

Service Design Site Visit Report

Boston University
Boston, Massachusetts



Dates of Site Visit: April 14–15, 2014

◆ Targeted Capacity Expansion, Technology-Assisted Care ◆

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Boston University

Grantee Name	Boston University
Grantee Phone Number	617-358-4661
Grantee Address	Boston University School of Social Work: Center for Addictions Research and Services 264 Bay State Road, Boston, MA 02215
Site Visit Dates	April 14–15, 2014
Program Name	Smartphone Technology To Reduce Relapse Among Latinos With Mental Health and Substance Abuse Disorders
Grant TI Number	TI024733
SAIS Number (TA Number)	3905
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Boston University and Casa Esperanza team left to right: Susan Dargon-Hart, Dilia De Jesús, Emily Stewart, and Jordana Muroff

Grantee Project Sites Visited

Casa Esperanza

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Executive Summary

In 2013, Boston University's Center for Addictions Research and Services (BU CARS) launched the Smartphone Technology To Reduce Relapse Among Latinos With Mental Health and Substance Abuse Disorders project to expand care options for Latinos in recovery from substance use who also have co-occurring mental health disorders. Approximately 100 eligible Latino/a adults (18 or older) who have completed residential treatment at partner site Casa Esperanza (Hope House) will receive an Android smartphone equipped with the University of Wisconsin-designed Addiction Comprehensive Health Enhancement Support System (A-CHESS) mobile application system adapted for Spanish-speaking clients (CASA Esperanza Comprehensive Health Enhancement Support System—CASA CHESS) to assist with their recovery over the course of their year-long program participation. In addition to Spanish content, CASA CHESS will include a medication-adherence feature to help clients maintain their wellness goals. The program will further the strategic initiatives outlined by the Substance Abuse and Mental Health Services Administration's (SAMHSA) Targeted Capacity Expansion, Technology-Assisted Care (TCE-TAC) grant.

Casa Esperanza has served greater Boston's Latino community for 30 years and has a longstanding relationship with BU. Its Roxbury campus (contained within a single block) includes residential and outpatient units for men, women, and pregnant or postpartum women (and their children) in need of care for mental illness and/or substance use issues and chronic disease. The program transformed a once blighted neighborhood into a thriving hub of integrated care. Casa Esperanza's service model (based on the tenets of Alcoholics Anonymous) offers a holistic approach to health care that helps clients transition to a safe, self-sufficient, and empowered way of life. It also has permanent supportive housing units to promote independent living. Casa Esperanza's fully licensed and CARF-accredited mental health clinic offers residential program graduates "culturally competent, trauma-informed outpatient services," including psychiatric care; individual, group, and family counseling; intensive case management; housing and employment assistance; and essential life skills training. It also offers a Structured Outpatient Addictions Program (known as SOAP) that uses evidence-based practices to address issues related to mental illness, substance use, and trauma. The organization was recently informed it would be awarded SAMHSA's Primary and Behavioral Health Care Integration grant to form a fully integrated health home and further expand service delivery capacity by including an onsite primary care clinic.

As Casa Esperanza has evolved, so has the organization's adoption of technology. Program staff believe that technology empowers clients to take control of their health care and obtain access to needed services that would otherwise be unavailable to them due to challenges associated with transportation, work schedules, and/or family commitments. The CASA CHESS program has been fully operational since January 2014 and, according to consumer feedback, it has already improved recovery outcomes for clients by providing help where and when they need it.

A team from JBS International's TCE-TAC portfolio conducted a site visit to the BU CARS program at Casa Esperanza on April 14–15, 2014, to review program accomplishments and identify potential areas where technical assistance may enhance achievement of program goals. The site visit team focused on understanding existing implementation and service delivery strategies. After receiving a comprehensive overview of Casa Esperanza's programs and a tour of the campus, the team addressed CASA CHESS implementation with program staff, focusing on the strengths, challenges, and lessons learned in the early design and implementation stages of the grant.

The team then met with clients, clinicians, and a recovery coach to gain their perspectives on the app's utility in real-world settings and technology's effects on engagement, treatment retention, recovery support, and other health outcomes. The consumer groups offered candid feedback on the app features that are most and least beneficial. They also shared ideas on potential enhancements and explored ways technology can be effectively integrated into practice. The team then addressed the program's evaluation approach, which includes randomized cohorts. During the discussion, the team emphasized the importance of data collection and predictive analytics to inform next steps for the CASA CHESS app and the organization more broadly. The team talked extensively about strategies to organize and prioritize technology implementation issues, including developing a governance process to ensure the CASA CHESS app is adequately supported in the context of Casa Esperanza's short- and long-term goals. The visit concluded with a discussion about Casa Esperanza's approach to support quality improvement and sustainability activities driven by the Affordable Care Act.

The JBS implementation site visit came at a time when 15 Casa Esperanza clients had several months' exposure to the smartphone and mobile application technology. BU staff work closely with A-CHESS developers at the University of Wisconsin to refine the tool to most effectively meet program objectives and client needs. While the program is still in the early implementation stages, it is essential for staff to understand how clients will use the app, incorporate client feedback on potential enhancements to the technology, and determine how the product's vendor will respond to the program's evolving needs.

The success of the program has organization-wide implications for Casa Esperanza, particularly as the organization considers an integrated technology strategy for the next several years. In addition to launching CASA CHESS, Casa Esperanza is in the process of implementing an electronic health system and patient portal through Netsmart (anticipated for release later in 2014). The TCE-TAC grant has the potential to inform future technology capacity within Casa Esperanza and improve the service delivery model.

It is necessary to form a technology governance process in which leadership, administrators, and clinical support staff are actively involved in identifying and setting priorities for Casa Esperanza's use of technology, including ongoing modifications to the CASA CHESS mobile application. A governance group that has cross-functional representation from across the organization will help to prioritize decisionmaking around the selection, integration, and use of technology and develop strategies to determine how technology will complement existing client services and secure Casa Esperanza's foothold in the evolving health care environment.

Developing a solid project management plan informed by meaningful data will be essential to the program's success. The plan should include setting expectations for the app's functionality, prioritizing the rollout of features, and identifying budget and timeline parameters. A well-constructed plan will outline staff responsibilities so staff can address the program's long-term goals while ensuring implementation-related activities are addressed. The program will need to continue to adjust workflow assumptions and assess priorities for application enhancements as guided by staff and clients.

Casa Esperanza can effectively recruit clients into service because program participants are already actively engaged in residential care. Full and continued engagement (beyond simply using the smartphone) once clients graduate to outpatient service depends on offering meaningful, relevant, and consistently updated content on the mobile platform. Identifying program champions from among clients, clinicians, recovery coaches, and other support staff will assist with future development and sustainability efforts. To help users achieve technology's potential, it was suggested program staff give clinicians and recovery coaches access to the CASA CHESS app and conduct additional focus groups to solicit user feedback on the app's utility. Staff might also explore using and/or adding other free or low-cost smartphone tools (e.g., texting, apps, educational resources). The program team can draw from consumer findings when brokering future iterations of the mobile application with the University of Wisconsin. Staff might negotiate reduced price contracts with phone service providers based on feedback from members who have benefited from accessing smartphones with app capabilities. This will be especially important as clients exit the program but wish to continue to use the app for recovery support.

BU program staff are focused on generating meaningful data that can inform the field about the merits of technology-based interventions. Since BU is the first to pilot the Spanish-language version of the A-CHESS platform, sharing outcomes will shape language-specific adaptations of the tool. For example, the CASA CHESS application was built on a platform that is separate from A-CHESS (the English language version); therefore, clients who read and/or write only in English may have difficulty using it. In addition to fulfilling grant-mandated reporting requirements, staff are conducting a randomized study that examines outcomes among clients enrolled in outpatient services who have been assigned to two groups: (1) clients who receive the CASA CHESS intervention and (2) clients who receive no additional technology support. Program staff have already identified some limitations with the study's design. The site visit team suggested staggering cohorts by several months to monitor how the technology is working.

The site visit team noted that program staff and leadership have a firm understanding of technology's role in the changing health care landscape and are mindful of long-term strategies to support program success. Casa Esperanza's executive director Emily Stewart mentioned that the introduction of the CASA CHESS app coincides with broader shifts in health care coordination and other technology-related developments occurring at Casa Esperanza, with its partners, and throughout the State. The need to share information and communicate seamlessly across systems will become increasingly important for delivering health services.

single-room occupancy facility; Dunmore Place and 300 Eustis Street with 8 units for families with children; Nueva Esperanza with 14 studio units for single individuals). Finally, the organization offers a relapse prevention and intensive outpatient services program (Familias Unidas Center), which provides culturally competent, trauma-informed outpatient behavioral health and addiction treatment services to those in recovery. Its Structured Outpatient Addictions Program (known as SOAP) “focuses on restoring, enhancing and/or maintaining a client’s level of functioning and the alleviation of symptoms that significantly interfere with quality of life.”³ Later in 2014, Casa Esperanza will begin providing outpatient and in-home therapy services to children and adolescents. The grantee also anticipates integrating primary care and behavioral health services by opening an on-campus clinic as part of SAMHSA’s Primary and Behavioral Health Care Integration grant.

Casa Esperanza provides care to men and women and their children from all walks of life, including individuals who are disabled and homeless, pregnant and parenting women, those involved in the criminal justice system, and injection-drug users at risk for contracting HIV/AIDS. Casa Esperanza’s clients are predominantly Hispanic/Latino (98 percent), many of whom (40 percent) are exclusively Spanish-speaking or have limited English language skills. A significant majority (85 percent) identify as Puerto Rican, followed by representation from the Dominican Republic and other Latino countries (e.g., El Salvador, Guatemala, Colombia, Chile, Cuba, Cape Verde). Nearly 64 percent of clients are marginally housed, 95 percent are unemployed or without a reliable source of income, and 61 percent have not received a high-school diploma.⁴ A 2013 report on the health of Boston showed that between 2006 and 2010, Latino residents had the lowest median annual household income of all racial/ethnic groups in the area (\$29,886 for Latinos versus the citywide median of \$49,893), the highest rate of poverty (35 percent versus 23 percent overall).⁵

Approximately 81 percent of Casa Esperanza clients have a co-occurring disorder, although only a third have received a formal diagnosis prior to enrolling in the program. Most (90 percent) have at least one significant medical condition (e.g., hepatitis C, asthma). Almost all women and most men served by Casa Esperanza have experienced traumatic life events (e.g., domestic violence, sexual abuse). Clients historically identified opiates as their primary drug of choice (65 percent), followed by crack cocaine (30 percent) and alcohol (5 percent). Heroin and crack cocaine, administered intravenously, are most common among Puerto Rican and Dominican populations. Alcohol use is more prevalent with the other Latino groups.

In light of the need to address substance use among Latinos in their community, Casa Esperanza is committed to using technology to engage and retain individuals in treatment and recovery services who might not otherwise have the ability to access and/or remain in care.

³ Casa Esperanza Web site: <http://www.casaesperanza.org/programs/outpatient.cfm>

⁴ Casa Esperanza Web site: <http://www.casaesperanza.org/about/profiles.cfm>

⁵ *Health of Boston 2010*, Boston Public Health Commission Research and Evaluation Office, Boston, Massachusetts
Web site: www.bphc.org

1. Site Visit Overview

A team from JBS International's TCE-TAC portfolio conducted a site visit to BU's grant program (CASA CHESS) at Casa Esperanza on April 14–15, 2014, to review program implementation progress and identify potential areas where technical assistance may enhance program goals. Day 1 of the visit began with a meeting of the JBS team and CASA CHESS program staff to learn about Casa Esperanza and the staff members' role in supporting the program's success. The team received an indepth overview of the program and discussed general implementation and service delivery strategies with a case manager who is actively engaged in using the mobile application with her clients. The site visit team learned how the technology is put to practice and the benefits and burdens of implementation. The team then met with Casa Esperanza clients, clinicians, and a recovery coach to discuss their views on using technology and the kinds of resources and functionality that would be most beneficial to engage clients interested in using the app and while aligning with staff workflows. The team ended the day by reviewing short- and long-term program evaluation and data collection strategies and the importance of forming a cross-functional and representative governance group to prioritize decisions about managing additional enhancements to the app and integrating technology into a larger framework that supports the organization's mission.



On day 2, the site visit team continued discussions with program staff about their health information technology (HIT) strategy, emphasizing how the CASA CHESS program can become a sustainable practice after the grant funding ends. They reinforced points related to coordinating future iterations of the CASA CHESS app with the product developer and creating a project management plan informed by the governance group. The team also spoke about the role of technology in Casa Esperanza's business model and how HIT and the availability of actionable data can support quality improvement and sustainability activities necessitated by the Affordable Care Act (ACA). The site visit concluded with a debriefing conference call with SAMHSA Government Project Officer Kathryn Wetherby.

2. Program Vision and Design

In collaboration with the University of Wisconsin, BU incorporated the A-CHESS mobile application system to support substance abuse recovery efforts among Casa Esperanza's clients. According to the BU grant application, program staff will accomplish the following implementation objectives:

- ▶ Adapt the A-CHESS application for smartphones for bilingual Latinos and include a medication-adherence component.
- ▶ Train clients with co-occurring disorders who completed Casa Esperanza residential treatment and Casa Esperanza staff in the use of the A-CHESS smartphone app.

- ▶ Provide smartphones to treatment completers.
- ▶ Have available one full-time case manager and one full-time peer specialist to respond to smartphone requests from graduated clients.
- ▶ Conduct ongoing technical assistance and local evaluation activities for all program components.

The proposed effort will—

- ▶ Reduce risk of relapse.
- ▶ Increase medication adherence.
- ▶ Improve mental well-being.
- ▶ Improve social connectedness.
- ▶ Promote independent living after graduating from treatment.

Eligible participants are adults (18 or older) who agree to provide contact information for at least two individuals who can help program staff reach them during the 12-month study period. Individuals may not participate if they have a history of being suicidal or significant cognitive, developmental, and/or visual problems that would hinder their ability to use the A-CHESS app. Of those enrolled, participants are on average aged 38, and most identify as Hispanic/Latino (mainly Puerto Rican). A small number identify as White or African American. Over half the program participants have less than a high school education, most have been incarcerated, and few are employed. Most have sought addiction treatment in the past, and a large percentage have been prescribed medication to treat psychological or emotional needs in the past 30 days. When asked, most clients reported having a cell phone, but not a smartphone.

BU's goals and objectives are outlined in exhibit 1.

Exhibit 1. BU's Program Goals and Progress Updates

Goals and Objectives
<p>Goal 1: Adapt the A-CHESS application to a bilingual version for Casa Esperanza's Latino/a population to better respond to client needs. The adapted version will include a feature to promote medication adherence.</p>
<p>Progress Update: The BU CARS team and members from Casa Esperanza's community advisory board worked closely with the University of Wisconsin to complete translations and develop the medication-adherence feature. Dr. Jordana Muroff (BU project director) convened weekly meetings and drafted frequent email communications to inform the development of the CASA CHESS application, which was completed December 31, 2013.</p>

Goals and Objectives

Goal 2: Provide training to Casa Esperanza staff and clients on the use of CASA CHESS and distribute smartphones to eligible program participants. Training will be offered on an ongoing basis to ensure participants can continue to use CASA CHESS upon graduation from the program.

Progress Update: BU CARS and University of Wisconsin have provided multiple trainings to Casa Esperanza staff on the use of the CASA CHESS mobile application and the Droid smartphone. Trainings may include staff not directly involved in the TAC program. All-staff meetings will take place annually.

Forty clients per year will receive CASA CHESS and smartphone training.

Dr. Muroff and BU's cultural competence expert (Dr. Luis López) and a graduate research assistant completed translating A-CHESS content.

Casa Esperanza clients participating in the outcome evaluation have been briefed regarding the expectations of their participation in the program. Fifteen clients are enrolled in the CASA CHESS program.

Goal 3: One case manager will provide intensive outpatient case management services to clients at discharge from residential treatment. The case manager will be available via smartphone to address client needs throughout the project.

Progress Update: Casa Esperanza has identified and trained a bicultural and bilingual case manager to support clients using CASA CHESS. The team has developed policies and procedures to address coverage expectations (e.g., engagement, responsiveness). All participating clients will meet with their case manager multiple times before graduating from the program to discuss postgraduation support and set up their CASA CHESS client profile.

Goal 4: Peer-to-peer recovery coaches will be available to support clients' use of technology throughout participation in the program.

Recovery coaches are receiving training on CASA CHESS, and graduating clients are meeting with recovery coaches.

Goal 5: The BU evaluation team will use a formative evaluation model, provide ongoing supervision, training and technical assistance to Casa Esperanza staff, and collect comparison group data. The team will have weekly contact with Casa Esperanza staff.

Progress Update: The BU team received approval from the BU institutional review board to proceed with TAC program implementation in October 2013. They also applied for and received a Certificate of Confidentiality from SAMHSA.

BU and Casa Esperanza staff finalized and translated evaluation instruments. Baseline intake data have been collected on 15 clients. Followup assessments will begin in May 2014. All facets of the BU process and outcome evaluation are moving forward as planned. Weekly conference calls between BU and Casa Esperanza staff address project implementation protocols, client flow, and data tracking procedures. The team created an informational business card for clients and discussed the development of culturally appropriate items (e.g., medication-adherence scale, recovery stories).

Thus far, clients have been responsive to CASA CHESS. Clients actively use the tool to check in with their case manager and share news about their progress. They particularly appreciate using the calendar feature, staying in touch with their support network, and learning about community resources.

Exhibit 2. The A-CHES App

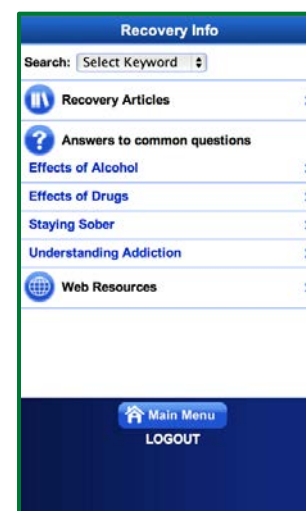


The CASA CHES application—modeled after the A-CHES app (see exhibit 2)—is designed to complement existing treatment and recovery opportunities for those in recovery. The application is intended to supplement the time when clients are not participating in face-to-face activities with their recovery coach, clinician, or peer group. CASA CHES is a tool that can be accessed anywhere and at any time through a smartphone, tablet, or a personal computer. It offers clients valuable recovery-oriented resources such as audio functions for those with literacy challenges and enhanced relapse prevention support. In addition to individualized resources, clients have the option to communicate with peer support groups and addiction experts. Among other functions, peer specialists have been trained to help clients develop recovery plans and increase social

connectedness. Clients will also receive reminders to help them remain on course with goals and complete a weekly Brief Alcohol Monitor (BAM) screening tool to assess their risk and protective factors.

A-CHES has several other useful functions for clients (see exhibit 3). For example, the “easing distress” function provides clients with brief guided exercises to help them learn refusal skills, relaxation techniques, assertiveness strategies, tips on how to cope with urges to use substances, and what to do if a relapse occurs. Clients can also find information to learn more about their addiction and the recovery process. Audio files of prerecorded videos and materials are available from others sharing stories of recovery and are especially helpful for those with low literacy levels. A panic button is available when a client feels recovery is in jeopardy. Clients can enter contact information for their loved ones or others in their support system who will receive a text message when a crisis arises. Discussion boards are particularly helpful to serve as a followup to counseling sessions and for others to share messages of encouragement.

Exhibit 3. A-CHES Resources



In addition to the medication-adherence component, the CASA-CHES application offers—

- ▶ Information on local Spanish-speaking Alcoholics Anonymous and Narcotics Anonymous meetings
- ▶ The ability to connect with the Casa Esperanza aftercare case manager
- ▶ A continuously updated list of local health events

There is a growing literature base in support of the effectiveness of the A-CHES application. A-CHES was recently evaluated in one randomized controlled trial in which patients were randomly assigned to either a treatment group that received usual recovery services plus use of the A-CHES application or a control group that did not use technology enhancements in their

recovery program. After a 1-year followup, A-CHESS users demonstrated statistically significant decreases in risky drinking behavior when compared to the control group. A statistically significant percentage of patients in the treatment group reported increased abstinence from alcohol consumption at months 8 and 12 (Gustafson et al., 2012).⁶

Casa Esperanza has a holistic approach to treatment and recovery “recognizing that physical and mental health, family reunification, and economic independence are the essential building blocks of individual recovery, family stabilization, and community development.”⁷ Alcoholics Anonymous and Narcotics Anonymous are the foundation of their service model. Other evidence-based practice approaches used by Casa Esperanza staff include—

- ▶ Motivational interviewing
- ▶ Stages of change
- ▶ Cognitive behavioral therapy
- ▶ Intensive case management
- ▶ Peer-to-peer recovery support
- ▶ Trauma-informed care

CASA-CHESS is being embedded in Casa Esperanza’s existing intensive outpatient programming. Upon enrolling in the program, clients receive an Android smartphone that is preloaded with the CASA CHESS mobile application. The case manager enters client-specific information in the device, including details related to recovery goals, current medications, triggers, and support network phone numbers. Clients are expected to complete a weekly assessment adapted from the BAM to report on their progress (e.g., if they are abstaining from using substances, if there have been changes to the risk and protective factors they identified). Case managers have received intensive case management training and are prepared to respond directly to their client’s needs as guided by the survey results.

Participants are expected to be actively engaged in the 12-month program. Participation will vary depending on client’s needs; however, clients must commit to the following minimum requirements:

- ▶ Learn and “try out” the application features.
- ▶ Complete daily medication reports.
- ▶ Complete weekly BAM surveys.
- ▶ Periodically meet with case managers and recovery coaches for training on how to use the application and discuss participation.

⁶ Gustafson, D., McTavish, F., Atwood, A., Chih, M., Shah D., Boyle, M., & Levy, M. (2012, December 4). Effects of a mHealth intervention for alcohol and relapse prevention: A randomized trial. *iMedicalApps*. Retrieved from <http://www.imedicalapps.com/2012/12/mhealth-intervention-alcohol-relapse-prevention/>

⁷ Retrieved from the Casa Esperanza Web site: <http://www.casaesperanza.org/about/philosophy.cfm>

- ▶ Review discussion board topics on a regular basis (posting is optional but encouraged).
- ▶ Be respectful of the diversity of the community's membership and refrain from posting any comments or photos that might be offensive to other member's race, ethnicity, gender, sexuality, religion, lifestyle, abilities, or culture.
- ▶ Program the panic button with at least one support contact in the event of an emergency.
- ▶ Refrain from using the application to commit any illegal acts.
- ▶ Meet with project staff to discuss changes in participation.
- ▶ Safely store and maintain the smartphone device and return it to program staff at the end of the project.
- ▶ Refrain from sharing the phone with others out of respect for the privacy of other program participants and the information they share.

According to the grant application, the program intends to enroll 100 unique participants over the course of the 3-year grant (year 1, 20; year 2, 40; year 3, 40). The programs will serve Latino clients, the majority of whom (65 percent) will be male. Staff indicated they did not account for the number of months it would take to implement the program when they set the goal for the number of clients that would be served in year 1. As a result, they submitted a request to SAMSHA to adjust the client total.

3. Grantee Leadership

BU and Casa Esperanza program staff have years of direct service experience in social work, evaluation, and program management and a clear understanding of the value of technology to enhance treatment outcomes. Casa Esperanza leadership is keenly aware of technology's role in the future of health care and is invested in adapting its strategies to comply with changes anticipated by ACA and other developments (e.g., the emergence of accountable care organizations and shifts in reimbursement). When speaking with Casa Esperanza's executive director and clinicians about opportunities for the organization to build on existing technology, it was apparent Casa Esperanza would like to expand traditional service delivery models and offer clients easy and cost-effective ways to remain engaged in recovery outside of the time spent with providers and in-person peer networks. In addition to expanding outreach opportunities, technology has boosted participation in social activities and enhanced leadership among clients. As a result, clients are engaged in their own care and hold each other accountable for content shared on the mobile application.

As the CASA CHESS program grows, it will become more important to form a governance group to help prioritize short- and long-term program activities, particularly related to enhancements designed to increase the use of technology. The governance group—composed of executive and management team members—can develop strategies to determine how technology will complement client engagement and retention in services and enable the organization to compete in the rapidly evolving health care environment. The use of CASA CHESS for the TAC

grant will help to define the organization's starting point for additional mobile technology-capacity building.

Casa Esperanza has operated a client-run consumer advisory board since 2005 that includes a membership of approximately 25–30 clients. Board meetings are a continuous quality improvement opportunity for the organization where clients provide feedback on programming they would like Casa Esperanza to offer, assess existing programs, and assist with planning and evaluation efforts. Board members participate in biannual focus groups and monthly informational meetings that include speakers on a variety of relevant topics (e.g., housing, employment, sealing criminal records).

Casa Esperanza remains flexible in its design and implementation strategies, recognizing there is no one-size-fits-all approach to service delivery. The team is amenable to adapting the program as needed to address challenges and considerations beyond implementation—including sustainability and readiness for ACA.

4. Implementation Plan

The smartphone and CASA CHESS mobile application were made available to clients in early January, and Casa Esperanza case managers and recovery coaches conduct outreach and followup activities using the app. The site visit team encouraged staff to continue to hold focus groups and to query clients on their preferences to increase their willingness to use the app, improve its utility, and make a stronger case when negotiating changes with the vendor.

Shortly before completing residential treatment, staff will introduce prospective participants to the smartphone program. Clients will be screened and, if eligible, will receive a smartphone pre-loaded with the CASA CHESS app. Participants are asked to use the app in the 7-14 days leading up to their graduation from residential treatment, or they will be asked to leave the program. This helps staff measure clients' ability to use the technology and demonstrates their commitment using CASA CHESS features (as opposed to having a phone for non-A-CHESS purposes). Clients must continue using the smartphone technology as directed throughout the 12-months they are in the program. If a week passes without activity, clients receive a warning that they have 3 days to resume use. A second warning is sent 3 days later if inactivity continues. Failure to respond to two warnings results in phone service cancellation. Participants must then return the phone.

Case managers play a pivotal role in facilitating service delivery. They work closely with clients and Casa Esperanza staff to complete the following activities:

- ▶ monitor communications, share resources, and post/moderate daily discussion topics
- ▶ alert Casa Esperanza staff about clients in crisis
- ▶ lead CASA CHESS orientation groups for new participants

- ▶ troubleshoot issues with using the technology
- ▶ track data related to phone use, weekly BAM assessments, and panic button usage

Clients will meet with program staff several times per week prior to discharge. These are opportunities to discuss how the technology is working and to identify any issues clients might have with their device. Staff can review summary reports on their client's activity, including results from the weekly assessment.

A large part of implementation is facilitating cultural change. Technology can be intimidating for staff and clients, so it is important to anticipate and respond to initial frustrations by having a well-communicated protocol place. The clinicians who met with the site visit team seemed willing to adopt new approaches to care. Identifying champions is essential to gaining buy-in. Program staff believe attitudes are shifting, particularly when providers see the benefits of improved client outcomes, reduced travel burden, and decreased missed appointments. Establishing a training protocol and using recovery coaches will also help facilitate technology adoption.

As reported in the grant application, BU staff developed the project timeline that appears in attachment 1. Successful implementation will require developing a project management tool to organize and prioritize the short- and long-term tasks identified by the governance group, Casa Esperanza staff, and app users as the program matures. Such a tool will help maintain accountability among staff and external partners and break complex steps into manageable action items. Organized, clearly defined, and well-communicated tasks will improve overall program implementation processes at all stages of the grant cycle.

5. Community Linkages, Partners, and Participation

Casa Esperanza has developed an extensive partner network that provides individualized, bilingual, and bicultural outreach and engagement services that reflect the nuanced beliefs, norms, and values reflective of the populations they serve. As discussed in the grant application, partners include the following:

- ▶ **Boston Public Health Commission** offers a variety of substance abuse treatment and recovery services to individuals, families, and communities, including gender-specific and culturally appropriate options for hard-to-engage populations. Boston Public Health Commission provides outpatient services for men, women, and adolescents, residential services targeting pregnant and postpartum Latina women and their children, and medication assisted treatment options.

- ▶ **Boston Emergency Services Team** offers 24-hour psychiatric support for adults and children. Among its many services, clients can access help from the urgent care center, short-term crisis stabilization unit, and toll-free hotline.
- ▶ **Latin American Health Institute** offers behavioral health services and interventions to Latinos and other minority populations in the surrounding community, including home-based therapeutic and case management services (Mi Familia), substance abuse clinical case management and treatment (Oasis), and outpatient counseling services.
- ▶ **Arbour Hospital, Latino Partial Hospitalization Program** offers structured intensive outpatient addiction programming for adults and adolescents and partial hospitalization options for individuals in need of a structured treatment plan while they transition from inpatient to outpatient care. Bilingual and culturally appropriate psychotherapy, case management, and counseling services are provided, including pharmacotherapy (if needed).
- ▶ **La Alianza Hispana** offers a range of bilingual and culturally appropriate social services designed to empower individuals, family, and the community, including family support services, adult and elder care, and education and workforce development services.

Recovery coaches will play a critical role in working with community partners and clients to facilitate technology adoption. CASA CHESS will gain additional momentum by partnering with Casa Esperanza's other programs to share information and resources, market the technology, and participate in evaluation activities.

6. Client Outreach, Recruitment, and Referral

Casa Esperanza's programs are infused with the cultural norms, beliefs, and values inherent to the Latino community. It was critical that A-CHESS developers consider the population when building the CASA CHESS platform for Spanish speakers. CASA CHESS includes Spanish-only content, but program staff hope to work with developers to diversify content so it can be used more broadly by clients whose reading and writing skills vary between English and Spanish.

To provide the smart phone and CASA CHESS mobile application to clients preparing to graduate from residential treatment, the program is recruiting participants from within the organization, which reduces the burden of extensive outreach, recruitment, and referral efforts. Staff will be responsible for adapting strategies to encourage full and continued participation among clients. This can be facilitated by maintaining an active presence on CASA CHESS and updating content on a regular basis. The site visit team suggested identifying technology champions to promote the app and encourage use among clinicians, clients, and others within the organization.

Clients will first undergo a screening to determine their eligibility to participate in the program. Although CASA CHESS has been available for only a short time, there is already buzz among clients about the "free phone program." Casa Esperanza and A-CHESS developers are creating

short videos that provide an overview of the program and explain how the technology is used. The videos could serve to promote the value of the program.

7. Affordable Care Act Readiness

BU and Casa Esperanza staff are mindful of the changes outlined under ACA, particularly with regard to technology and an increased focus on quality metrics. Fortunately, the CASA CHES program is part of a broader, organization-wide strategy to meet meaningful use data standards established under the Health Information Technology for Economic and Clinical Health Act and ACA. Predicting and managing financial and population health outcomes and cost offsets will be an essential part of ACA quality expectations, and data collected by this project will help to tell the story.

Momentum toward ACA readiness began with sweeping statewide healthcare reform measures when State legislature enacted Chapter 58 of the Acts of 2006 (*An Act Providing Access to Affordable, Quality, Accountable Health Care*) on April 12, 2006 which has served as the model for broader national changes outlined by the ACA. The law represented Massachusetts' plan to expand quality, low-cost healthcare coverage options for the uninsured. It established the **Massachusetts Health Connector** – a health insurance marketplace that offers comprehensive and tiered health insurance options for individuals, families, and small business owners. The law sets minimum coverage standards and benefits and extends subsidy assistance for individuals who participate in one of two programs⁸ – Commonwealth Care and Commonwealth Choice. Today, 97 percent of all Massachusetts residents are insured.

Casa Esperanza is experiencing its own changes in preparation for ACA. In addition to its myriad mental health and substance abuse service offerings, Casa Esperanza plans to open an onsite primary care clinic as part of a recently awarded SAMHSA grant. The organization is also preparing to launch an electronic health record (EHR) system and patient portal using the Netsmart Evolv platform. The system will be meaningful-use certified, compliant with the Health Information Portability and Accountability Act, and include a patient portal to allow clients easy access to their health information. The new system will increase workflow efficiency (e.g., timeliness, scheduling, billing) and information sharing capacity across the organization. The site visit team cautioned staff about diversifying functionality so the portal does not compete with the CASA CHES app.

The site visit team encouraged the Casa Esperanza program to develop a strategic plan that aligns with ACA requirements to guide the organization's technology use and future (3-4 year) investments. The plan should be comprehensive, aligned with the broader organization, and responsive to clients' needs. Offering technology to supplement treatment services and improve engagement and adherence to recommended treatment is a strong leveraging tool for

⁸ *Health Reform Facts and Figures*:

https://www.mahealthconnector.org/HomePortal/content/conn/UCM/path/Contribution%20Folders/Content%20Folders%20for%20Connector/About/Policy_Center/Reports_and_Publications/documents/FactsandFigures

organizations to compete in today's health care environment and represents the future of health care. A solid data-informed strategy will help secure Casa Esperanza's role as a leader in technology-supported behavioral health care.

8. Sustainability Planning

Casa Esperanza has a global perspective on how technology enhances client care, which is essential for program sustainability. While implementation of the CASA CHESS app has been the program's primary focus, program staff have considered the importance of developing a long-term sustainable practice model—notably, the involvement of leadership in technology enhancement and sustainability discussions, investments, and planning to further enhance buy-in opportunities. Technology will influence most of the domains of the organization's operations as Casa Esperanza addresses payment reform, data management, information integration, workflow, and organizational culture shifts (for clinical staff and clients). A technology-informed strategy will outline how Casa Esperanza intends to address these changes internally and among its partners. The plan should include details related to the organization's vision of a full complement of integrated technology tools, acquisition and project management strategies, identifying clinical champions, and developing robust analytical tools.

Additional staff support, preferably cross-functional assistance that draws on the expertise of staff and clients across Casa Esperanza, will help the organization realize its long term sustainability goals. This will also enable program leaders to focus on development opportunities to assist with near and long-term strategies for ongoing maintenance costs and the provision of cellular access for clients. The Latino community served by Casa Esperanza is resource poor, and mobile phones are a critical lifeline to individuals in recovery. The site visit team recommended that program staff demonstrate to vendors how essential smartphones are for clients to maintain sobriety. The devices are not luxury items but serve an important health-related purpose. Positive client testimonials will help make the case to vendors about why they should continue to support CASA CHESS participants at a price clients can afford when the grant-funded support ends.

Casa Esperanza actively participates in the A-CHESS mobile application consortium, which includes users of the tool from around the country. Collectively, the consortium should encourage the University of Wisconsin to expand A-CHESS functions, such as offering more comprehensive predictive analytics and the ability to connect with EHR systems and personal health records. As the number of A-CHESS users grows, so will the need for effective backup systems. The tool is currently housed on the University of Wisconsin's server, which means that when the university's server is down, thousands of A-CHESS users are without access to important device features. Moreover, the CASA CHESS tool is housed on a separate A-CHESS platform so utility of the tool may be diminished for those who do not read or write well in Spanish which could influence its long-term value. A final issue is that long-term sustainability is dependent on clients acquiring and retaining cellular service with a data plan; otherwise the

utility of the A-CHESS app is limited to the organization's willingness to provide ongoing financial support to cover costs associated with data plans. The consortium may be able to work together to prompt necessary changes to help A-CHESS stay relevant and compatible in the changing technology landscape.

9. Grantee Evaluation

Newly implemented, Casa CHESS does not yet have robust evaluation data to report on the 15 clients enrolled in the program. Six-month GPRA followup interviewers will begin in May 2014. Participants will receive a \$20 gift card for completing the followup GPRA interviews. The BU team has planned a comprehensive evaluation model that examines process and outcome measures. The process evaluation will measure fidelity to the program model and assess implementation strengths and challenges. The outcome evaluation will include the results of a randomized study that measures the outcomes of 100 enrolled clients who have completed residential treatment and have graduated to intensive outpatient services at Casa Esperanza. Clients will be assigned to one of two groups: (1) those who will use smartphone and CASA CHESS technology in addition to receiving outpatient care, or (2) those who will receive traditional treatment services only. To avoid conflict between clients in the treatment and control groups, the site visit team recommended staggering the random assignment process so the cohorts are separated by several months.

In addition to the questions asked as part of the GPRA interview, the program team created a bilingual outcome evaluation questionnaire that addresses the following outcomes: (1) risk of alcohol/drug relapse, (2) medication adherence/compliance, (3) mental well-being, (4) social connectedness, and (5) independent living status. A literature review was conducted to improve the selection of key outcome measures to include as part of the program's evaluation. The following tools were identified to inform on the outcome measures:

- ▶ Morisky Measure of Medication Adherence⁹
- ▶ Adherence to Refills and Medications Scale¹⁰
- ▶ Patient Health Questionnaire 9¹¹
- ▶ Generalized Anxiety Disorder¹²

⁹ Morisky, D., Green, L., & Levine, D. (1986). Concurrent and predictive validity of a self-reported measure of medication adherence, *Med Care* 24, 67–74. Retrieved from http://media.mycme.com/documents/30/11-136_case_3_table_2_rev_7413.pdf

¹⁰ Kripalani, S., Risser, J., Gatti, M., & Jacobson, T. (2009). Development and evaluation of the Adherence to Refills and Medications Scale (ARMS) among low-literacy patients with chronic disease. *Value Health* 12(1), 118–123.

¹¹ Kroenke, K., & Spitzer, R. (2002). The PHQ-9: A new depression diagnostic and severity measure. *Psychiatric Annals* 32, 9. Retrieved from <http://www.integration.samhsa.gov/images/res/PHQ%20-%20Questions.pdf>

¹² Spitzer, R., Kroenke, K., Williams, J., & Lowe, B. (2006). A brief measure for assessing generalized anxiety

Service Design Site Visit Report, Boston University, April 2014

- ▶ Expectancy Scale¹³
- ▶ Medical Outcomes Study Social Support Survey¹⁴
- ▶ Addiction Severity Index¹⁵
- ▶ Texas Christian University Trauma Form¹⁶

Evaluation activities will include creating an Excel spreadsheet to log 6-month GPRA followup details and developing a filing system for paper-based data materials (e.g., consent forms, client phone use agreements, intake and followup booklets). The team developed an SPSS database to track outcome evaluation data and a coding system for instrument scores.

BU and the University of Wisconsin will collect A-CHESS-specific data (e.g., frequency of application features used). Program evaluation updates are delivered on a weekly basis to BU and Casa Esperanza staff to alert about activities, developments, and announcements.

A successful evaluation strategy will inform on technology's ability to add value to the management of health outcomes and effectively demonstrate its return on investment. The plan must be dynamic, focused, and account for global system changes (e.g., the changing technology landscape outside of Casa Esperanza). These factors will be particularly helpful to garner stakeholder buy-in and support future expansion efforts.

Summary

BU and Casa Esperanza's TAC program is supporting the expansion of technology to Latino adults with substance abuse and co-occurring disorders living in the greater Boston area. The program is well aligned with Casa Esperanza's mission and is committed to enhancing client care by adopting smartphone and mobile application technology to help clients remain on course with long-term recovery.

disorder. *Archives of Internal Medicine* 166, 1092–1097. Retrieved from

<http://www.integration.samhsa.gov/clinical-practice/GAD708.19.08Cartwright.pdf>

¹³ Devilly, G., & Borkovec, T. (2000). Psychometric properties of the credibility/expectancy questionnaire. *Journal of Behavior Therapy and Experimental Psychiatry* 31, 73–86.

¹⁴ Shervourne, C., & Stewart, A. (1991). The MOS Social Support Survey. *Social Science Medicine* 32(6), 705–714. Retrieved from <http://chipts.ucla.edu/wp-content/uploads/downloads/2012/02/MOS-Social-Support.pdf>

¹⁵ McLellan, T., Kushner, H., Metzger, D., Peters, R., Grisson, G., Pettinati, H., & Argeriou, M. (1992). The fifth edition of the Addiction Severity Index. *Journal of Substance Abuse Treatment* 9(3), 199–213. Retrieved from http://tie.samhsa.gov/documents/pdf/chapter6_7.pdf

¹⁶ Weathers, F. W., Litz, B. T., Huska, J. A., & Keane, T. M. (1994). *PTSD Checklist—Civilian Version*. Boston: National Center for PTSD. Retrieved from <http://ibr.tcu.edu/wp-content/uploads/sites/2/2013/06/TRMAForm-sgv11.pdf>

Strengths and Considerations for Action

Program Vision and Design

STRENGTHS

- The BU team has experience implementing Federal grant awards, including several SAMHSA-funded programs. The team has also adapted other technologies for Latino patients with co-occurring disorders.
- Casa Esperanza has a long-term vision for incorporating technology into recovery services for clients.
- Casa Esperanza intends to conduct client focus groups to obtain feedback on the utility of the mobile application and serve as a continuous quality improvement mechanism.

CHALLENGES

- The case manager originally assigned to the project is leaving the organization; however, another case manager has been identified and will be trained to take over project responsibilities.
- A-CHESS developers created a separate platform for the CASA CHESS application that contains content in Spanish. This may be an issue for clients with varied language proficiency skills, particularly those who read and write only in English.

Potential Enhancements		Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	Adapt the CASA CHESS mobile application with the end user in mind. Consider the user experience to achieve the greatest potential and least frustration. Conducting additional routine focus groups may help guide decisionmaking.	X		
2	Consider having clients who are actively using the mobile application lead technology support groups and education efforts.	X		
3	As program enrollment expands, it may be necessary to reevaluate the provider-to-client ratio to most effectively manage caseloads and user activity on the app.	X		

Grantee Leadership

STRENGTHS

- BU and Casa Esperanza leadership believe in the value of technology to support member outcomes.
- CASA CHES program staff demonstrate passion and drive to achieve goals.
- Casa Esperanza has an active consumer advisory board that helps to develop, assess, and promote programs that meet client needs.
- Technology is improving leadership and accountability skills among clients.

CHALLENGES

- In the absence of a technology governance group, tasks associated with technology implementation are not prioritized, integrated, or aligned, and effective implementation processes are threatened.

Potential Enhancements		Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	Casa Esperanza will benefit from forming a governance group to help prioritize enhancements designed to increase the use of technology.	X		
2	Casa Esperanza may wish to identify champions from within the organization and among clients to promote the value of using technology to enhance substance abuse treatment services.	X		

Implementation Plan

STRENGTHS

- The smartphone and mobile application are considered tools for clients' recovery toolboxes. Clients are encouraged to use the technology in ways that support their individual recovery needs.
- Clients use their peer support network and case manager as points of contact for the panic button feature. Clients reported that having someone who understands what they are going through is invaluable.
- Clinicians reported a decrease in missed appointments as a result of using mobile technology. The smartphone has been a helpful way to expand communication opportunities with clients, clinicians, and other support members.
- BU and Casa Esperanza program staff have remained flexible in their implementation strategy and are willing to adapt delivery mechanisms as needed.
- Casa Esperanza uses recovery coaches to help achieve an excellent user experience and increase recruitment and engagement opportunities.
- As part of the case management approach, Casa Esperanza gives clients access to a computer lab to help them learn basic computer skills and access employment sites.
- BU and A-CHESS developers are in the process of making Spanish-language video tutorials (e.g., YouTube) that outline on how to use the smartphone and mobile application.

CHALLENGES

- Coordinating and prioritizing next steps for the CASA CHESS program will require a detailed project management plan guided by the governance group.

Potential Enhancements		Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	Clients reported that having a goal/objective tracking feature for a range of issues within and outside of their program treatment plan on the CASA CHESS app would be helpful.	X		
2	Solicit client input at intake to better determine access to and preference for different types of technology.	X		
3	Establish a detailed project management plan to help set expectations for the app's functionality, prioritize the adaptation and rollout of features, and identify a budget and timeline.	X		
4	During the technology and information strategic planning process, consider expanding content of portals and/or CASA CHESS to include resources that benefit clients' lives, such as information related to education, employment, housing, and child welfare. Content must be relevant and easy to find.	X		

Community Linkages, Partners, and Participation

STRENGTHS

- Casa Esperanza has a longstanding presence in the community and established partnerships with multiple Federal, State, and local agencies. Its reputation and voice in the community facilitate partnership opportunities, especially with groups serving Latinos.
- Casa Esperanza uses recovery coaches to facilitate program adoption.
- BU and Casa Esperanza have connected with a fellow TCE-TAC cohort 1 grantee, Advocates, Inc. (located in Ayer, Massachusetts), to aim for the best possible client service delivery.

CHALLENGES

- None noted.

Potential Enhancements		Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	Collect qualitative and quantitative data to share with potential partners about the program's value and effectiveness.	X		
2	A detailed workplan may help capture best practices for streamlining staff workflow and continuity-of-care strategies for clients transitioning to different service providers.	X		

Client Outreach, Recruitment, and Referral

STRENGTHS

- CASA Esperanza recruits clients receiving on-campus residential treatment services. Close proximity to clients on a daily basis facilitates outreach and recruitment efforts.
- There is already considerable buzz about the “free phone program” among clients.
- During the consumer discussion, clients commented on the value and utility of having access to a smartphone with preloaded support tools.

CHALLENGES

- It may take time for clients to feel comfortable transitioning from more traditional treatment modalities to technology platforms. Understanding client preferences for and access to different technologies will assist in outreach, recruitment, and retention efforts.

Potential Enhancements		Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	The program may benefit from identifying clients who have had success using technology in their own recovery to serve as champions to others.	X		
2	Texting may serve as an effective marketing mechanism to spread the word about CASA CHES and to complement other outreach activities. Consider incorporating “thought-of-the-day” or other motivational messages as part of engagement and retention strategies.	X		
3	Develop a strategic marketing campaign that uses technology (e.g., brief videos) to market technology’s potential to improve client health outcomes.	X		

Affordable Care Act Readiness

STRENGTHS

- Massachusetts has taken a progressive stand toward expanding health care services to its residents. The State served as the model for the national health care platform (i.e., ACA). As a result, Casa Esperanza is prepared to address changes outlined under ACA.
- Casa Esperanza understands the value of distance treatment technology on client outcomes and appreciates the role technology will have in the future of patient care.
- Casa Esperanza is preparing to launch an EHR system and patient portal through the Netsmart product.

CHALLENGES

- None noted.

Potential Enhancements		Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	Technology will serve as the currency of health reform. Consider using the Casa Esperanza program as a way to demonstrate technology's effectiveness in improving health outcomes for clients outside static clinical settings. This may help to make the case for needed reimbursement reform.	X		
2	Casa Esperanza may wish to consider joining local chapters of health informatics groups to gain perspective on how the organization can position its use of technology in the changing health care landscape.	X		
3	As accountable care organization models expand and shift to primary care based approaches in response to the ACA, it will be important for Casa Esperanza to stay on top of these developments and demonstrate the value of early intervention and improved client engagement. Ongoing technology enhancements that align with this need to be guided by an organizational information plan.	X		

Sustainability Planning

STRENGTHS

- From the onset, BU and Casa Esperanza have considered sustainable practices as part of the program's design.
- BU and Casa Esperanza is an active member of the A-CHESS consortium and is prepared to ask questions related to short- and long-term functionality and sustainability.
- BU and Casa Esperanza can draw from the lessons learned from fellow TAC programs in cohorts 1 and 2 (e.g., Advocates, Inc.) to determine which features translate into sustainable practices.

CHALLENGES

- CASA CHESS is operated on a separate A-CHESS platform and housed on the University of Wisconsin's server. Since competencies across reading, writing, and speaking are different, housing the app on a platform that does not contain bilingual content may hinder future scalability considerations.
- Casa Esperanza is preparing to launch an EHR system and client portal. It will be important to consider design elements for both to avoid competition and duplication between the platforms.

Potential Enhancements		Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	Sustainability planning should begin early and include a focus on workforce and financial strategies that can support the program beyond the life of the grant. Develop a strategic plan for the next several years with a focus on how the program will adapt to the technology and population health goals outlined under ACA.	X		
2	Training recovery coaches to promote the program will help embed the program in the recovery community and reduce strain on staff.	X		
3	Demonstrate the value of technology in supporting other Casa Esperanza initiatives by showcasing the program's cost-benefit and savings potential. Data-driven results will assist in making the case for expanding funding mechanisms.	X		
4	Casa Esperanza should develop a decision support tool that the governance group can use to guide short- and long-term decisionmaking.	X		
5	Utilize the A-CHESS consortium to make a collective request for necessary changes to the tool's functionality.	X		

Grantee Evaluation

STRENGTHS

- In addition to collecting GPRA data, BU staff will conduct a process and outcome evaluation to inform future program activities. The outcome evaluation consists of a randomized controlled study that examines clients that received the technology intervention and those that received traditional treatment services.
- Casa Esperanza offers incentives to clients to encourage continued program participation and the completion of followup reporting requirements.
- Casa Esperanza staff are motivated to build technology-related questions into their evaluation model to make the case for how technology-based practices enhance client outcomes. This will be an asset for future sustainability efforts.

CHALLENGES

- A-CHESS does not provide comprehensive analytics related to how clients are using the instrument; therefore, program staff do not have a complete picture on how the technology is being used.

Potential Enhancements		Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	Outcomes data is essential to solicit and diversify funding for sustainability purposes. Collect evidence of program effectiveness and efficiency to demonstrate why distance treatment services should be reimbursed in the future.	X		
2	BU may wish to consider developing simple inquiries that are routinely collected to gauge the technology features that are most useful to users.	X		
3	Ensure that the randomized study provides an equal amount of client support time to the control group so that a more accurate comparison can be made.	X		
4	It might be helpful to stagger treatment and control groups by several months to avoid conflict between clients who received a phone and those who did not.	X		

Abbreviations and Acronyms

ACA	Affordable Care Act
A-CHESS	Addiction-Comprehensive Health Enhancement Support System
BU CARS	Boston University's Center for Addictions Research and Services
BAM	Brief Alcohol Monitor
CASA CHESS	Casa Esperanza's Comprehensive Health Enhancement Support System
EHR	Electronic health record
GPRA	Government Performance and Results Act
HIT	health information technology
SAMHSA	Substance Abuse and Mental Health Services Administration
SOAP	Structured Outpatient Addictions Program
TAC	technology-assisted care

Attachment 1

BU Project Timeline

Milestones Activities (Staff responsible)	Year 1 2013-2014				Year 2 2014-2015				Year 3 2015-2016			
	Oct	Jan	Apr	July	Oct	Jan	Apr	July	Oct	Jan	Apr	July
Project Preparation												
Obtain BU IRB approval (PI)												
Train Casa Esperanza staff (PI, CE, TIA, DD)												
Translate A-CHESS app into Spanish, and refine medication-adherence component (PI, CE, DD)												
Program the translated version and medication-adherence component												
Refine screening tools and assessments instruments (PI, AT)												
Project Management												
Integrate technology within Casa Esperanza (ED, DD, IT, CM, PS)												
Train clients to use CASA CHESS and smartphones (DD, CM, PI, TIA)												
Conduct review meetings (DD, PI, CM)												
Incorporate evaluation findings into service delivery (ED, DD, PI, PS, DTC, CM)												
Program Operations												
Supervise program staff and evaluation staff weekly (DD, PI)												
Begin screening and enrolling participants (DD, CM, PI)												
Provide program services to referred clients (DD, PS)												
Participants complete weekly survey feedback on CASA CHESS (PP)												
Program staff access CASA CHESS data to tailor supports to participants needs (DD, PS, CM)												

Milestones Activities (Staff responsible)	Year 1 2013-2014				Year 2 2014-2015				Year 3 2015-2016			
	Oct	Jan	Apr	July	Oct	Jan	Apr	July	Oct	Jan	Apr	July
Evaluation and Data Management												
Hire trainer/interviewer assistants (PI)												
Set up data collection systems (PI, DD, DC, TIA)												
Gather data (TIA, IT, PS)												
Conduct stakeholder interviews (TIA, CM, PS)												
Analysis and Reporting												
Analyze data (DC, EE, PI)												
Report Government Performance and Results Act (GPRA) data to CSAT (EE, DC)												
Collaboration/ Community Involvement												
Participate in quarterly community advisory board meetings (ED, DD, PI, TIA)												
Participate in SAMHSA grantee meetings (DD, PI)												

Key: AT (A-CHESS team), CE (cultural expert), CM (case manager), DC (data coordinator/analyst), DD (deputy director), ED (Casa Esperanza executive director), EE (evaluation expert), IT (information technology consultant), PI (BU principal investigator), PP (program participant), PS (peer specialist), TIA (trainer and interviewer assistants)