

House District 2, 3, 4, 5

Senate District 2

THE TWENTY- FOURTH LEGISLATURE  
HAWAI'I STATE LEGISLATURE  
APPLICATION FOR GRANTS & SUBSIDIES  
CHAPTER 42F, HAWAI'I REVISED STATUTES

Log No: 16-0

For Legislature's Use Only

Type of Grant or Subsidy Request:

GRANT REQUEST - OPERATING

GRANT REQUEST - CAPITAL

SUBSIDY REQUEST

"Grant" means an award of state funds by the legislature, by an appropriation to a specified recipient, to support the activities of the recipient and permit the community to benefit from those activities.

"Subsidy" means an award of state funds by the legislature, by an appropriation to a recipient specified in the appropriation, to reduce the costs incurred by the organization or individual in providing a service available to some or all members of the public.

"Recipient" means any organization or person receiving a grant or subsidy.

STATE DEPARTMENT OR AGENCY RELATED TO THIS REQUEST (LEAVE BLANK IF UNKNOWN):

STATE PROGRAM I.D. NO. (LEAVE BLANK IF UNKNOWN):

1. APPLICANT INFORMATION:

Legal Name of Requesting Organization or Individual:

Bay Clinic, Inc.

Db/a:

Bay Clinic, Inc.

Street Address:

224 Haili Street Hilo, HI 96720

Mailing Address:

224 Haili Street Hilo, HI 96720

2. Contact person for matters involving this application:

Name PAUL STRAUSS

Title Chief Executive Officer

Phone # 808-961-4083

Fax #

e-mail pstrauss@bayclinic.org

3. TYPE OF BUSINESS ENTITY:

- NON PROFIT CORPORATION
- FOR PROFIT CORPORATION
- LIMITED LIABILITY COMPANY
- SOLE PROPRIETORSHIP/INDIVIDUAL

7. DESCRIPTIVE TITLE OF APPLICANT'S REQUEST:

PILOT PROGRAM TO INTEGRATIVE BEHAVIORAL HEALTH SERVICES THAT INCLUDES PSYCHIATRIC CARE WITHIN A PRIMARY HEALTH CARE SETTING

(Maximum 300 Characters)

4. FEDERAL TAX ID #:

5. STATE TAX ID #:

6. SSN (IF AN INDIVIDUAL):

8. Fiscal years and amount of state funds requested:

FY 2008-2009 \$ 296,834.00

9. STATUS OF SERVICE DESCRIBED IN THIS REQUEST:

- NEW SERVICE (PRESENTLY DOES NOT EXIST)
- EXISTING SERVICE (PRESENTLY IN OPERATION)

SPECIFY THE AMOUNT BY SOURCES OF FUNDS AVAILABLE AT THE TIME OF THIS REQUEST:

STATE \$20,000.00

FEDERAL \$150,000.00 (PENDING)

COUNTY \$

PRIVATE/OTHER \$50,000.00

TYPE, NAME & TITLE OF AUTHORIZED REPRESENTATIVE:

PAUL STRAUSS CHIEF EXECUTIVE OFFICER  
NAME & TITLE

JANUARY 27, 2008  
DATE SIGNED

## **Application for Grants and Subsidies**

### **I. Background and Summary**

#### **1. Applicant's Background**

Bay Clinic, Inc. is a nonprofit 501c3 health center network that provides comprehensive primary care services at four (4) locations on Hawaii Island: Hilo Bay Clinic, Pahoa Family Health Center, Kea'au Family Health Center and Ka'u Family Health Center. We have a 25 year history of delivering acute and chronic care, health prevention, promotion, and maintenance to persons in all life cycles, family planning, health education and special programs for low-income individuals, dental services, outreach programs, behavioral health services and pharmaceutical assistance.

Our target populations are low-income residents with barriers to accessing health care. Such barriers include poverty, lack of health insurance, no transportation, geographic isolation, cultural differences, language barriers, and a lack of understanding of how to access health care. We use a sliding fee scale for low-income individuals below 250% of the poverty line. In addition, our clinics are located in areas that have been given federal designations as Medically Underserved Populations (MUP) in Medically Underserved Areas (MUA) covering census tracts 201-211.

Our mission is to provide high quality, patient-centered, comprehensive health care that is accessible, affordable, coordinated, culturally competent, and community directed for all. We accomplish this mission through values that include:

- Compassionate care
- Commitment to serve
- Empowerment and accountability
- Respect for all
- Integrity in all we do
- Continuous quality improvement
- Openness

#### **2. Goals and Objectives**

The Goals of this proposal are as follows:

1: Improve access to mental and behavioral health services by improved integration of behavioral health within primary health care setting.

We will achieve our goal through the following objectives:

- 1: Improve access to behavioral health through recruitment of a psychiatrist and behavioral health professionals.
2. Increase the number of persons seen in primary health care setting who receive mental health screening and assessments.
3. Improve mental health outcomes of patients seeking behavioral health care services.

### 3. Public Need

The need for improved mental health including psychiatric services is recognized as a major issue in Hawaii County. *Hawaii County Comprehensive Integrated Service Area Plan* published by the State of Hawaii, Department of Health Adult Mental Health Division in June 2004 outlined major barriers to adult mental health care as lack of psychiatrists willing to work on the Big Island and the need to increase salary to attract and recruit psychiatrists to meet the need (pg. 17). Town hall meetings have been held throughout Hawaii Island in January 2008. The report indicates residents' desire and need for more psychiatrists, substance abuse and mental health services overall. The report also recognized the impact of poor funding, including the lack of insurance coverage and low reimbursement rates as indicative of the low status of mental health services (Hawaii Tribune Herald January 24, 2008). The County of Hawaii Advisory Committee on Family Violence indicates "the shortage of psychologists and psychiatrists" as a major concern with regard to mental health, interpersonal violence and substance abuse (Hawaii County Meeting Minutes, Friday, May 23, 2003). The Health and Resources Services Administration indicates East and South Hawaii Island are experiencing a shortage of Mental Health Professionals and that residents are medically underserved. Thus, government officials and agencies, medical and mental health professionals as well as local residents alike recognize the need to improved mental health services for the Big Island.

The lack of adequate mental health treatment services is translated into high rates of mental illness and increased risk for mental illness. In November 2007, the DOH published, "The Hawaii Behavioral Risk Factor Surveillance System Special Report: Prevalence of Anxiety and Depression among Hawaii's Adults Derived from HBRFSS 2006." The report indicates that, the County of Hawaii bears the highest mental health burden among counties in the state for lifetime anxiety, it has significantly higher lifetime depression prevalence rates for both depression and anxiety and the lifetime prevalence rates of anxiety and depression for Hawaii County are significantly greater than that for Honolulu County ( $p < .05$ ) (page 6). In addition, the County of Hawaii has the highest mental health burden among counties in the state in terms of current depression prevalence (p. 21)." As shown in Table 1, the Report on East Hawaii (University of Hawaii at Manoa 2002) indicates the average risk and protective factors in Bay Clinic's service area are higher than state averages for family conflict, substance abuse in the home, elder abuse, parental supervision, family connectiveness, low income and births to teens which are all indicators of mental health status<sup>1</sup>. Clearly, data show that the need for expanded mental health services in East Hawaii is of critical proportions.

In Hawaii County there is minimal provision of psychiatric services except for those with persistent mental illness meeting Adult Mental Health Department (AMHD) eligibility criteria. Those who do not meet criteria have limited options – particularly if they do not have insurance accepted by private providers. Even within the state system have limited options except pharmacology. Studies indicate that comprehensive case management, counseling and

<sup>1</sup> Milne A, Hatzidimitriadou E, Chryssanthopoulou C and Owen T (2001) *Caring in Later Life: Reviewing the Role of Older Careers*. London. Help the Aged.

Meltzer H, Gill B, Pettigrew M and Hinds K (1996) *The prevalence of psychiatric morbidity among adults living in private households OPCS surveys of psychiatric morbidity in Great Britain Report 1* HMSO London: HMSO

Piccinelli M and Wilkinson G (2000) *Gender differences in depression. The British Journal of Psychiatry* 177: 486-492.

pharmacology is the most effective treatment for those with behavioral and mental health disorders and success rates with combined therapy and pharmacology are better than any one treatment alone for a variety of mental health conditions including depression, attention deficit disorder, anxiety, bulimia nervosa, and others.<sup>2</sup> Most people with mental illness do not realize that they have treatment options, and do not seek help in mental health settings. However, most people do seek medical treatment. Thus, through integrated behavioral health care within a primary care setting, providers can utilize combined treatment options such as therapy, medication management and psychopharmacology, and case management to improve outcomes, reduce individual and societal health care costs, and improve quality treatment.

**Table 1**

**Risk and Protective Indicators for Hawai'i County – Eastern Area**

<b>FAMILIES</b> <b>Protective Indicators</b>	<b>Hilo</b>	<b>Laupahoehoe</b>	<b>Central Hilo</b>	<b>Kaanu</b>	<b>Pahoa</b>	<b>Kau</b>	<b>State Average</b>
<b>11</b> Per capita income	\$15,987	\$13,134	\$17,377	\$11,849	\$10,476	\$13,375	13.2%
<b>12</b> Family connectedness	47.5%	56.5%	43.9%	45.5%	48.3%	27.8%	34.1%
<b>13</b> Parental supervision	57.7%	65.2%	49.3%	54.5%	51.3%	38.9%	45.5%
<b>Risk Indicators</b>							
<b>14</b> Single parent families	21.4%	21.7%	19.1%	16.5%	20.3%	16.7%	18.7%
<b>15</b> Births to Teens	6.1%	6.1%	6.1%	6.9%	6.9%	7.6%	6.3%
<b>16</b> Family conflict	39.1%	26.1%	43.4%	47.4%	40.5%	33.3%	31.7%
<b>17</b> Substance abuse in home	59.7%	60.9%	48.2%	57.8%	54.2%	58.8%	49.8%
<b>18</b> Elder abuse	4.7	0.0	2.4	1.2	5.0	11.0	3.4

**Definitions:**

- 11 % personal income of residents
- 12 % youth reporting family connectedness
- 13 % youth reporting adequate parental supervision
- 14 % of children in single parent families

- 15 % of all births that are to mothers age 17 yr and younger
- 16 % youth reporting family conflict
- 17 % youth reporting substance abuse in home
- 18 # of elderly abuses per 1000 population aged 65 and over

**4. Target Population**

The Bay Clinic, Inc.'s target population is those who experience barriers to health care access. In 2006, we served 14,380 patients with 41,154 total encounters. 27% of our populations live below the federal poverty line<sup>3</sup>. 78% of our service area is of Native Hawaiian / Asian American / Other Pacific Islander Descent (US Census 2006). Of our behavioral health patients, we have had a 47% increase in patients between 2004 and 2006.

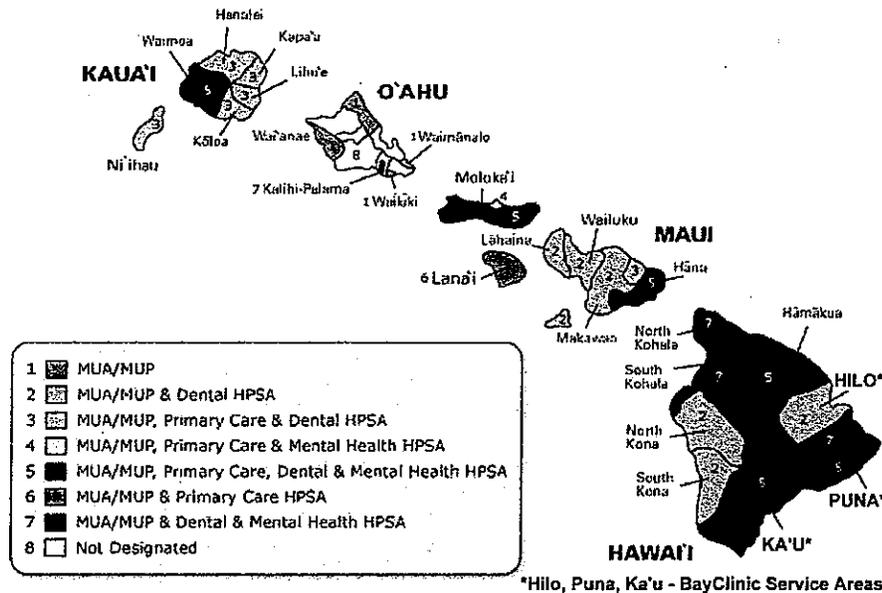
<sup>2</sup> Lipman, A.J. and Philip C. Kendal, P.C. (1992) Drugs and psychotherapy: Comparisons, contrasts, and conclusions. *Applied and Preventive Psychology* 1(3) 141-148.

<sup>3</sup> Source: U.S. Bureau of the Census, 2000 Census of Population, General Social and Economic Characteristics, Hawai'i, PC80-1-C13 (June 1983), table 181; 1990 census STF 3A, 1990 CPH-L-81 (1992), table 3; U.S. Census Bureau, Census 2000, "QT-P34. Poverty Status in 1999 of Individuals: 2000" and "QT-P35. Poverty Status in 1999 of Families and Nonfamily Householders: 2000."

**Bay Clinic Behavioral Health Care Services**

	<b>Patients</b>	<b>Encounters</b>
<b>2006</b>	438	1282
<b>2005</b>	419	1205
<b>2004</b>	297	700

*The Hawaii County/Infrastructure Needs Assessment-Growth Analysis Memorandum*, states that the County of Hawaii is the second most populous county in Hawaii and overall growth has been constant...<sup>4</sup>. According to *Toward a Health Hawaii 2010*, a major factor that contributes to health outcomes such as increasing quality and years of healthy lives is accessibility to and availability of adequate health care services<sup>5</sup>. Yet, Bay Clinic is the only affordable health care option for our most rapidly growing districts in Hawaii leading to a health care crisis on the Big Island. As shown in the graph below, Bay Clinic’s service areas of Hilo, Puna and Ka’u on the Big Island of Hawaii have underserved populations. Specifically, Hilo, Puna and Ka’u are designated as “Medically Underserved Areas” with “Medially Underserved Populations”. Puna and Ka’u are also experiencing a “Shortage of Mental Health Providers”.



**5. Geographic Coverage**

Bay Clinic, Inc. is the *only* federally qualified health center in East and South Hawaii Island. This is a geographic expanse of over 2,048 square miles of rural and agricultural lands. Bay Clinic’s four clinics are in the towns of Hilo, Kea’au, Pahoa and Na’alehu census tracts 201-212. Our service area larger than both the states of Delaware and Rhode Island with a population of

<sup>4</sup> *The Hawaii County/Infrastructure Needs Assessment – Growth Analysis Memorandum*. Duncan Associates, in association with Helber, Hastert & Fee, Planning Department, County of Hawaii, January 2006.

<sup>5</sup> *Toward A Healthy Hawaii 2010, Checking the Health of Hawaii County*, Hawaii State Department of Health, pg 9.

86,000<sup>6</sup>, 27% of which live below the federal poverty line<sup>7</sup>. The Hawaii Primary Care Association in 2006 stated that Island geography creates problems in health care access and delivery across the state as reliable convenient public transportation is not available. Another problem for Hawaii residents is that populations are increasing but health care infrastructure is not. Community Health Centers (such as Bay Clinic) are being asked to provide more urgent and specialty services for which they do not have the human, technological, and facility resources.

## **II. Service Summary and Outcomes**

### **Service Delivery Model**

We are modeling this evidenced based program after the Health and Resources Services Administration Chronic Care Model for Depression, referencing the Health Disparities Collaborative materials and the "Depression Management Toolkit." The Toolkit includes: physician guidelines, antidepressant administration schedule, physician antidepressant fact sheet, PHQ-9 and instructions for scoring, re-assessment tool, depression flow chart, patient education and self-management materials, group visit starter kit, depression follow up schedule, referral to mental health services form, and model communication form. We have a resource binder with self-management and psychoeducational materials. Psychoeducational materials are made available in the lobby areas where behavioral health services are administered. We are continuously updating our community resource guide.

### **Overview of the Integrated Care Process:**

The model we are seeking to implement through this measure is the integrated collaborative health care model. Integrating psychiatry to behavioral health team makes a more powerful and, as will hopefully be demonstrated by this pilot project, cost-efficient primary care model.

Solid research has demonstrated when psychiatry is 'carved-in' to the primary care setting, patients outcomes improve and the overall ability of the FQHC providers to treat the mental health patient rises. An all too common problem is patients are seen for a medical condition in one location and a psychiatric condition in another condition. Often providers do not talk to each other or know the full condition of their patients. This can cause an array of complications regarding patients' medications and treatment plans. Other states have been able to successfully demonstrate improved patient outcomes and increased ability of all the FQHC providers to better treat the mental health patient when psychiatry is part of the behavioral health team.

Thus, this pilot program will allow integrated psychiatric and behavioral health care among and within primary health care settings. The mental and behavioral health services that will be provided are **universal** depression screening, medication support and management, assessment and diagnosis, brief individual therapy, group therapy, self-management groups, psychoeducation, case

<sup>6</sup> Source: U.S. Bureau of the Census, 2000 Census of Population and Housing Unit Counts, Hawai'i, 1990 CPH-2-13 (March 1993), table 8; and Census 2000 Redistricting Data, (Public Law 94-171) Summary File; figures compiled and calculated by County of Hawai'i, Department of Research & Development.

<sup>7</sup> Source: U.S. Bureau of the Census, 2000 Census of Population, General Social and Economic Characteristics, Hawai'i, PC80-1-C13 (June 1983), table 181; 1990 census STF 3A, 1990 CPH-L-81 (1992), table 3; U.S. Census Bureau, Census 2000, "QT-P34. Poverty Status in 1999 of Individuals: 2000" and "QT-P35. Poverty Status in 1999 of Families and Nonfamily Householders: 2000."

management, brief substance abuse interventions, referral and interagency collaboration, follow-up. The integrated procedure will be as follows:

1. Recognition and Diagnosis – universal screening plus primary care physician training to be on alert for “red flags.” PHQ-2, PHQ-9 (Primary Health Questionnaire) Suicide risk assessment for all patients seen in Bay Clinic.
2. Patient Education – if depression diagnosis is confirmed, clinician/staff provide education regarding depression and treatment options and processes.
3. Treatment – together with patient, treatment is agreed upon with:
  - “watchful waiting” – no intervention needed
  - Psychoeducation and self-management (with possible referral to medication support): Most of the referrals to Behavioral Health will be generated internally from primary care providers within Bay Clinic. Providers and nurses will be trained in screening and detection of a variety of mental health symptoms and conditions. Educational materials will also be made available to patients, increasing awareness of mental health issues and encouraging them to speak with their doctor if they have any such concerns. Psychoeducational materials available include “Basic Facts About Mental Health,” “10 Tips for Improving Family Mental Health,” “Real Men. Real Depression.,” “Relaxation Techniques: Learn Ways to Calm Your Stress,” “Managing Life’s Challenges,” as well as informational brochures about marijuana and methamphetamine.
  - In-house therapy services (with possible referral to medication support): In house therapy consists primarily of brief and problem solving therapy. Visits are coordinated when possible with primary care appointments.
  - Referral to alternative agency more appropriate for patient’s level of need: We will obtain MOA/MOU with community agencies so that we can have a smooth process of referral, communication, and collaboration for those patient with needs that cannot be met within Bay Clinic such as inpatient substance abuse treatment. The agreement between these agencies and the Bay Clinic will specify how such a referral should be made and assure the optimal continuity of care. With the appropriate releases of information, each provider would be able to (and have a responsibility to) communicate with the other to discuss treatment progress and goals.
4. Care Management/Monitoring – clinician and support staff monitor treatment compliance and progress. PHQ is repeated at established intervals to track symptoms and progress, and will also be the tool for evaluating success of the program and of clients. Treatment is modified according to progress.
5. Evidence based care – the intern/care coordinator will administer problem solving therapy, self-management, psychoeducation. Case management type activities will be handled by interns and supervised by the psychologist/LCSW. In the absence of such a team member, the Behavioral Health providers (LCSW, psychologist) will assume this responsibility.
6. Follow up system will involve use of a patient registry. Within this system, patient progress and adherence to treatment will be tracked. Optimally, the system will generate prompts at appropriate

time frames for coordinator to check in and/or re-assess. Registry system will be determined with an investigation of utilizing existing EMR system versus alternatives (electronic or paper).

### **1. Timeline (July 1, 2008 – June 30, 2009)**

Full integration of psychiatric and behavioral health care will be completed on June 30<sup>th</sup> 2009 including implementation of universal screening tool, analysis of PHQ data and both process and outcome results within the organization and among patients. Elements of the plan are being implemented currently; for example, memorandums of understanding are being formalized between February and June of 2008 with community partners.

### **2. Quality Assurance and Evaluation Plan.**

Bay Clinic is an active participant in the Health Resources and Services Administration's (HRSA) national Health Disparities Collaborative that uses the structure of a Planned Care Model focusing on:

1. The health care organization
2. Community resources and policies
3. Self-management support
4. Decision support
5. Delivery system design
6. Clinical information systems

As participants in the collaborative we study specific changes that can be made within each area. Changes are then "tested" and guided by the principles of continuous quality improvement theory. Part of the learning of the collaborative is the art of making small changes and learning from each change – the PDSA (Plan, Do, Study, Act) process. Changes that are effective are expanded. Multiple changes in high leverage areas result in transformational change, which is what we plan to accomplish with this grant request to expand behavioral health services.

We will track and report on core national process and outcome measures involving patients with depression who we are tracking and monitoring. "Patients with depression" are defined as patients with the diagnosis of major depression (ICD-9 code 296.20-296.3), dysthymia (chronic depression) (ICD-9 code 300.4), depression NOS (ICD-9 code 311), and adjustment disorder with depression, or minor depression (ICD-9 code 309.0). To be included in the study, they must score 10 or above on a screening instrument known as the PHQ-9. The measures, as currently defined, apply to all adults; i.e., those greater than or equal to 16 years of age.

Our goal is to track incidents of depression, and monitor effects of treatment on those who score >10 in our patient registry. Analysis of PHQ scores at incremental points throughout (4 weeks, 8 weeks) treatment will allow us to monitor the effects of integrated behavioral health within primary care setting.

The process will involve coordinated scheduling with therapists for patients who score high on PHQ and who agree that they may have a need for treatment. We will also our monitor and

evaluate patients who have the co-occurring conditions that include depression chronic pain, depression, anxiety and/or substance abuse. During this pilot project we will also track patient volumes, primary diagnosis, net collections on billable encounters, for business planning purposes. We will also select measures in conjunction with the psychiatrist that are consistent with the Health Disparities Collaborative to assess the use of evidence-based medication treatments for major depression and dysthymia.

### 3. Measurements

All patients will be screened by nursing staff via PHQ-2 (Patient Health Questionnaire -2), which will be included in electronic medical records. Patients with a positive response to the two-question screen will be further assessed using the PHQ-9. This can be completed by nursing staff as well. All providers will be trained in the use of the PHQ and in the detection of significant mental health symptoms. Results of the PHQ will be communicated to the PCP verbally as well as recorded in EMR. Evaluation of the success and effectiveness of integrated behavioral health model are PHQ scores evaluated at intake and post treatment for behavioral health patients. Depending on the patient's responses to the PHQ screening process, there will be four possible outcomes:

- 1) No treatment or behavioral service required
- 2) Psychoeducation
- 3) Treatment with in-house therapists
- 4) Referral to more appropriate agency for treatment.

Triage decisions will be made according to the Four Quadrant model, which takes into account the degree of risk and complexity of the individual's mental health condition, substance abuse, and physical health. The model steers patients into systems in which they will receive the most appropriate level of care.

### III. Financial

#### Narrative

Bay Clinic currently employs 1.5 FTE Behavioral Health Staff. Another .5 FTE behavioral health employee is under contractual employment due to grant funding restrictions. We are requesting funds to expand our behavioral health department to meet the need for behavioral health care in our area. We are requesting only a portion of these funds from the State at this time and are concurrently awaiting notice of pending requests for this pilot project from private and federal agencies for the balance. This request is as follows:

<b>Personnel</b>	<b>Costs</b>
1.0 FTE Psychiatrist	\$190,000.00
1.0 LCSW	\$70,000.00
<b>Total personnel requested</b>	<b>\$260,000.00</b>

#### Benefits and Taxes

**Requested Taxes and Benefits      \$36,846.00**

**Total Funds Requested: \$296,846.00**

All other funds to support this new service and expansion of mental health is being sought through other funding sources. Billing revenue is anticipated to support the program after start up funds are secured. We expect expenses and revenue will balance in FYE June 30, 2009. Quarterly funding requirements for the fiscal year 2008-2009 are:

<b>Quarter 1</b>	<b>Quarter 2</b>	<b>Quarter 3</b>	<b>Quarter 4</b>	<b>Total Grant</b>
\$74,211.50	\$74,211.50	\$74,211.50	\$74,211.50	\$296,846.00

**BUDGET REQUEST BY SOURCE OF FUNDS (Period: July 1, 2008 to June 30, 2009)**

Applicant/Provider: Bay Clinic Inc

BUDGET CATEGORIES	Overall Budget Expenses (a)	State Budget Request (c)	Other Funding Pending Income (d)	BCI Current Budget (e)
<b>A. PERSONNEL COST</b>				
1. Salaries	\$550,000	\$260,000	\$120,000	\$170,000
2. Payroll Taxes & Assessments	\$88,720	\$28,834	\$17,467	\$42,419
3. Fringe Benefits	\$24,036	\$8,012	\$8,012	\$8,012
<b>TOTAL PERSONNEL COST</b>	<b>\$662,756</b>	<b>\$296,846</b>	<b>\$145,479</b>	<b>\$220,431</b>
<b>B. OTHER CURRENT EXPENSES</b>				
1. Airfare-lodging, Inter-Island	\$5,000	\$0	\$0	\$5,000
2. Airfare, Out-of-State	\$0	\$0	\$0	\$0
3. Audit Services	\$500	\$0	\$0	\$600
4. Contractual Services - Administrative	\$500	\$0	\$0	\$500
5. Contractual Services - Subcontracts	\$0	\$0	\$0	\$0
6. Insurance	\$0	\$0	\$0	\$0
7. Lease/Rental of Equipment	\$0	\$0	\$0	\$0
8. Lease/Rental of Motor Vehicle	\$3,120	\$0	\$0	\$3,120
9. Lease/Rental of Space	\$6,000	\$0	\$0	\$6,000
10. Mileage	\$0	\$0	\$0	\$0
11. Postage, Freight & Delivery	\$0	\$0	\$0	\$0
12. Publication & Printing	\$0	\$0	\$0	\$0
13. Repair & Maintenance	\$600	\$0	\$0	\$600
14. Staff Training; Continuing Education	\$0	\$0	\$0	\$0
15. Substance/Per Diem	\$0	\$0	\$0	\$0
16. Supplies	\$5,000	\$0	\$0	\$5,000
17. Telecommunication	\$0	\$0	\$0	\$0
18. Transportation	\$0	\$0	\$0	\$0
19. Utilities	\$1,200	\$0	\$0	\$1,200
21. Relocation	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0
<b>TOTAL OTHER CURRENT EXPENSES</b>	<b>\$21,920</b>			<b>\$21,920</b>
<b>C. EQUIPMENT PURCHASES</b>				
<b>D. MOTOR VEHICLE PURCHASES</b>				
<b>COLUMN TOTALS</b>	<b>\$684,676</b>	<b>\$296,846</b>	<b>\$145,479</b>	<b>\$242,351</b>
<b>SOURCES OF FUNDING</b>		Budget Prepared By:		
(a) Total Budget (Expenses)	\$684,676	Susan Lee CFO 808-961-4084		
(b) Request From State	\$296,846	Name (Please type or print) Phone		
(c) Pending Requests	\$145,479	[Redacted Signature]		
(d) Current Bay Clinic Expenses (covered by billable services with current staff)	\$242,351	Signature of Authorized Official Date		
<b>TOTAL REVENUE</b>	<b>\$0</b>	Paul Strauss CEO		
		Name and Title (Please type or print)		

Applicant: Bay Clinic, Inc.

Period: July 1, 2008 to June 30, 2009

POSITION TITLE	FULL TIME EQUIVALENT	ANNUAL SALARY A	% OF TIME BUDGETED TO REQUEST B	TOTAL SALARY BUDGETED IN REQUEST A x B
Director of Behavioral Health	1	\$100,000.00	0.00%	\$ -
Psychiatrist	1	\$190,000.00	100.00%	\$ 190,000.00
Licensed Clinical Social Worker	2.5	\$70,000.00	40.00%	\$ 70,000.00
Marriage and Family Therapist	1	\$60,000.00	0.00%	\$ -
Master's Level Intern / Care Coordinator	0.5	\$50,000.00	0.00%	\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
				\$ -
<b>TOTAL:</b>	<b>6</b>		<b>1.4</b>	<b>260,000.00</b>

**JUSTIFICATION/COMMENTS:**  
 Bay Clinic is requesting funds for to pilot psychiatric services with support staff. Remaining staff are funded through other grants.

Applicant/Provider: Bay clinic Inc

TYPE	BASIS OF ASSESSMENTS OR FRINGE BENEFITS	% OF SALARY	TOTAL
<b>PAYROLL TAXES &amp; ASSESSMENTS:</b>			
Social Security	As required by law	7.65%	\$19,890.00
Unemployment Insurance (Federal)	As required by law	0.00%	\$0.00
Unemployment Insurance (State)	As required by law	0.91%	\$2,366.00
Worker's Compensation	As required by law	1.20%	\$3,120.00
Temporary Disability Insurance	As required by law	1.33%	\$3,458.00
<b>SUBTOTAL:</b>			<b>\$28,834.00</b>
<b>FRINGE BENEFITS:</b>			
Health Insurance	\$11,057.64		\$8,012.00
Retirement			
<b>SUBTOTAL:</b>	<b>\$11,057.64</b>		
<b>TOTAL:</b>			<b>\$39,891.64</b>

**JUSTIFICATION/COMMENTS:**  
 Additional staff increases our taxes and benefits.

Applicant: Bay Clinic, Inc.

**DECLARATION STATEMENT  
APPLICANTS FOR GRANTS AND SUBSIDIES  
CHAPTER 42F, HAWAII REVISED STATUTES**

The undersigned authorized representative of the applicant acknowledges that said applicant meets and will comply with all of the following standards for the award of grants and subsidies pursuant to section 42F-103, Hawaii Revised Statutes:

- (1) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant or subsidy is awarded;
- (2) Comply with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
- (3) Agree not to use state funds for entertainment or lobbying activities; and
- (4) Allow the state agency to which funds for the grant or subsidy were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and assuring the proper expenditure of the grant or subsidy.

In addition, a grant or subsidy may be made to an organization only if the organization:

- (1) Is incorporated under the laws of the State; and
- (2) Has bylaws or policies that describe the manner in which the activities or services for which a grant or subsidy is awarded shall be conducted or provided.

Further, a grant or subsidy may be awarded to a non-profit organization only if the organization:

- (1) Has been determined and designated to be a non-profit organization by the Internal Revenue Service; and
- (2) Has a governing board whose members have no material conflict of interest and serve without compensation.

Further, the undersigned authorized representative certifies that this statement is true and correct to the best of the applicant's knowledge.

Bay Clinic, Inc.  
(Typed Name of Individual or Organization)



(Signature)

January 27, 2008

(Date)

Paul Strauss  
(Typed Name)

Chief Executive Officer  
(Title)

Applicant: Bay Clinic, Inc.

Period: July 1, 2008 to June 30, 2009

FUNDING AMOUNT REQUESTED						
TOTAL PROJECT COST	ANY OTHER SOURCE OF FUNDS RECEIVED IN PRIOR YEARS		STATE FUNDS REQUESTED		FUNDING REQUIRED IN SUCCEEDING YEARS	
	FY: 2005-2006	FY: 2006-2007	FY:2007-2008	FY:2008-2009	FY:2009-2010	FY:2010-2011
PLANS	\$0	\$0	\$0	\$0	\$0	\$0
LAND ACQUISITION	\$0	\$0	\$0	\$0	\$0	\$0
DESIGN	\$0	\$0	\$0	\$0	\$0	\$0
CONSTRUCTION: Renovations to two clinics (Private and Foundation Donors)	\$0	\$197,029	\$0	\$0	\$0	\$0
EQUIPMENT: Medical Equipment	\$113,221	\$136,779	\$0	\$0	\$0	\$0
<b>TOTAL:</b>	<b>\$113,221</b>	<b>\$333,808</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>
<b>JUSTIFICATION/COMMENTS:</b>						
Renovations to Hilo and Kea'au clinics to add exam room and behavioral health room space. We are not requesting additional state funds.						

#### IV. Experience and Capability

##### A. Necessary Skills and Experience

Bay Clinic has developed from its inception in 1983 from a small family planning clinic in Hilo to one of the largest community health centers in Hawaii. Since 1995 we have grown from one to four sites throughout East and South Hawaii Island, with an annual budget of nine million annually. We have an active and committed Board of Directors, 50% of whom represent our target population and are also patients of our clinics. Our Board conducts community needs assessments regularly and is well informed of the health care needs in the communities we serve.

Since 2003, Bay Clinic, Inc. has offered behavioral and mental health care services at Hilo Bay Clinic, Kea'au Family Health Center, and Pahoehoe Family Health Center. A growing concern for our patients is the lack of mental health, lack of psychiatrists, and unwillingness of other mental health providers to accept new patients. Thus, the decision to integrate behavioral/mental health to Bay Clinic, Inc.'s scope of services was based upon the need witnessed by primary care providers as well as community assessments. Most individuals with diagnosable mental disorders seek **no** mental health care, but 80% of these individuals will see their primary care provider at

least once a year.<sup>8</sup> Prior to the addition of behavioral and mental health care professionals, Bay Clinic, Inc.'s primary care providers saw most individuals with behavioral health needs such as psychological distress, pain management or unhealthy lifestyle choices.

In 2001, Bay Clinic received 1.5 million dollar grant to implement a teen substance abuse prevention and treatment grant island-wide from the Substance Abuse and Mental Health Services Administration. With these funds, Bay Clinic strengthened community wide collaborations between community health centers, treatment centers, prevention organizations, and area schools as a comprehensive safety net for teens and their families in response to the Methamphetamine epidemic. Since 2001, methamphetamine use among adolescents has dropped significantly and increasingly among adolescents.<sup>9</sup>

Bay Clinic is also a part of the Hawaii Primary Care Association Behavioral Health (HPCA) Hui. This is a joint collaborative group between HPCA and behavioral health providers across the thirteen Federally Qualified Health Centers in Hawaii. The mission of this group is to, "Promote quality, culturally competent, integrated health care through effective behavioral health services in collaboration with primary care providers in the Community Health Center network." The group has quarterly meeting in Honolulu and monthly teleconferences for consultation, networking, and collaboration. The Behavioral Health Hui sponsors educational forums, professional development and training, advocacy, cultural competency, and best practice development. The group is also actively working on the issue of psychiatric access.

Our behavioral health services department has expanded from one clinical psychologist to a team of three; the clinical psychologist/behavioral health director, one Licensed Clinical Social Worker and one Marriage and Family Therapist. Funding for behavioral health care is provided through state and federal grants, fee for service billing, and grant funds for uncompensated care.

Bay Clinic's management team oversees the following federal grants and state contracts:

Management Team oversees the following federal grant and state contracts relevant to behavioral health:

1. U.S. Department of Health and Human Services  
Health Resources and Services Administration Bureau of Primary Health Care  
Consolidated Health Center Funding Grant # H80CS00837  
(Includes Behavioral Health Care)
2. State of Hawaii Department of Health  
Family Health Services Division  
Comprehensive Primary Care Services To Uninsured Contract Log # 06-039  
(Includes Behavioral Health Care)

---

<sup>8</sup> *Primary Behavioral Health Care Service Practice Manual*. US Air Force Medical Operations Agency Population Health Support Division, Office for Prevention and Health Services, page 8.

<sup>9</sup> Hawaii State Department of Health, Substance Abuse Prevention and Treatment Report 2005.

Bay Clinic has established relationships with all major providers of health insurance for credentialing and billing purposes for behavioral health including AlohaCare, HMSA/HMSA Quest/Tricare, HMA/Summerlin, HMAA, University Health Alliance, MDX Hawaii, Medicare Part B, Medicare Railroad, Medicaid, and Pacific Administrators Inc.

Bay Clinic's Behavioral Health Services Department has developed a special service niche focusing on understanding eligibility criteria and access protocols for numerous agencies and programs. Currently Bay Clinic has informal agreements with and is working on formalized Memorandums of Agreement with the following agencies.

*Lokahi Substance Abuse Treatment Center.* Bay Clinic offers a harm reduction model for substance abuse, which includes weekly outpatient counseling for individuals and families. If the patient requires more intensive outpatient treatment, he/she is referred to Lokahi where services include group sessions for substance abuse, anger management and biofeedback.

*Big Island Substance Abuse Council (BISAC).* Bay Clinic refers patients requiring residential treatment access through BISAC's therapeutic living program. Bay Clinic's SAMHSA grant provided start-up funds to BISAC and BISAC continues to be an active partner of Bay Clinic.

*Adult Mental Health Division-DOH (AMHD).* Patients with chronic severe mental illness requiring psychiatric and case management services are referred to Adult Mental Health. Bay Clinic's Behavioral Health Director works closely with AMHD staff and Bay Clinic provides primary medical care for AMHD clients.

*Hawaii Island HIV/AIDS Foundation* Bay Clinic is the primary care provider for the majority of HIV/AIDS patients in East Hawaii, and also provides specialized counseling to patients with HIV/AIDS infection. Bay Clinic and HIHAF work closely to provide comprehensive HIV/AIDS services to this population.

*Care Hawaii* Provides services for individuals with serious mental illness including schizophrenia, bi-polar illnesses, depression and dual-diagnosis disorders as well as intensive outpatient treatment program for individuals having a chemical dependency.

*Drug Addiction Services of Hawaii (DASH)* Provides outpatient opioid therapy treatment including methadone maintenance treatment and will be a referral source for patients needing opioid outpatient care.

*Helping Hands Hawaii* Outpatient drug treatment programs.

## **B. Facilities**

Bay Clinic renovated the Kea'au and Hilo clinics between November 2007 and January 2008 to accommodate a growing patient base. The Pahoa clinic was renovated several years ago for the same purpose. All of our clinics are networked in real-time for patient management software (PAMM) use. A computer-based Voice Over IP telephone system allows calling and paging between clinics without using an outside phone line. Bay Clinic's Behavioral Health Services are

integrated with primary medical care within all clinics. Offices are located in a former surgical suite and are used for both therapy and administrative purposes. All clinics are equipped with teleconferencing capabilities. All of our buildings are ADA compliant.

**Hilo Bay Clinic**

We recently renovated a new clinic in downtown Hilo to respond to the growing need for low-cost medical care in our area. We are increasing access to care from six to ten exam rooms two of which will be for behavioral health care. This clinic has 4,894 square feet of clinical space.

**Kea’au Family Health Center**

The Keaau Family Health Center has 7,175 square feet of customized exam space. This clinic was renovated in November 2007 to increase capacity from six to ten exam rooms, two of which are for behavioral health.

**Pahoa Family Health Center**

In Pahoa we have eight exam rooms and a treatment room; there is also a waiting room and secondary waiting room to isolate patients who may be contagious or in need of separation from the other patients who are awaiting appointments. The Pahoa clinic has 5,527 square feet of clinical space. There is one behavioral health care room available.

**Ka’u Family Health Center**

We have a clinic in Na’alehu (Ka’u District) with four spacious exam rooms for the medical providers based there, a lab area where blood tests can be performed and a screened outdoor lanai that we use as a waiting room. The Ka’u Family Health Center has 3,456 square feet of clinical space, behavioral health providers share rooms with primary care providers.

**Kea’au Adolescent Health Center**

Bay Clinic also has an adolescent health promotions center for after-school enrichment activities. We are developing health promotions programs that may integrate behavioral health and counseling in the future,

Our four clinics are open from 7am to 7pm and Saturdays in Kea’au and Na’alehu. Our staff include 112 full-time employees; 24 nurses, 8 mid-levels (Nurse Practitioners/Physician Assistant), 9 physicians, 1 psychologist, and a part time Licensed Clinical Social Worker as well as supporting staff and administration.

**V. Personnel: Project Organization and Staffing**

**A. Proposed Staffing, Staff Qualifications, Supervision and Training**

<b>Current Staffing Pattern</b>	<b>Proposed Staffing Pattern Overall</b>	<b>Request From State</b>
1.0 FTE Clinical Psychologist/Director	1.0 FTE Clinical Psychologist/ Director	None
	1.0 FTE Psychiatrist	1.0 FTE
.5 Licensed Clinical	2.5 Licensed Clinical Social Worker	1.0 FTE

Social Worker		
.5 Marriage and Family Therapist	1.0 Marriage and Family Therapist	None
	.5 Master's Level Intern / Care Coordinator	None
<b>Total 2.0 FTE</b>	<b>Total 6.0 FTE</b>	<b>2.0 FTE Requested</b>

**We are requesting only funding support to one psychiatrist and one LCSW from the State. Funds for the remaining expanded staffing profile are being requested from other sources.**

**Staff Qualifications**

Dr. Tony Brown, Bay Clinic's Medical Director, received his medical degree from Boston University School of Medicine. Prior to receiving his medical degree, he studied psychology at Loyola University in Maryland. He served as Associate Professor of Family Medicine from 2002 to 2005 at the University of California in San Diego School of Medicine. He has been the Medical Director of Bay Clinic since 2005 and continues to work toward expanded clinical and behavioral services. He has experience in working with rural and remote community health in Kauai, Lanai, and in reservations in Arizona and New Mexico. His research focus has been Social and Psychological Factors Associated with Low Birth Weight Outcomes in African-American Women

Kimberly Cooper, Psy.D., Behavioral Health Services Director is a Hawai'i Licensed Clinical Psychologist. She received her Doctor of Psychology degree from Spalding University in 2002 and has ten years of experience in the social service field including community mental health, psychosocial rehabilitation, VA Medical Center, psychiatric unit within a hospital setting, neuropsychological assessment, and work with the Brain Injury Association. Her graduate study concentrated on clinical work (including assessment and psychotherapy) with adults. Her experience in rural settings has given her an awareness and appreciation of the unique barriers and obstacles that Bay Clinic's service population tends to face. Her past employment was with the state mental health system gives her extensive network of professional contacts that will help her to facilitate implementation of the proposed expansion.

We have an LCSW ready to accept positions as soon as funding is secured. Current and future LCSW staff must have graduated from an accredited school of social work and be licensed in the state of Hawaii as licensed clinical social workers. Consistent with our current behavioral/mental health services, the LCSW's assist clients to identify and prioritize goals and establish behavioral treatment plans as they pertain to the individuals' mental and physical health care needs. In addition, mental health services will enable client-centered goal setting for therapeutic interventions to improve mood, assist the psychiatrist with pharmacologic management, and enhance overall functioning, employ behavioral modification, stress reduction, or supportive psychotherapeutic techniques, as well as encourage self-care.

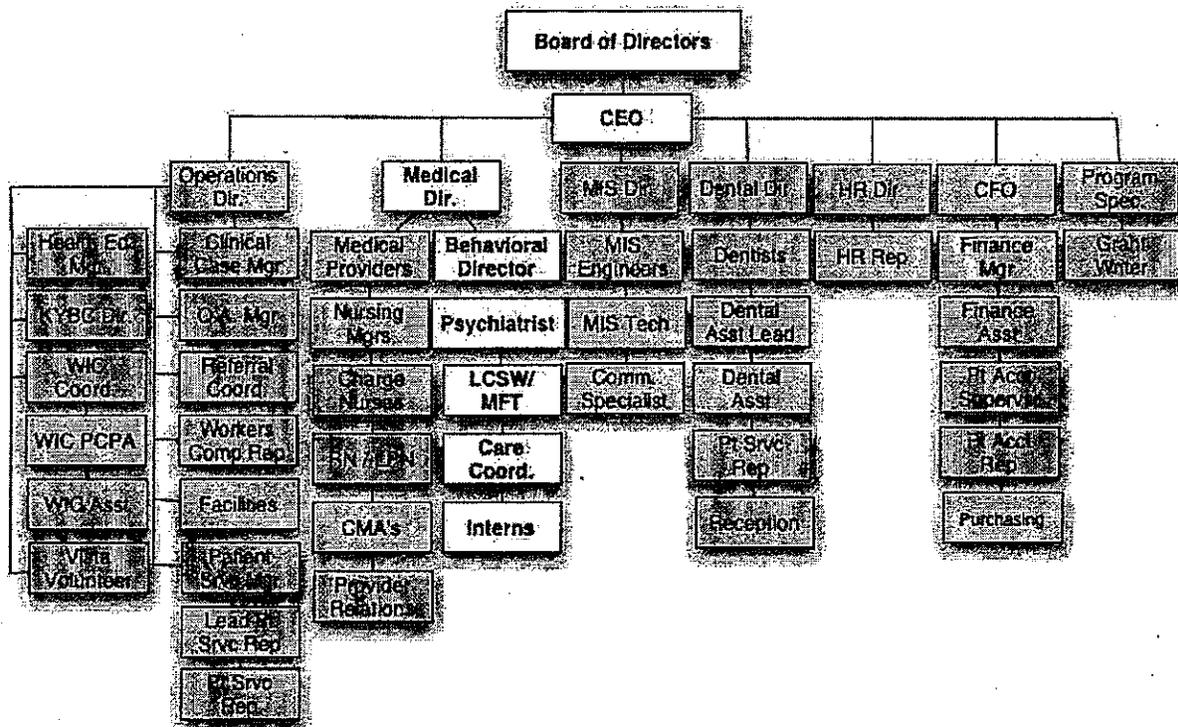
We are in active recruitment for a psychiatrist from both Hawaii and mainland recruiting resources. We have staff ready to assume positions funding permitted.

**B. Organization Chart**

The Behavioral Health Director (Kimberly Cooper) reports to the Medical Director (Dr. Tony Brown) Medical Director. The Medical Director reports to Chief Executive Director, Paul Strauss who has over 20 years of experience in health administration. The Behavioral Health Services Department was developed from the ground up and integrated into the primary care setting under the direction of the CEO.

Dr. Tony Brown, MD, is a licensed and board-certified family practice physician. In his role as Medical Director he provides supervision of clinic provider staff. He is responsible for clinical quality improvement and risk management functions and adherence to evidence-based clinical protocols. The Medical Director's duties also include oversight of credentialing and privileging of staff providers.

Susan Lee is the Chief Financial Officer for Bay Clinic, Inc. Formerly the CFO of Kalihi Palama Health Center on Oahu, She oversees all financial and management information systems functions for Bay Clinic, including financial projections and budgeting, internal and external reporting, cash flow management, internal system controls, grants management, compliance, and day-to-day accounting functions.



**VI. Other**

**A. Litigation**

A pending litigation to which we are a party involves a patient fall on clinic premises. There are no current outstanding judgments.

**B. Licensure or Accreditation**

All staff are licensed to practice in their disciplines.

**DECLARATION STATEMENT  
APPLICANTS FOR GRANTS AND SUBSIDIES  
CHAPTER 42F, HAWAII REVISED STATUTES**

The undersigned authorized representative of the applicant acknowledges that said applicant meets and will comply with all of the following standards for the award of grants and subsidies pursuant to section 42F-103, Hawaii Revised Statutes:

- (1) Is licensed or accredited, in accordance with federal, state, or county statutes, rules, or ordinances, to conduct the activities or provide the services for which a grant or subsidy is awarded;
- (2) Comply with all applicable federal and state laws prohibiting discrimination against any person on the basis of race, color, national origin, religion, creed, sex, age, sexual orientation, or disability;
- (3) Agree not to use state funds for entertainment or lobbying activities; and
- (4) Allow the state agency to which funds for the grant or subsidy were appropriated for expenditure, legislative committees and their staff, and the auditor full access to their records, reports, files, and other related documents and information for purposes of monitoring, measuring the effectiveness, and assuring the proper expenditure of the grant or subsidy.

In addition, a grant or subsidy may be made to an organization only if the organization:

- (1) Is incorporated under the laws of the State; and
- (2) Has bylaws or policies that describe the manner in which the activities or services for which a grant or subsidy is awarded shall be conducted or provided.

Further, a grant or subsidy may be awarded to a non-profit organization only if the organization:

- (1) Has been determined and designated to be a non-profit organization by the Internal Revenue Service; and
- (2) Has a governing board whose members have no material conflict of interest and serve without compensation.

Further, the undersigned authorized representative certifies that this statement is true and correct to the best of the applicant's knowledge.

Bay Clinic, Inc.  
(Typed Name of Individual or Organization)

\_\_\_\_\_

(Signature)

Paul Strauss  
(Typed Name)

January 27, 2008

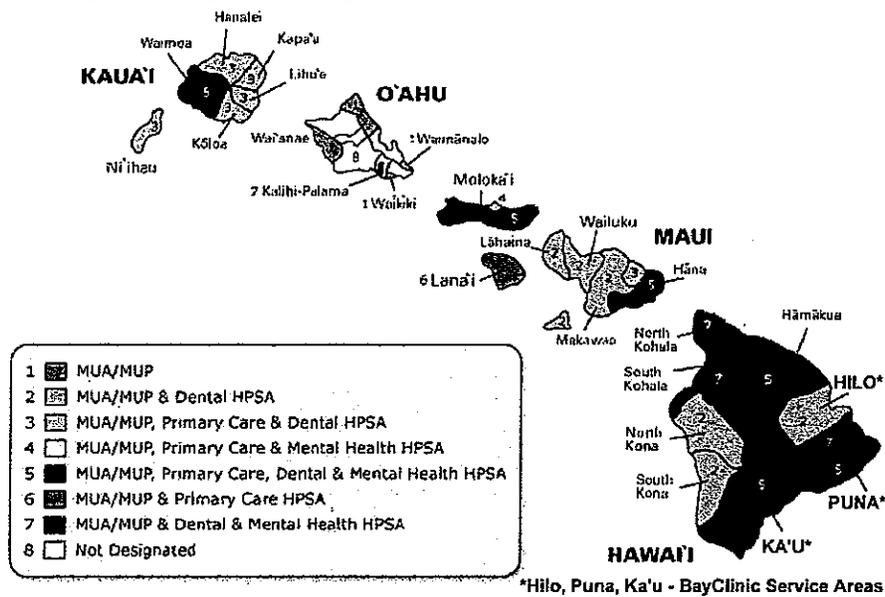
(Date)

Chief Executive Officer  
(Title)

**Bay Clinic Behavioral Health Care Services**

	<b>Patients</b>	<b>Encounters</b>
<b>2006</b>	438	1282
<b>2005</b>	419	1205
<b>2004</b>	297	700

*The Hawaii County/Infrastructure Needs Assessment-Growth Analysis Memorandum*, states that the County of Hawaii is the second most populous county in Hawaii and overall growth has been constant...<sup>4</sup>. According to *Toward a Health Hawaii 2010*, a major factor that contributes to health outcomes such as increasing quality and years of healthy lives is accessibility to and availability of adequate health care services<sup>5</sup>. Yet, Bay Clinic is the only affordable health care option for our most rapidly growing districts in Hawaii leading to a health care crisis on the Big Island. As shown in the graph below, Bay Clinic’s service areas of Hilo, Puna and Ka’u on the Big Island of Hawaii have underserved populations. Specifically, Hilo, Puna and Ka’u are designated as “Medically Underserved Areas” with “Medially Underserved Populations”. Puna and Ka’u are also experiencing a “Shortage of Mental Health Providers”.



**5. Geographic Coverage**

Bay Clinic, Inc. is the *only* federally qualified health center in East and South Hawaii Island. This is a geographic expanse of over 2,048 square miles of rural and agricultural lands. Bay Clinic’s four clinics are in the towns of Hilo, Kea’au, Pahoa and Na’alehu census tracts 201-212. Our service area larger than both the states of Delaware and Rhode Island with a population of

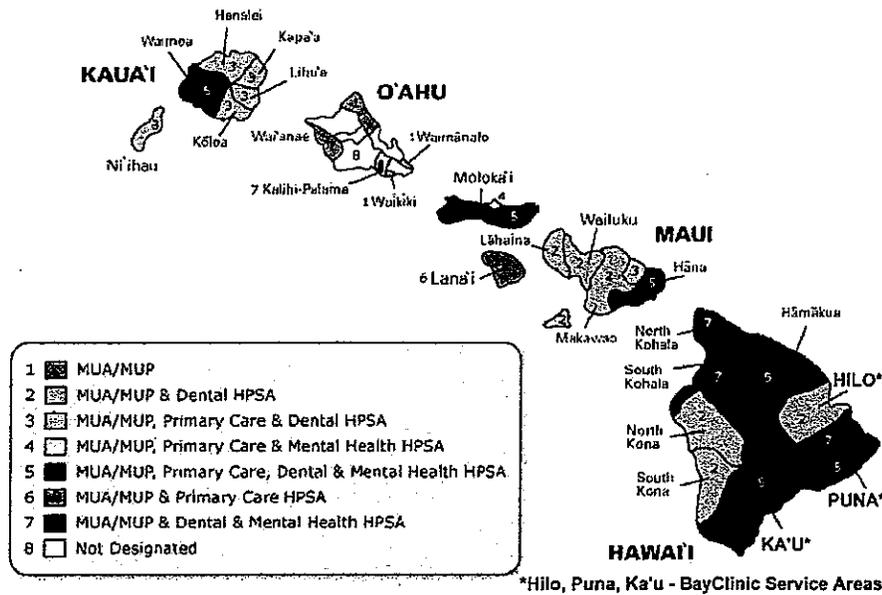
<sup>4</sup> *The Hawaii County/Infrastructure Needs Assessment – Growth Analysis Memorandum*, Duncan Associates, in association with Helber, Hastert & Fee, Planning Department, County of Hawaii, January 2006.

<sup>5</sup> *Toward A Healthy Hawaii 2010, Checking the Health of Hawaii County*, Hawaii State Department of Health, pg 9.

**Bay Clinic Behavioral Health Care Services**

	<b>Patients</b>	<b>Encounters</b>
<b>2006</b>	438	1282
<b>2005</b>	419	1205
<b>2004</b>	297	700

*The Hawaii County/Infrastructure Needs Assessment-Growth Analysis Memorandum*, states that the County of Hawaii is the second most populous county in Hawaii and overall growth has been constant...<sup>4</sup>. According to *Toward a Health Hawaii 2010*, a major factor that contributes to health outcomes such as increasing quality and years of healthy lives is accessibility to and availability of adequate health care services<sup>5</sup>. Yet, Bay Clinic is the only affordable health care option for our most rapidly growing districts in Hawaii leading to a health care crisis on the Big Island. As shown in the graph below, Bay Clinic’s service areas of Hilo, Puna and Ka’u on the Big Island of Hawaii have underserved populations. Specifically, Hilo, Puna and Ka’u are designated as “Medically Underserved Areas” with “Medially Underserved Populations”. Puna and Ka’u are also experiencing a “Shortage of Mental Health Providers”.



**5. Geographic Coverage**

Bay Clinic, Inc. is the *only* federally qualified health center in East and South Hawaii Island. This is a geographic expanse of over 2,048 square miles of rural and agricultural lands. Bay Clinic’s four clinics are in the towns of Hilo, Kea’au, Pahoa and Na’alehu census tracts 201-212. Our service area larger than both the states of Delaware and Rhode Island with a population of

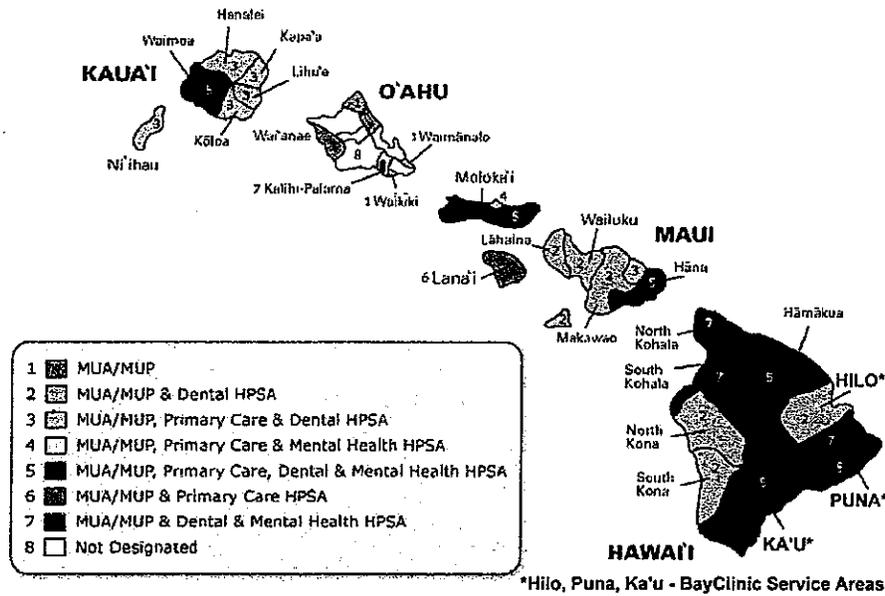
<sup>4</sup> *The Hawaii County/Infrastructure Needs Assessment – Growth Analysis Memorandum*, Duncan Associates, in association with Helber, Hastert & Fee, Planning Department, County of Hawaii, January 2006.

<sup>5</sup> *Toward A Healthy Hawaii 2010, Checking the Health of Hawaii County*, Hawaii State Department of Health, pg 9.

**Bay Clinic Behavioral Health Care Services**

	<b>Patients</b>	<b>Encounters</b>
<b>2006</b>	438	1282
<b>2005</b>	419	1205
<b>2004</b>	297	700

*The Hawaii County/Infrastructure Needs Assessment-Growth Analysis Memorandum*, states that the County of Hawaii is the second most populous county in Hawaii and overall growth has been constant...<sup>4</sup>. According to *Toward a Health Hawaii 2010*, a major factor that contributes to health outcomes such as increasing quality and years of healthy lives is accessibility to and availability of adequate health care services<sup>5</sup>. Yet, Bay Clinic is the only affordable health care option for our most rapidly growing districts in Hawaii leading to a health care crisis on the Big Island. As shown in the graph below, Bay Clinic’s service areas of Hilo, Puna and Ka’u on the Big Island of Hawaii have underserved populations. Specifically, Hilo, Puna and Ka’u are designated as “Medically Underserved Areas” with “Medially Underserved Populations”. Puna and Ka’u are also experiencing a “Shortage of Mental Health Providers”.



**5. Geographic Coverage**

Bay Clinic, Inc. is the *only* federally qualified health center in East and South Hawaii Island. This is a geographic expanse of over 2,048 square miles of rural and agricultural lands. Bay Clinic’s four clinics are in the towns of Hilo, Kea’au, Pahoa and Na’alehu census tracts 201-212. Our service area larger than both the states of Delaware and Rhode Island with a population of

<sup>4</sup> *The Hawaii County/Infrastructure Needs Assessment – Growth Analysis Memorandum*, Duncan Associates, in association with Helber, Hastert & Fee, Planning Department, County of Hawaii, January 2006.

<sup>5</sup> *Toward A Healthy Hawaii 2010, Checking the Health of Hawaii County*, Hawaii State Department of Health, pg 9.