

Submitted Proposal

Organization: Aloha House, Inc.

Requested Amount: \$94,329.00

Proposal Title: Self-Paced Interactive Digital Substance Abuse Treatment

1. Describe your organization. What is your mission and who do you serve? Highlight some of the most notable successes your organization has had in the last several years.

The mission of Aloha House is to promote recovery and healthy lifestyles to individuals and families by providing compassionate, effective, and comprehensive behavioral health services with the spirit of aloha. Aloha House, Inc. (AHI) is a private, nonprofit, Maui-based organization that was incorporated in the State of Hawaii in 1977 by a group of concerned citizens aware of the need for a residential facility to help those addicted to alcohol and drugs to recover. Initially, services were provided informally through the generosity of one individual who opened his Kahului home as a halfway house for anyone wishing to recover from alcohol or drugs. Aloha House moved in the early 1980s to its primary location on the site of the old Maunaolu College campus between Paia and Makawao. In 2007, Aloha House began providing substance abuse assessments and outpatient and intensive outpatient services to the general public from a small office in Wailuku.

Aloha House works with adults on Maui who are addicted to drugs and/or alcohol, as well as with individuals with co-existing mental health issues, and helps them to achieve and maintain a healthy and sober lifestyle. The broad range of treatment services includes Motivational Enhancement, Residential, Social Detoxification, Intensive Outpatient, and Outpatient Treatment, the Therapeutic Living Program, Clean and Sober Living and Recovery Support Services, Drug Court, and a continuum of care for persons with a serious mental illness. Aloha House is the only medically monitored residential detoxification substance abuse treatment facility on Maui and in the State. Aloha House is also accredited by the State Department of Health Alcohol and Drug Abuse Division and nationally accredited by the Counsel of Accreditation for Rehabilitation Facilities (CARF).

Aloha House is part of a Tri-Partnership with Maui Youth and Family Services and Malama Family Recovery Services. All three agencies share in infrastructure, experience, and professional expertise, and maintain highly qualified staffs using best practice intervention models and evidence-based practices in structured treatment settings. The Tri-Agency Partnership has already resulted in \$250,000 in cost savings per year by not only sharing CEO Jud Cunningham, but by sharing one Director of Finance and one Human Resources Director and other administrative personnel. Additional cost efficiencies have been realized through the installation of a single networked laser printer, networked computers, and installation of VOIP phones. The partnership has also combined payroll for the three organizations saving \$70,000 annually, streamlined clinical program administration, and achieved administrative efficiencies through continuous upgrades of Information Technology resources. Thus, the Tri-Partnership has a history of innovation with regard to organizational restructuring and collaboration with partners.

2. Please describe your innovation. Include the practical steps involved to take the innovation from the idea phase to implementation.

Aloha House proposes to develop and beta-test an interactive, dynamic, self-paced, internet based substance abuse treatment curriculum. This computer-based option will allow individuals entering substance abuse treatment to receive services adapted to their specific drug or alcohol treatment needs, substance abuse history and drugs of choice, stage of treatment, and personal educational and cultural considerations. The design will be similar to other adaptive interactive user-friendly online learning tools such as the Khan Academy education model.

The multi-modal on-line curriculum consists of 3 evidence-based treatment areas: the abuse/dependence disease model, cognitive behavioral therapy, and relapse prevention. Because recovery is essentially learning, the curriculum includes journaling, instant access to streaming links from salient domain sites in the group treatment setting, ongoing assessment, and testing. Recurring client evaluations provide a built-in evaluation for the program itself.

The curriculum developed by Aloha House staff will address the following treatment needs:

- Standardizes treatment modalities around a standard, evidence consumer curriculum skill set system.
- Includes end of module test components which check for consumer competence and understanding-- completable and scorable online.
- Includes proprietary streaming video clips, expository, pedagogy and test components.
- Includes public domain citations, material and permission granted excerpts.
- Runs on standard desk top PCs.
- Focuses on expanded treatment components addressing different drugs of choice.
- Includes universal treatment pieces for all substance dependent patients.
- Includes updatable standardized printouts of sober support meeting schedules, bus schedules, social services resources and intra-agency/ex-agency resource data.
- Is culturally sensitive to Hawaii's diverse community, including linguistic and educational differences, and includes potential for adaptation to other cultural competencies.

In order to take the innovation from idea phase to implementation, a Digital Treatment Team will create a detailed one-year workplan once funds are awarded. The workplan will include resolution of legal and copyright issues (in terms of content usage and licensing by Aloha House and protection of Aloha House's intellectual property) by Month 2; outlining curriculum for 112 sessions in Month 3, developing storyboards and text in Month 4; embedding content to software by a qualified Embed Team in Months 5 and 6; completing first draft of digital curriculum by Month 6; completing second draft of curriculum and preliminary beta version in Months 7 and 8; completing final beta test and performing final legal check in Month 9; purchasing twelve demonstrations work stations for implementation in Month 9; beta testing program at Aloha house with consumers in Months 10 and 11; performing final revisions in month 11; releasing demonstration in Month 12.

3. Please explain how your innovation is a clear improvement over what already exists or what is currently meeting the needs of your clients, constituents, members, or customers.

Substance abuse treatment is generally provided in an open-ended group setting. Because of the nature of addiction and recovery, groups must be flexible and allow for clients to join at any time. This flexibility allows for clients to access treatment when they are ready for recovery and takes into consideration relapse and other personal issues that interrupt an individual's treatment. Also, from an economic efficiency standpoint, organizations cannot start a new group each time a new client needs treatment. However, the open-ended nature of groups can be challenging. Because of the variance among consumers regarding educational level, language and cultural proficiencies, substance use histories and drugs of choice, not to mention the stage of treatment, the open-ended group treatment model results in gaps in treatment delivery for some, and unnecessarily prolonged treatment times for others. At the same time, group sessions tend to lack cohesion around a standardized, evidence-based consumer curriculum skill set system. Furthermore, written treatment materials are often expensive, and by their nature are unable to address the following variances in consumer need:

- Prior treatment exposure and home care knowledge.
- Levels of relapse risk.
- Degrees of co-occurring mental health disorders.
- Degrees of criminogenic risk and need.

Self-paced customized digital treatment will eliminate the barriers associated with traditional open-ended group treatment, while additionally providing clients with built-in recurrent assessments to enhance identification and responsiveness to cognitive and linguistic barriers, and opportunities to screen for possible co-morbid conditions requiring referral. Digital treatment also allows for peer to peer treatment interactivity and for the provider to continually and rapidly update and integrate novel and best practices across the agency to each consumer, which is more difficult in the group setting due to time constraints.

4. What impact do you expect the innovation to have on your field or on other fields? Provide specific examples of how your innovation will benefit the public.

If successful, the self-paced digital treatment (Digital TX) model will impact standards and methodology of substance abuse treatment delivery in Hawaii and nationally. Most significantly, low cost delivery of treatment materials means that multiple programs and clinics can provide standardized effective substance abuse treatment at a relatively low cost.

According to the National Survey on Drug Use and Health (NSDUH) conducted by the Substance Abuse and Mental Health Services Administration (SAMHSA), the use of illicit drugs among Americans increased by 10% between 2008 and 2010, to 8.9% of the population – for a total of 22.6 million Americans aged 12 or older. And in 2008, SAMHSA had already reported that drug use was at its highest level in ten years. According to the 2007-2008 SAMHSA report, the number of individuals using illicit drugs in Hawaii had risen to 95,000 or 7.37% of the adult population (based on Census population estimates for Hawaii 2008: 1,287,481). Drugs used on Maui include alcohol, marijuana, cocaine, amphetamines, prescription drugs, benzodiazepines, opiates (heroin), psychedelics, ecstasy, other "club drugs," and inhalants.

Crystal methamphetamine, which is readily available and the drug of choice in Hawaii, continues to be a significant problem on Maui and in the state. Over the last ten years, Hawaii has maintained the unfortunate distinction of having the highest rates of crystal meth use in the country. Drug abuse negatively impacts an individual's health and welfare, creates family problems ranging from financial issues to domestic abuse, and results in a significant burden for health care providers and criminal justice systems. Alcohol abuse is associated with motor vehicle crashes, homicides, suicides, and drowning.

According to the State of Hawaii 2004 Treatment Needs Assessment , in Hawaii, “regardless of the category of treatment needed, the level of drug involvement leading to the treatment, or the effectiveness of the treatment being offered, the resources available for treatment services are totally inadequate to manage the task at hand.... In total, in the State of Hawaii, ... 107,658 persons [are] in need of treatment for the consequences of their use of both licit and illicit substances.”

Because of the public's increasing ability and interest in accessing information, knowledge, and training using digital tools, computer-based treatment has the potential of substantially increasing access to substance abuse treatment. Furthermore, while Aloha House, Inc. will copyright and own the programs it develops, digital treatment modules will be distributed freely to partner agencies and substance abuse caregivers throughout the State such as Hawaii State agencies including the Department of Education and various judiciary departments, Salvation Army, homeless resource centers, and University of Hawaii medical school and social work departments. Initially and on an ongoing basis, Aloha House will provide the digital treatment to its own programs including Maui Drug Court, Aloha House and Maui Youth and Family Services School Based Programs, Malama Family Recovery Center, Intensive Outpatient Program, and the Sober Living Program.

According to the Treatment Needs Assessment referenced above, “In 2004, there were 7,573 persons admitted to treatment ... [and] roughly 100,000 persons in need of treatment did not receive it.” Thus, once developed, digital treatment has the potential to impact the 100,000 individuals in Hawaii alone for almost no additional cost.

Additionally, digital treatment has the potential to impact the behavioral health field by:

- 1) Providing an expandable platform with open source capability allowing for easy updating in order to remain current and novel.
- 2) Capturing consumer data and providing precise means for comparing longitudinal outcomes to improve outcomes and efficacy.
- 3) Applying substance abuse pedagogy to other mental health disorders.

5. How have you tested demand or interest for your innovation? Have you developed a prototype of your product or pilot tested your new idea yet? Surveyed potential users? Please provide data and information from your early stage testing.

Aloha House staff members have developed much of the proposed digital treatment curriculum in written format. Over a three-year period from 7/1/09 to 6/11/12, Aloha House Substance Abuse Counselor/Cognitive Skills Facilitator Gerald Palmer and Program Director Geoff Kirkland developed a substance abuse curriculum that integrates cognitive-behavioral treatment with 12-step methodologies, based on the neuroscience of addiction. This curriculum includes multiple treatment instruments (charts, graphs, studies, quizzes, public domain films, news articles etc.), and has been tested with approximately 925 consumers incarcerated in the Maui County funded Treatment Dorm at the Maui Community Correctional Center (MCCC). The curriculum has also been tested and is currently in use at the Aloha House Wailuku Intensive Outpatient Clinic, where 754 individuals have utilized it since 2004.

Previously, from 2001 to 2008, in addition to his duties at Maui Youth and Family Services and Aloha House and as an independent contractor to the State of Hawaii, Corrections Education section, Palmer utilized this curriculum while providing Cognitive Behavioral Therapy services to Maui's over 700 inmates at night at MCCC, where 80-90% of offenders are substance abusers. Over 35 complete courses were conducted at thirty 2-hour sessions.

Both Maui County and the State of Hawaii are supportive of cognitive-behavioral treatment programs that provide alternatives to drugs, crime and emotional distress for criminal justice clients as advocated by such experts as Dr. Edward Latessa, Professor and Director of the School of Criminal Justice at the University of Cincinnati. Thus, while providing services at MCCC, Palmer and Kirkland were afforded considerable latitude in curriculum development due to their reliance on Latessa's ground breaking evidence based research, first revealed in his seminal article, "What Works in Corrections."

Consequently, they integrated the following recognized treatment disciplines into the new curriculum, upon which the digital treatment will be based: the brain disease model of addiction, currently espoused by the National Institute of Drug Abuse (NIDA), Cognitive Behavioral therapy, embraced by the U. S. Department of Prisons along with a growing number of states, and the long recognized efficacy of 12-step legacy models utilized throughout treatment and recovery sectors. Thus far, specific curriculum materials have consisted of purchased criteria developed by recognized experts in the self-change and substance abuse/criminology fields and federal open source materials from NIDA and Mental Health Services Administration, as well as materials in the public domain. This treatment model also relies on physician prescribed medication when indicated. This new curriculum was received well by clients, with 60% of consumers completing treatment as compared to the national 35% rate (SAMHSA, April 23 2009 TEDS Report).

6. Are you aware of others working in a similar way as your proposed innovation? Please describe these other efforts and describe how your innovation is different from theirs. Do you plan to collaborate? If so, how?

As a substance abuse facility that provides substance abuse treatment to a variety of clients, the staff of the Tri-Partnership of Aloha House, Maui Youth and Family Services, and Malama Family Recovery Center constantly researches new methods of delivering treatment. Thus far, a curriculum that integrates cognitive-behavioral treatment with 12-step methodologies, and based on the neuroscience of addiction is wholly unique, whether provided digitally or in written format, and is not being used in any other treatment models.

The concept of providing mental health and substance abuse treatment through digital curricula has been actively tested in the substance abuse treatment field for the last several years and is clearly of interest to such entities as the National Institute on Drug Abuse (NIDA). For example, NIDA has studied "Web-delivery of Evidence-based, Psychosocial Treatment for Substance Use Disorders" in an effort to evaluate the effectiveness of interactive, web-based outpatient substance abuse treatment.

Unlike other national projects currently being tested, however, Aloha House is developing a digital treatment prototype that focuses on criminally addicted local offenders. Since Aloha House's proposed curriculum has evolved within the prison system, it provides an interface that is accessible to populations that struggle to intellectually understand crucial scientific treatment concepts due to their limited vocational and educational attainment and tendencies related to varying mental health challenges. Aloha House's curriculum helps consumers to develop knowledge competencies around these concepts by identifying each client's unique intelligence and then, by checking, testing and providing treatment in an appropriate format.

Most importantly, because the curriculum design specifically addresses the issue of varying client readiness, combined with an accountability test that requires demonstrated comprehension in order to move to the next level, this treatment model ensures intellectual proficiency in the areas necessary for successful recovery. The ability to display an understanding of vital tools, concepts, and skills is a function of the curriculum. The digital modification of this treatment will exponentially increase this educational treatment function by automating skill acquisition, regardless of the mixed client readinesses and open entry described in Question 3. It will also make the treatment easily transferable to other Hawaii institutions that deal with marginalized populations.

And finally, Aloha House's digital treatment intends to be open sourced, which means that new and dynamic material will constantly be added, and individuals, agencies, and institutions will be able to access the curriculum at little or no cost.

Beyond the first level of internal collaboration within the Tri-Partnership, Aloha House will contact NIDA identified programs to collaborate if approved by the Aloha House board of directors.

7. Please describe the background of your primary innovation team. If your innovation is a collaboration or partnership, please provide information about each partner's role and responsibilities. (e.g. Who will be the lead? Are key staff in place or will you hire?)

Aloha House, which has the knowledge, experience, and skills to develop the curriculum and convert it to an online treatment program, has been providing substance abuse treatment on Maui for over 30 years. The AHI Innovation Team will consist primarily of staff member Gerald Palmer and various contracted consultants. Gerald Palmer will head up the curriculum development committee and will supervise the overall project. He has worked for the last ten years for Aloha House as a counselor/facilitator and at Maui County Correctional Center for a total of nine years in the criminal supervision parole/probation substance abuse environment. Palmer has a Bachelor's degree in Film Philosophy and English, a Masters Degree in the Humanities, and is certified as an Advanced facilitator in Cognitive Self Change, and a facilitator in Strategies for Self Change. He has also operated his own business, and is well-versed in project implementation.

Converting the curriculum to the online format, including complete hardware and software implementation will be the responsibility of Terisol, a technology services provider that has worked with Maui's non-profit community for nearly 15 years and specifically with Aloha House since 2008. Terisol's online development division specializes in crafting fully interactive, engaging, online portals that effectively delivers content by crafting experiences that emotionally resonate with the target audiences through the use of reactive site designs, database driven interactive modules, social media tools and reward based gamification systems.

Aloha House also intends to partner with UH Maui College's film department for the development of video clips. Maui College has an active multi-media department that collaborates closely with Maui's public TV access channel. Aloha House hopes to work closely with the college media, computer and social work departments in order to involve young Maui students in this important innovation.

8. How will you grow the impact of your innovation? Describe how your innovation has potential to scale up and expand benefit beyond just your organization. Be specific about expansion plans and targets for making that increased impact. (e.g. increase in users, replication at other sites/communities, etc.)

The Tri-Partnership, consisting of Aloha House, Malama Family Recovery Center, and Maui Youth and Family Services, can provide the numbers and range of clients with addiction issues needed to thoroughly beta-test the program. Between the three agencies, substance abuse issues are addressed for men, women, youth, parenting women, and drug court clients in residential, outpatient, intensive outpatient, and school based settings. Aloha House intends to beta-test the digital curriculum with 50 clients starting in the 10 month of the project and 100 clients over a subsequent 12- month period.

If this innovation scales beyond the Tri-Partnership, the logical next step will be to expand digital treatment within the Hawaii State Corrections population. Aloha House currently provides substance abuse services in the Maui County Correctional Center in collaboration and under contract with the Honolulu Salvation Army. In addition, Aloha House is the provider of substance abuse treatment services for Maui Drug Court. These service contracts serve upwards of 300 persons per year. NIDA estimates that as many as 90% of inmates suffer from drug and alcohol abuse/dependency. The Digital Treatment Project plans to expand incrementally to serve these populations statewide. For example, the Salvation Army serves 600 clients per year under judicial supervision across Oahu. Ultimately, Aloha House would like to add the curriculum to all corrections treatments in collaboration with Department of Public Safety State of Hawaii through their substance abuse section. The State of Hawaii has approximately 5000 inmates in Hawaii and on the mainland. Aloha House projects serving 200 inmates in the second year following initial project completion (assuming cooperation of the State of Hawaii).

Expansion throughout the Hawaii State Corrections community not only increases the number of individuals treated effectively via a digital treatment model, it also provides a platform for capturing wide consumer treatment data. For example, extensive client drug/alcohol/tobacco history use may be gathered as part of a treatment module and added to a master data base of provider users without violating client confidentiality. On a routine basis, it will be possible to capture life use histories across the population served, including date of first use per substance, time periods of use, amounts of substance used, social milieu while using, route of administration per drug etc. to tabulate for further study and research. This report generating feature promises to enhance expandability.

Another logical expansion area would be other agencies that serve at-risk populations. Thus, the Tri-agency partnership will work with Maui County and community agencies to provide the curricula in a variety of settings, including homeless shelters, and schools. Further, Aloha House will modify curriculum as needed to serve a broader clientele. Substance abuse and its associated diminished wellness is a nationwide problem of enormous scope, cost and tragedy. For example, by creating an expandable open access resource program, Aloha House's School-based program would be able to place these materials (modified for grade level) in every intermediate and high school in the State of Hawaii. If every appropriate nonprofit in Maui County and the State utilized the curriculum, a potential 10,000 individuals could benefit by the end of the third year.