live. Through a client-centered approach that meets individuals where they are, CTI has improved the lives of many people who have experienced homelessness and mental illness.

We are looking forward

to taking on this training

together.

# **Course Overview**

The goal of the eight-week course in Critical Time Intervention is to teach homeless services providers to implement Critical Time Intervention within their agencies.

The first two modules are focused on teaching the basics of CTI, including the skills needed for working on a CTI team. Most of the work in modules 1 and 2 is self-paced and completed independently. In modules 3 and 4, equipped with the basics of CTI, the training turns to implementing CTI in specific agencies and teaching training participants to think as a team about how they would implement this team based intervention into their own agencies. The work in modules 3 and 4 is focused on developing an implementation proposal for establishing CTI in your agency. This work is conducted in small groups of 4 training participants so that implementation issues can be thought through from multiple perspectives. Feedback on the implementation plan will be given by other participants and trainers. Teams will be able to self-assess their implementation plan and revise before making a final presentation to the entire group in the final webcast.

## Module 1. Basics of CTI

Participants will learn the core skills for Critical Time Intervention, including definition, principles and phases of CTI, how CTI became an evidence-based practice, and who is involved in CTI. Topics will include: definition, principles, phases of CTI, who is involved, and evidence for CTI.

#### Module 2. The CTI team

The second module will focus on the role of CTI team members within each of the three phases of CTI. Topics include: therapeutic stance, clinical areas of intervention, engagement, assessment, goal setting, and basic Intervention

#### Module 3. CTI in the Real World

Module 3 will explore challenges and provide solutions for implementing Critical Time Intervention in community settings, addressing issues such as how to implement the practice in non-traditional settings such as streets and shelters, and how to address difficulty in continuity with clients who are in crisis and who move frequently. Participants will work through case-based scenarios to gain insights in how to address challenges to implementation. We will cover how to start a CTI program, and will include case based scenarios for implementing CTI in the community.

#### Module 4. Implementing CTI in Your Agency

The fourth module will equip participants to implement CTI in their agencies. Particular focus will be paid to achieving fidelity to Critical Time Intervention, measuring outcomes, and evaluating the learner's skill in implementing the practice.

#### **Each Module will include:**

## **Module Lesson**

A self-directed, online presentation with voice narration and accompanying materials (e.g., handouts, Podcasts) will be available each module.

## **Online Discussion**

There will be an online discussion related to the lesson for each module. The discussion will not happen in real time but will be asynchronous (like email where people can post comments and read replies on their own time onthe discussion board). The discussion will last for the entire two weeks of the module. Participants will be encouraged to access the lesson early so they can actively participate in the online discussion. Participants are required to post a minimum of 3 times to the online discussion during each module.

#### **Live Webcast**

At the end of each module, there will be a scheduled webcast participants will access by login to WebEx Training Center. Participants can ask Sally Conover and Dan Herman, CTI experts, questions about the module. Participants will also share assignments and receive feedback from trainers and participants.

#### **Office Hours**

Sally Conover will have virtual "office hours" in WebEx Training Center for each module so participants can ask her questions.

# **Assignment and Quizzes**

Each module will have an assignment that to be completed by the end of the module. In modules 1 and 2, the assignment will be completed individually then shared with a small group of participants in the live webcast at the end of the module. In module 3 and 4 assignments will be focused on participants implementing CTI in community settings and their own agencies. These assignments will be completed in small groups of 4-5 participants. At the end of module 3, each group will have an opportunity to receive feedback from another small group on their preliminary CTI implementation plan, and then present a final CTI implementation plan to the larger group at the end of module 4. Each module will also have a short module quiz that will test your knowledge of the module content.

# **Course Schedule**

# Please save the following dates:

Week of March 16<sup>th</sup>: Pre-course technology training. Times TBA (choose one that works for you)

March 24 <sup>th,</sup> 1-2 PM EST March 31 <sup>st</sup> , 1-2 PM EST April 3 <sup>rd</sup> , 5 PM EST April 7 <sup>th</sup> , 1-2 PM EST	Kickoff webcast  Module 1 office hours (optional)  Module 1 assignment due  Module 1 live webcast
April 14 <sup>th</sup> , 1-2 PM EST April 17 <sup>th</sup> , 5 PM EST April 21 <sup>st</sup> , 1-2 PM EST	Module 2 office hours (optional) Module 2 assignment due Module 2 live webcast
April 28 <sup>th</sup> , 1-2 PM EST May 1 <sup>st</sup> , 5 PM EST	Module 3 office hours (optional)  Module 3 assignment due. Draft 1 of CTI implementation plan
May 5 <sup>th</sup> , 1-2 PM EST	Module 3 live webcast
May 12 <sup>th</sup> , 1-2 PM EST May 15 <sup>th</sup> , 5 PM EST	Module 4 office hours (optional)  Module 4 assignment due. Final draft of CTI implementation plan
May 19 <sup>th</sup> , 1-2 PM EST	<b>Module 4</b> live webcast. Presentation of CTI implementation plans

# **Course Requirements**

In order to pass this training, receive a certificate of completion, obtain CEUs (pending), and receive the stipend for your participation, you must complete all course requirements outlined below.

For each module you must:

- Complete the guiz
- · Post at least three times to the online discussion
- Participate in live webcast
- Complete the module assignment
- Share your assignments with others in the training during the live webcast

# In addition you must:

- Participate in a pre-course training to get you familiar with the technology for the training
- Participate in a live webcast on March 24<sup>th</sup> at 1:00 PM which will kickoff the training

# **Evaluation**

We are very interested to learn about your experience with this online training and to hear your ideas about how it can be improved. We hope you will agree to participate in:

- A one-on-one telephone interview (30-45 min.)
- A group discussion with other trainees via conference-call (60 min.)

You will be asked to participate in these discussions once before the training begins, and once later in the summer after the training has been completed.

Please review and sign the consent form (sent as an attachment to this email) if you are willing to participate in this evaluation. You may send us the signed form via e-mail (szerger@center4si.com), fax (617-467-6015), or mail (Center for Social Innovation, 189 Wells Avenue, Newton MA, 02459). We greatly value your input, and look forward to talking with you.

If you have any questions about the consent form or the evaluation, please contact Suzanne Zerger (Phone: 647-435-4616; E-mail: <a href="mailto:szerger@center4si.com">szerger@center4si.com</a>).



March 6, 2009

## To Whom It May Concern:

The Center for Social Innovation in partnership with the Columbia University School of Public Health is offering an online professional development opportunity on Critical Time Intervention. Critical Time Intervention is an evidence-based practice that helps individuals with severe mental illness successfully transfer from an institutional setting to the community. Continuing Education Units in social work are pending.

Your staff member is enrolled in this professional development opportunity and will need to dedicate 3-4 hours per week to learning about Critical Time Intervention from March 24<sup>th</sup> 2009—May 19<sup>th</sup> 2009. Included in this training will be "live" events where participants will need to be in front of a computer with Internet access to attend an hour long meeting with the trainers and training participants. The dates for these live events are from 1:00-2:00 PM Eastern Standard Time: March 24, April 7, April 21, May 5, and May 19. There will also be a training in the technology used for the training in the week prior to the beginning of the course. To successfully participate in this training, participants will need access to a computer with Internet access and a telephone to call a toll-free number for live webcasts.

In addition, each participant will need to provide 2 hours in the weeks leading up to the course and 2 hours in the weeks following the course, to participate in focus groups and/or interviews.

Finally, a small stipend of \$400 is available for participation in this course. It is up to you as an agency to determine whether the stipend is paid to the agency or the participant personally.

If you have any questions about the training or if we can help facilitate your staff's participation in this training, please do not hesitate to contact me at 857-998-1380, or <u>jolivet@center4si.com</u>.

Sincerely,

Jeffrey Olivet, M.A., Director of Training Center for Social Innovation

189 Wells Avenue

olivet

Newton Massachusetts, 02459

# **Technology Requirements**

Two technologies will be used in this training.

- 1) The Center for Social Innovation Website, which you can access by going to a web address. We will provide you the web address and information to create your login and password. On the website you will be able to access course information, including dates of course events, access course modules, participate in the course discussions for each module, and use collaborative tools to work with your small group on your assignments for modules 3 and 4.
- For the "live" webcasts, we will use WebEx Training Center. You will access WebEx Training Center by dialing a toll free number that we will email to you before each training session.

The Center for Social Innovation website will have more information shortly and we will train you in all of the technologies you need through a "live" web cast pre-training in technology in the week before the CTI training. We will send you an email with times for this pre-training and you will be asked to sign up for one.

Ensuring you have the proper hardware and software is vital to your success in an online learning environment. These system requirements are created to help you access the course web-based modules and ensure you can <u>view</u> all course materials, and participate in "live" course events and discussions.

#### **Operating System and Browser**

**Operating System Requirements:** An operating system is a computer program (software) that manages a computer system and facilitates the operation of applications.

- For PC users: You must have at least Windows XP.
- For Mac users: You must have Mac OS X ver. 10.3 or any newer visions of OS X.

**Browser:** A browser is a software program used to view and interact with various types of Internet resources available on the World Wide Web. Netscape, Safari, and Internet Explorer are several common examples.

- You will want one of the following browsers and version numbers:
  - o Internet Explorer 6.0 or any newer version.
  - Netscape 7.1 or any newer version.
  - Safari 1.1 or any newer version.
  - Firefox 1.5 or any newer version.

#### Audio

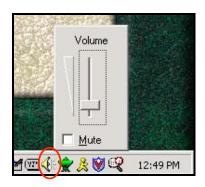
Some of the course materials are in the form of audio files (often referred to as podcasts). Podcasting, is a method of publishing audio files to the Internet. For this course, we will be using podcasts created specifically for the CTI training to summarize and provide background for all course modules.

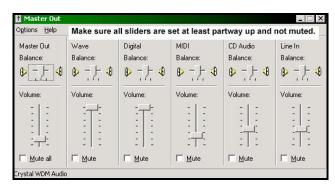
**<u>Audio requirements:</u>** 16 bit or better sound card and speakers to listen to audio. On desktops these are often external whereas on laptops the speaker is often built-in.





- <u>For Mac Users</u>: If you are not getting sound but you have speakers, please check that the mute button is not checked on your computer and that everything is plugged in where it should be. This can be found under "System Preferences" (under the apple sign at the top left corner of the toolbar on your computer) and then under "Sound."
- <u>For PC Users:</u> If you are not getting sound but you have speakers, please check that the mute button is not checked on your computer and that everything is plugged in where it should be. This can be found under the "Speaker" symbol found in the bottom corner of your screen on most PCs.





#### **Internet Connection**

You will need a fast Internet connection to access all materials from the course easily. Your connection should be a high speed internet connection such as cable modem or DSL.

\*\*Note: Corporate or academic security firewalls may block some course content, such as chat or streaming media. Accommodations for access can usually be arranged if you contact your network administrator, though local security policies ultimately dictate what is allowed.

#### **Email Address**

Email is a vital communication medium for online learning programs. You will be able to email other participants and trainers from inside the web-site (The website has an email inbox built in). It is also very important that you have a working email address separate from the training (such as gmail or yahoo) to receive communications from the training team. You are responsible for keeping your email address and other personal information up to date.

# Java and Plug-ins

Our courses make extensive use of Java, JavaScript, browser plug-ins, helper applications and cookies. It is essential that you have these elements installed and enabled in your web browser for optimal viewing of the content and functions of your online course. You can check that these elements and other settings for your web browser are configured correctly using the Browser Checker tool offered by the University of Texas Telecampus: <a href="http://www.telecampus.utsystem.edu/forms/bcheck/browsercheck.html">http://www.telecampus.utsystem.edu/forms/bcheck/browsercheck.html</a>

The following programs can be downloaded for free on <a href="www.download.com">www.download.com</a> or by searching on the World Wide Web for the words "Name of Element" and "Free Download." For example, by using the website <a href="www.google.com">www.google.com</a> and searching "realplayer and free download" several links should appear, at which you may download the element for free.

#### Programs to download (for free!):

- **Macromedia Flash Player** allows you to view content created with Macromedia Flash such as interactive web applications and animations.
- RealPlayer allows you to view and listen to streaming video and audio.
- QuickTime Player allows Mac and Windows users to playback audio and video files.
- Windows Media Player 10 allows you to view, listen and download streaming video and audio.
- Adobe Reader allows you to view, save, and print Adobe Portable Document Format (PDF) files.
- Sun Java Runtime Engine (JRE) allows you to use interactive tools on the web.

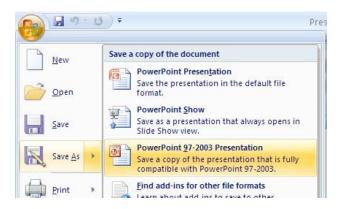
## **Applications**

#### **Microsoft Word:**

You will need Microsoft Word or another Microsoft-compatible text editing software to create assignments and view content. If you do not already have Microsoft Word as part of the Microsoft Office Suite, it can be purchased separately. Information on pricing and how to buy MS Word can be found on the link below:

http://www.microsoft.com/office/word/howtobuy/default.mspx

<u>Important Note for PC users:</u> Microsoft Office 2007 (including Word and PowerPoint) will save documents, by default, in a format that is not automatically compatible with previous versions of Microsoft Office. For best results, choose "save as" and select a format that is compatible with earlier versions of Microsoft Office as depicted in the image below.



# Contract HHSN271200800027C Final Report

