Evaluation of a Mental Health Service Model for Haitians Living with HIV/AIDS

Center for Community Health, Education, & Research Dorchester, Massachusetts

Final Evaluation Report

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Table of Contents

Executive Summary 2
Acknowledgments 4
Introduction 5
Evaluation Plan 6
Evaluation Results 8
  Client Characteristics 9
  HIV Health Indicators 10
  Mental and Physical Health Problems and Treatment 11
  Psychological Distress 13
  Health and Functioning/Health-Related Quality of Life 14
Service Utilization Patterns 17
Outcome Data 21
  Client Satisfaction with Services 21
  Changes in Psychosocial Well Being 25
  Changes in Health Status 28
References 31
Project Dissemination 32
Appendix 1: Participant Feedback from Specific CCHER Mental Health Groups 33

Executive Summary

In 2001, the Center for Community Health, Education and Research, Inc. (CCHER) was awarded a Targeted Capacity Expansion HIV grant from the Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Mental Health Services (CHMS). Through this project, CCHER established a culturally specific mental health treatment and counseling program, the *Alcide Center for Counseling & Family Services (ACCFS)*. The CCHER mental health service model was designed to increase treatment capacity for Haitians living with HIV/AIDS and their families by identifying culturally appropriate and competent approaches to mental health for this vulnerable population.

Over the course of this project, CCHER identified 75 Haitian immigrants living with HIV/AIDS who had at least one co-occurring diagnosable mental disorder. The most frequent mental health diagnoses among program clients were Adjustment Disorders (46.7%), Depressive Disorders (44.0%), and Anxiety Disorders (29.3%). Two-thirds of the clients (66.7%) had one Axis I DSM-IV diagnosis, while one-third (33.3%) had more than one Axis I diagnosis. No clients had a confirmed Axis II diagnosis.

In addition to the mental health diagnoses clients presented at intake, a number of other indicators illustrated acute mental health needs in this population. A total of 91.7% of the clients assessed had clinically elevated levels of psychological distress as measured by the Center for Epidemiological Studies Depression Scale; in fact, psychological distress levels among the CCHER mental health clients were significantly higher than those in a comparison sample served by CCHER in a prior innovative case management program for Haitians living with HIV/AIDS (although not specifically identified as having mental disorders). Levels of health-related quality of life were comparable to those found in the comparison sample of CCHER HIV clients served by this community-based organization. In large part, the level of mental health service need discovered in the earlier CCHER HIV case management program spurred CCHER to seek funds specifically to enhance its mental health service offerings and thus seeded its CMHS-funded mental health service model for Haitian immigrants living with HIV/AIDS.

The CCHER Haitian Mental Health/HIV service model was extremely effective in retaining clients in services. On the average, clients were retained approximately 1½ years in CCHER's mental health program, with 50% of the clients remaining in treatment for at least one year. During their time in treatment, clients participated in a range of individual and group mental health services. Many of the mental health groups were specifically developed for Haitians living with HIV/AIDS (e.g., the Ten Commandments of Living Well with HIV/AIDS; Spiritual Awareness), while others took more traditional mental health concepts (e.g., stress management) and delivered them in a culturally specific manner.

The program demonstrated a number of major outcomes that indicate program effectiveness. Services were well-received by program clients, and client satisfaction data provides evidence of the program's level of cultural competence. Clients identified a range of treatment goals they addressed while receiving mental health services from CCHER, most frequently to reduce symptoms of depression and to help with treatment adherence issues. A the 6-month follow-up, all clients with available data had met or made significant progress towards their treatment goals. Fully 92.0% reported that CCHER had helped "a lot" in assisting clients with meeting their treatment goals.

Clients demonstrated significant improvement on measures of psychosocial functioning and adjustment, including a significant reduction in psychological distress and significant

improvement on 6 out of 8 possible measures of health-related quality of life, including Emotional Well-Being, Social Functioning, Physical Functioning, Role Functioning, Energy, and Lack of Pain.

These data provide considerable support for the effectiveness of the CCHER mental health service model for Haitian immigrants living with HIV/AIDS and mental health disorders.

Acknowledgments

The evaluation of the CCHER MHHSC program could not have been possible without the contributions of key individuals.

Eustache Jean-Louis, M.D., M.P.H. is the Executive Director of CCHER. At CCHER, Gemima St. Louis, Ph.D. served as the Project Director and was instrumental in overseeing grant-funded activities, as was Berthonia Antoine, MA. We thank all staff of the CCHER for their assistance in data collection in the content of providing mental health services to clients living with HIV/AIDS.

At The Measurement Group, evaluation activities were overseen by Lisa A. Melchior, Ph.D. (Vice President) and George J. Huba, Ph.D. (President). Assistance with data management and final report preparation was provided by Aaron Griffith, M.A., and Eva Sofia Mendoza. Additional data collection and project support was provided at The Measurement Group by Rosemary Pelayo, Celia Stillwell, and Anne Baden.

We also wish to thank the CMHS Project Officer, Barbara Silver, Ph.D., for her support.

Introduction

This report presents data from the evaluation of a mental health service model program for Haitians living with HIV/AIDS in Boston, Massachusetts, as funded by the SAMHSA Center for Mental Health Services (CMHS) as part of its Mental Health HIV Services Collaborative (MHHSC) Program through a grant to the Center for Community Health, Education, and Research (CCHER). The CCHER mental health service model was designed to increase treatment capacity for Haitians living with HIV/AIDS and their families by identifying culturally appropriate and competent approaches to mental health for this vulnerable population. Because many clients in the target population have un-served or under-served mental health needs, the program developed culturally-specific ways to increase client willingness to seek help for mental health issues. Housed within a community-based storefront outpatient and drop-in program for Haitians living with HIV/AIDS, mental health services were part of an integrated, comprehensive service continuum that also included case management, social supports, medication adherence support (for HIV/AIDS as well as psychiatric medications), health education, links to primary and specialty medical care, and other wraparound services designed to reduce barriers to care for Haitians living with HIV/AIDS.

Background

The SAMHSA/CMHS Minority HIV/AIDS Mental Health Services cooperative agreements were intended to expand service capacity targeted to meet unmet mental health treatment needs of individuals living with HIV/AIDS who are African American, Hispanic/Latino, and/or from other racial ethnic minority communities. The initiative also sought to train and improve the skills of individuals in African American, Hispanic/Latino and/or other racial ethnic minority communities who provide mental health care and emotional support in traditional and/or non-traditional settings. The program included HIV/AIDS-related mental health treatment services, HIV/AIDS and mental health education services, and a coordinating center. Community-based organizations serving minority clients were targeted and engaged as key liaisons to community members, health care providers, and resources.

The CCHER Minority Mental Health Project

The Center for Community Health, Education & Research, Inc. (CCHER) is a non-profit community based organization. The agency was established in 1987 as the “Haitian Community AIDS Outreach Project,” originally providing AIDS case management and HIV education to the growing Haitian community in Boston and the surrounding areas.

To meet the complex needs of clients dually diagnosed with HIV disease and mental illness, CCHER used this CMHS project to expand its existing HIV services to provide more extensive and intensive culturally appropriate mental health services for Haitians living with HIV/AIDS and their family members. The “Haitian HIV Mental Health Service Model” had five major components: (1) intensive, one-on-one psychotherapy and counseling sessions; (2) group educational training; (3) integration of Haitian HIV/mental health messages into other related services; (4) creation of Advisory Committee; and (5) ongoing macro level and cross-cultural training for CCHER’s staff, Haitian and Non-Haitian HIV clinical providers.

The project had the following major goals.

1. To expand and strengthen the capacity of community-based entities to provide culturally appropriate competent mental health services treatment services targeted Haitian living with HIV and their families; and

2. To improve, on an ongoing basis, the core client outcomes of recipients of the expanded mental health services, in a culturally competent way that incorporates health beliefs, environmental/historical factors, and social/economic factors.

In 2002, CCHER established the *Alcide Center for Counseling & Family Services* (ACCFS) to provide culturally-competent mental health services to Haitians living with HIV/AIDS. Housed at CCHER, the program offers an array of direct care services including diagnostic evaluations; crisis intervention; psychopharmacological assessment and intervention; individual, family and group counseling; and community education and outreach. The mission of the Alcide Center is threefold: (1) to provide comprehensive and culturally-competent mental health assessment, treatment, and consultation to Haitian individuals and families who are living with in the greater Boston area and surrounding communities; (2) to link clients to other supportive services that promote psychosocial adjustment and well-being; and (3) to raise awareness, reduce stigmas, and promote greater acceptance of mental illness and mental health care in the community.

Evaluation Plan

An independent local evaluation was conducted to determine the effectiveness of the program in meeting its goals and to document client and program outcomes. The local evaluation was intended to address the extent to which the program has: (a) enrolled, engaged, and retained Haitians with HIV/AIDS and mental health problems in services; (b) identified, implemented, and provided culturally appropriate/competent mental health services; (c) been implemented as planned; (d) linked clients to needed services; (f) produced client outcomes including improvements in health and psychosocial functioning, employment/educational status, increases in safe and stable housing, as well as reductions in negative outcomes.

Process Evaluation. The process evaluation for the proposed project will provide information to address issues such as who provided what services to whom, in what context, and at what cost. The table below summarizes the process evaluation indicators proposed for this project.

Table 1. Process evaluation indicators for mental health treatment model for Haitians living with HIV/AIDS.

Process Evaluation Indicator	Data Collection Measures	Description, Purpose, and When Collected
Number and characteristics of individuals served	Intake-enrollment form (Module 1, www.TheMeasurementGroup.com)	• Identify number of individuals served with grant funds • Capture demographic, housing status, substance abuse, mental health, and other health and psychosocial characteristics of program clients • Completed by program staff at intake

Process Evaluation Indicator	Data Collection Measures	Description, Purpose, and When Collected
Types and numbers of services provided	Psychosocial Services Form (Module 2B, www.TheMeasurementGroup.com)	• Identify service utilization patterns by program clients • Completed each day for each client who participates in services by program staff • Permits documentation of program retention and completion

Outcome Evaluation. The outcome evaluation for the project was designed to provide information to address issues such as the effect of treatment on the service participants; program/contextual factors associated with outcomes; and client factors were associated with outcomes. The following table summarizes the major outcomes measured for this project and shows the methods of evaluating the extent to which program clients achieve those outcomes. The evaluation indicators as a whole were used to assess the extent to which the program has provided culturally appropriate/competent mental health services to its clients.

Table 2. Outcome evaluation indicators for the mental health treatment model for Haitians living with HIV/AIDS.

Demonstrable Outcome	Data Collection Measures	Description, Purpose, and When Collected
Improved health status and functioning	GPRA and supplemental indicators of health status and functioning taken at intake and follow-up (6 and 12 months); possibly adapt measure of health functioning such as Module 17: Brief Health and Functioning Questionnaire or the RAND Medical Outcomes Study SF-21 (www.TheMeasurementGroup.com); also collect HIV/AIDS health indicators such as CD4 count, viral load, opportunistic infections, medications prescribed using Module 71: Medical Health Form (www.TheMeasurementGroup.com)	• Identify at baseline and follow-ups (6 and 12 months post-intake) level of health-related quality of life, functioning in various domains (e.g., physical functioning, energy, role functioning, social functioning, cognitive functioning, lack of pain, emotional well-being, current health perceptions)
Improved psychosocial functioning	Center for Epidemiological Studies-Depression Scale (CES-D; Module 26, www.TheMeasurementGroup.com)	• Identify at baseline and follow-ups (6 and 12 months post-intake) level of current psychological distress.
Increased employment and/or education	GPRA and supplemental indicators of employment and/or education taken at intake and follow-up (6 and 12 months)	• Identify levels at baseline and follow-ups (6 and 12 months post-intake) of client employment • Identify levels at baseline and follow-ups (6 and 12 months post-intake) of client school attendance
Increase housing stability	GPRA and supplemental indicators of housing status taken at intake and follow-up (6 and 12 months)	• Identify at baseline and follow-ups (6 and 12 months post-intake) stability of client housing situation
Reduction of criminal justice system involvement	GPRA and supplemental indicators of criminal justice system involvement taken at intake and follow-up (6 and 12 months)	• Identify at baseline and follow-ups (6 and 12 months post-intake) extent to which client has current criminal justice system involvement
Reduction of substance abuse	GPRA and supplemental indicators of substance abuse history taken at intake and follow-up (6 and 12 months)	• Identify levels at baseline and follow-ups (6 and 12 months post-intake) of recent (past month) substance abuse • Identify levels at baseline and follow-ups (6 and 12 months post-intake) of adverse consequences of substance abuse
Reduction of HIV risk behaviors	Detailed measure of recent sexual and drug use risk behaviors such as Module 20: HIV Risk Behaviors Form (www.TheMeasurementGroup.com)	• Identify levels at baseline and follow-ups (6 and 12 months post-intake) of recent (past month) sexual and substance abuse risk behaviors
Reduced utilization of hospital emergency and inpatient services for mental health treatment	GPRA and supplemental indicators of ER utilization and inpatient hospitalizations taken at intake and follow-up (6 and 12 months)	• Identify levels at baseline and follow-ups (6 and 12 months post-intake) of recent (past month) utilization of these services

Demonstrable Outcome	Data Collection Measures	Description, Purpose, and When Collected
Client satisfaction with services	Module 11: Client Satisfaction with Services Form (Haitian version; www.TheMeasurementGroup.com)	• Identify client satisfaction with services at CCHER • Identify extent to which clients feel the program was culturally appropriate/competent

To ensure cultural appropriateness of evaluation instruments, key stakeholders – including members of the target population – reviewed evaluation measures and protocols to ensure their relevance. All client assessments were translated and available in Haitian Creole as well as in English.

Evaluation Results

Client Screening and Enrollment

All clients of CCHER – who are all Haitians living with HIV/AIDS – were screened for eligibility for the Mental Health and HIV Services program. Clients were screened for possible mental health issues by program staff. A formal screening instrument was available to assist with identifying clients with potential mental health issues, developed by The Measurement Group and adapted from the PRIME-MD Patient Health Questionnaire (Spitzer, Kroenke, & Williams, 1999) and the SPAN (Davidson, 2002) for possible traumatic stress issues. All CCHER staff were trained in the administration of the screening instrument. Any clients with potential mental health issues flagged during screening were referred to a mental health clinician for a full psychodiagnostic interview. It was also possible for clients to enter the program at CCHER with a qualifying diagnosis from another program. In addition, clients seen by the staff psychiatrist were not necessarily screened in advance.

Over the course of the project, a total of 79 Haitians living with HIV/AIDS were screened for possible mental health issues.[1] Of the 79 individuals screened, 75 adults age 18 and above had a qualifying DSM diagnosis.[2] As per the guidelines for this project set forth by the Center for Mental Health Services, clients were eligible to receive services if they were living with HIV/AIDS and were diagnosed with a DSM-IV Axis I or II mental health diagnosis (other than a primary diagnosis of substance abuse or dependence). The 75 enrolled clients were 100% Haitians living with HIV/AIDS, ages 26 to 73 years (mean age = 42.48 years, s.d. = 10.05 years) and included 27 males (36.0%) and 48 females (64.0%). Given the emphasis of this program on serving communities of color, **the CCHER Mental Health and HIV Service program reached its intended target population.**

The following table summarizes the major DSM diagnostic categories among the 75 enrolled clients. Overall, 66.7% had a single Axis I diagnosis and 33.3% had two or more Axis I diagnoses. No clients had a confirmed Axis II diagnosis.

[1] It should be noted that the data reported in the body of this evaluation report are based on unduplicated individuals. Data reported to the Abt Coordinating Center may not match what is presented in this report due to clients being re-assessed and re-activated during the course of the program. CMHS permitted duplicate counting of such cases in the totals reported to the Coordinating Center. This local evaluation report summarizes data for unique individuals who were clients of CCHER mental health services funded under the CMHS grant.

[2] One individual screened did not have a mental health diagnosis; three individuals under 18 years of age were screened and had mental health diagnoses but were not included in the evaluation.

Table 3
Summary of Axis I Mental Diagnoses among CCHER Clients

Diagnostic Category	% Males (*n* = 27)	% Females (*n* = 48)	% Total (*n* = 75)
Mood Disorders			
Depressive Disorders	**51.9**	**39.6**	**44.0**
Major Depressive Disorder	40.7	35.4	37.3
Dysthymic Disorder	0.0	2.1	1.3
Depressive Disorder NOS	11.1	2.1	5.3
Other Mood Disorders	**3.7**	**8.3**	**6.7**
Mood Disorder due to Medical Condition	3.7	4.2	4.0
Mood Disorder NOS	0.0	4.2	2.7
Anxiety Disorders	**29.6**	**29.2**	**29.3**
Posttraumatic Stress Disorder	11.1	6.3	8.0
Anxiety Disorder Due to General Medical Condition	22.2	25.0	24.0
Schizophrenia and Other Psychotic Disorders			
Schizophrenia	0.0	4.2	2.7
Psychotic Disorder NOS	3.7	2.1	2.7
Adjustment Disorder	**44.4**	**47.9**	**46.7**
Adjustment Disorder with Depressed Mood	25.9	29.2	28.0
Adjustment Disorder with Anxiety	7.4	8.3	8.0
Adjustment Disorder with Mixed Anxiety/Depressed Mood	7.4	6.3	6.7
Adjustment Disorder Unspecified	3.7	4.2	4.0
Sleep Disorder			
Primary Insomnia	7.4	0.0	2.7
Cognitive Disorder			
HIV Dementia	3.7	0.0	1.3
Sexuality Disorder			
Sexuality Disorder	0.0	2.1	1.3
Other Conditions of Clinical Concern			
Relational Disorder	0.0	2.1	1.3
Bereavement Disorder	0.0	2.1	1.3
Substance-Related Disorders [secondary to another disorder]	**7.4**	**0.0**	**2.7**
Cocaine Abuse	3.7	0.0	1.3
Alcohol Abuse	3.7	0.0	1.3

- The most frequent diagnoses were Depressive Disorders, with the most frequent type of Depressive Disorder diagnosed being Major Depressive Disorder.

- None of the observed gender differences were significant at the $p < .05$ level.

Client Characteristics

Data presented in the remainder of this report were collected between October 1, 2001 and September 30, 2006. Of the 75 adult clients with diagnosis data, a number did not have sufficient evaluation data available for analysis. Thus, baseline data summarized here are based on a sample size of $n = 62$ unless otherwise noted.

Demographic characteristics. Based on data from the baseline evaluation interview, the following characteristics were documented for clients of the CCHER mental health program treatment program.

- The intake sample included 21 males (33.9%) and 41 females (66.1%).
- The average age at intake was 42.19 years (s.d. = 10.34 years).
- Clients were all Haitian immigrants.
- The majority of the clients (83.9%) reported that Haitian Creole was their primary language. 3.2% said English was their primary language, 8.1% identified another primary language (most often French), and 4.8% did not indicate their primary language.
- A total of 70.9% of the clients in the intake sample had children; of those who identified as parents, 75.8% had children under 18 living in their household. One reported having a child who was living with HIV.
    - Of the clients with children, the average number of children per client was 2.54 (s.d. = 1.55).
    - Of the clients with children, one out of four (25.0%) said they had at least one child needing care when the client would be receiving HIV/AIDS services.
    - One client reported having a child in their home that was living with HIV.

Employment. The baseline evaluation interview includes indicators of employment status.

- 22.6% were employed (12.9% full time and 9.7% part time);
- 24.2% were unemployed;
- 1.6% were not at work because of illness;
- 1.6% were retired;
- 12.9% identified themselves as full-time homemakers;
- 12.9 reported another (unspecified) employment status; and
- 24.2% did not report their employment status in the week prior to the baseline assessment.

HIV Health Indicators

HIV Health History. The baseline evaluation interview asked a number of questions about how long the client had been living with HIV, stage of HIV disease, and selected HIV health indicators.

- On the average, clients reported testing HIV-positive 6.65 years ago (s.d. = 4.56 years) relative to their intake in CCHER mental health services (*n* = 55 with valid data).

- On the average, clients reported *first* receiving medical care for HIV/AIDS 5.76 years ago (s.d. = 4.25 years) relative to their intake in CCHER mental health services (*n* = 54 with valid data). None of the respondents reported they had never received medical care for HIV/AIDS, although some did not provide the date they first accessed such services.

- On the average, clients reported receiving medical care for HIV/AIDS *most recently* within the past year (0.78 years ago, s.d. = 2.31 years ago) relative to their intake in CCHER mental health services. 84.0% of those who reported a recent HIV/AIDS medical visit (*n* = 50) indicated that visit was in the past year. 6.5% said they didn't know when their most recent medical visit was for HIV/AIDS.

- Approximately three clients in four (77.4%) reported they had been told by a doctor, nurse, physician assistant or other healthcare provider that they have AIDS. On the average, these clients had been given this information 6.59 years ago relative to their intake in CCHER mental health services (s.d. = 4.41 years; *n* = 41). 12.5% said they didn't know when the first time was they had been given this information.

Most Recent CD4 Counts and Viral Load. The baseline evaluation interview asked clients about their most recent CD4 counts and viral load values.

Three out of four clients (75.8%) with baseline evaluation data reported that they had ever been told their CD4 count. Of these individuals, 66.0% knew their most recent CD4 count. Of those who reported this information, the average CD4 count was 499.10 (s.d. = 491.39); on the average this indicates a fairly healthy population. Participants reported their most recent CD4 count on the average 97.08 days (s.d. = 135.71 days) before the intake date for CCHER mental health services. Of the clients who reported recent CD4 count information, the following breakdown provides an approximation of their stage of HIV disease.

- 22.6% had CD4 counts lower than 200; this level is within the definition of AIDS; individuals in this range are at higher risk for opportunistic infections;

- 19.4% had CD4 counts between 200 and 350, which is a level at which treatment guidelines generally advise initiating HIV antiretroviral therapy and monitoring more frequently for signs of decreasing CD4 levels; and

- 58.1% had CD4 counts over 350, suggesting relatively good health for individuals with HIV disease. This is a level at which clinical guidelines advise deferring HIV antiretroviral therapy in the absence of other symptoms.

A total of 61.3% of the clients with baseline evaluation data reported that they had ever been told their HIV viral load. Of these individuals, 58.5% provided information about their most recent viral load. The average log viral load was 1.40 (s.d. = 2.30). The most recent viral load information was received on the average 67.93 days (s.d. = 45.05) before the intake evaluation assessment. Of the 24 clients who reported recent viral load information, 58.3% reported their most recent viral load was at an undetectable level.

Primary Health Care Source. The baseline evaluation interview collected information concerning where clients go to obtain HIV medical care. Of the 62 clients with baseline evaluation data:

- 72.6% received health care in a hospital outpatient setting;
- 8.1% received HIV medical care from a community clinic or public health department;
- 3.2% received HIV medical care from a private practice provider;
- 1.6% went to the emergency room most recently for HIV medical care; and
- 14.5% did not specify where they most recently received HIV medical care.

Mental and Physical Health Problems and Treatment

The baseline evaluation interview includes indicators of self-rated health, as well as utilization of various types of treatment in the past 30 days.

Table 4
Self-Rated Overall Health at Intake (*n* = 62)

Health Rating	Percent	*n*
Excellent	8.1%	5
Very Good	33.9%	21
Good	27.4%	17
Fair	17.7%	11
Poor	8.1%	5
Not indicated	4.8%	3

- **The majority of respondents (69.4%) rated their overall health as at least "Good" or better.**

A number of questions were asked at baseline about utilization of services for physical complaints and mental health issues in the past 30 days. These data are available for a subsample of 38 participants. This set of items was included from the SAMHSA/CMHS performance (GPRA) measures.

- A total of 13.2% of those with available data reported receiving inpatient treatment for a physical complaint in the past 30 days. Of those using inpatient treatment for a physical complaint, clients stayed an average of 14.33 nights (s.d. = 13.58) during the past 30 days.

- A total of 7.9% of those with available data reported receiving inpatient treatment for a mental health problem in the past 30 days. Of those using inpatient mental health treatment, clients stayed an average of 6.00 nights (s.d. = 7.07) out of the past 30 days.

- A total of 71.1% of those with available data reported receiving outpatient treatment for a physical complaint in the past 30 days. Of those utilizing outpatient medical treatment, clients received such services an average of 1.61 times (s.d. = 2.29) in the past 30 days.

- A total of 76.3% of those with available data reported receiving outpatient treatment for mental health in the past 30 days. Of those utilizing outpatient mental health services, clients received those services an average of 2.52 times (s.d. = 1.30) in the past 30 days.

- A total of 7.9% of those with available data reported emergency treatment for physical complaint in the past 30 days. Of those receiving such treatment, clients utilized those emergency room services an average of 1.33 times (s.d. = 0.58) in the past 30 days.

- A total of 5.3% of those with available data reported use of emergency treatment for a mental health problem in the past 30 days. Of those receiving such treatment, clients utilized those emergency room services an average of 2.00 times (s.d. = 1.41) in the past 30 days.

Visits to/by Doctors, Nurses, or Other Health Professionals. As part of the SF-21 Health-Related Quality of Life measure, the baseline evaluation interview included questions relating to visits to or by doctors, nurses, or other health professionals.

- 77.4% made visits to doctors, nurses, or health professionals at private office, a clinic, or hospital emergency room in the past 4 weeks.
- 24.2% reported home visits from doctors, nurses, or other paid professionals in the past 4 weeks.

- 50.0% indicated they had phone contact with a doctor, nurse, or other health care professional in the past 4 weeks.

Psychological Distress

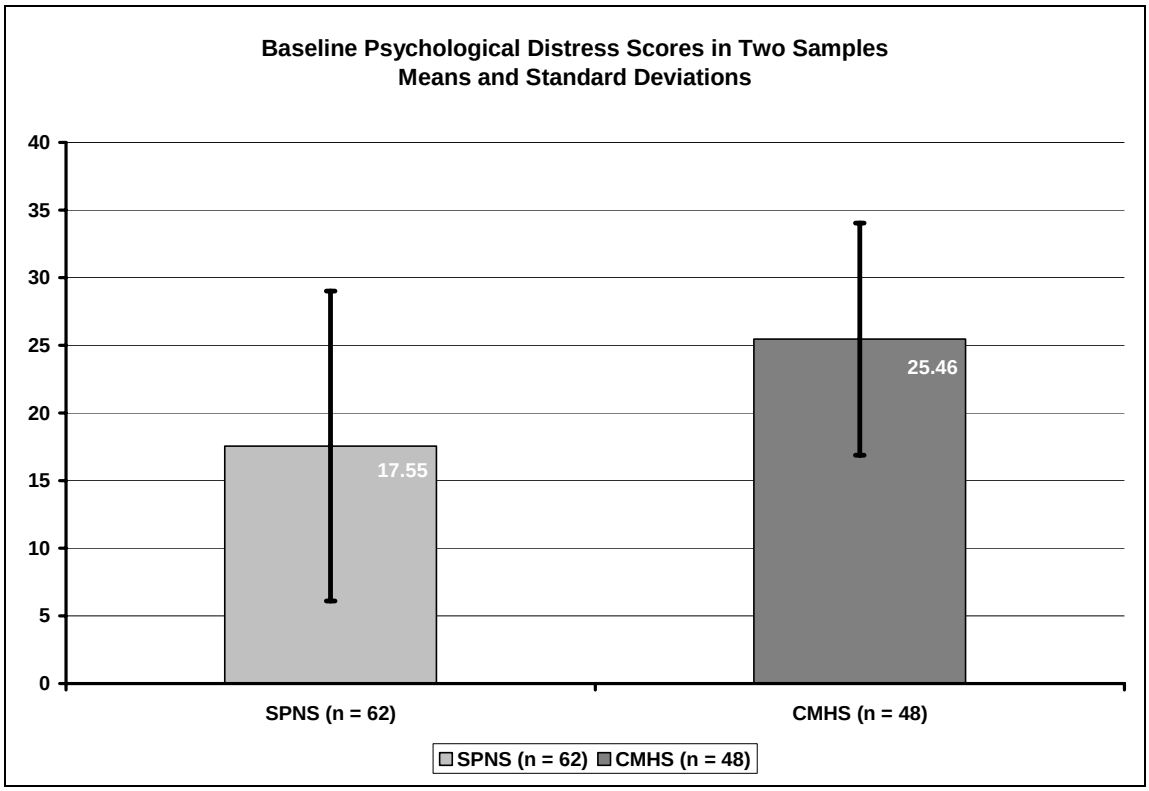
The Center for Epidemiological Studies Depression Scale (CES-D) was administered at intake to assess level of psychological distress in the past week. These assessments were conducted at enrollment to the CCHER outpatient program.

On the 20-item CES-D, scores of 16 or greater indicate clinically significant levels of psychological distress.

- Of the 48 clients assessed at intake, **91.7% had a total CES-D score of 16 or greater**, suggesting clinically significant levels of recent psychological distress. In an unselected population, 20% of respondents would be expected to score at this level.
- The mean CES-D score for these 48 clients assessed at intake was 25.46 (s.d. = 8.58), with scores ranging from 5 to 43.

Comparison to Other CCHER Service Population. Comparable CES-D data was available from a prior CCHER model enhanced case management program for Haitian immigrants living with HIV/AIDS[3]. Mental health diagnostic information is not known for that sample, and that program did not specifically target Haitians living with HIV/AIDS who had mental heath diagnoses as did the current CMHS-funded program. **The current mental health clients ("CMHS") did have significantly higher CES-D scores than the prior HIV case management ("SPNS") sample**, as illustrated in the following figure ($F(1,108) = 15.931$, $p < .001$.)

[3] Funded by the HRSA Special Projects of National Significance Program, 1994-1999.



Health and Functioning/Health-Related Quality of Life

As part of the local evaluation, the intake interview included the SF-21 Brief Health and Functioning Measure (Bozzette et al., 1992). The following table summarizes baseline levels of self-reported health and functioning scores among program participants. High scores indicate high levels of functioning. The eight functioning scales range from 0 (worst possible functioning) to 100 (best possible functioning). The Categorical Health Rating ranges from 0 (worst possible functioning) to 10 (best possible functioning).

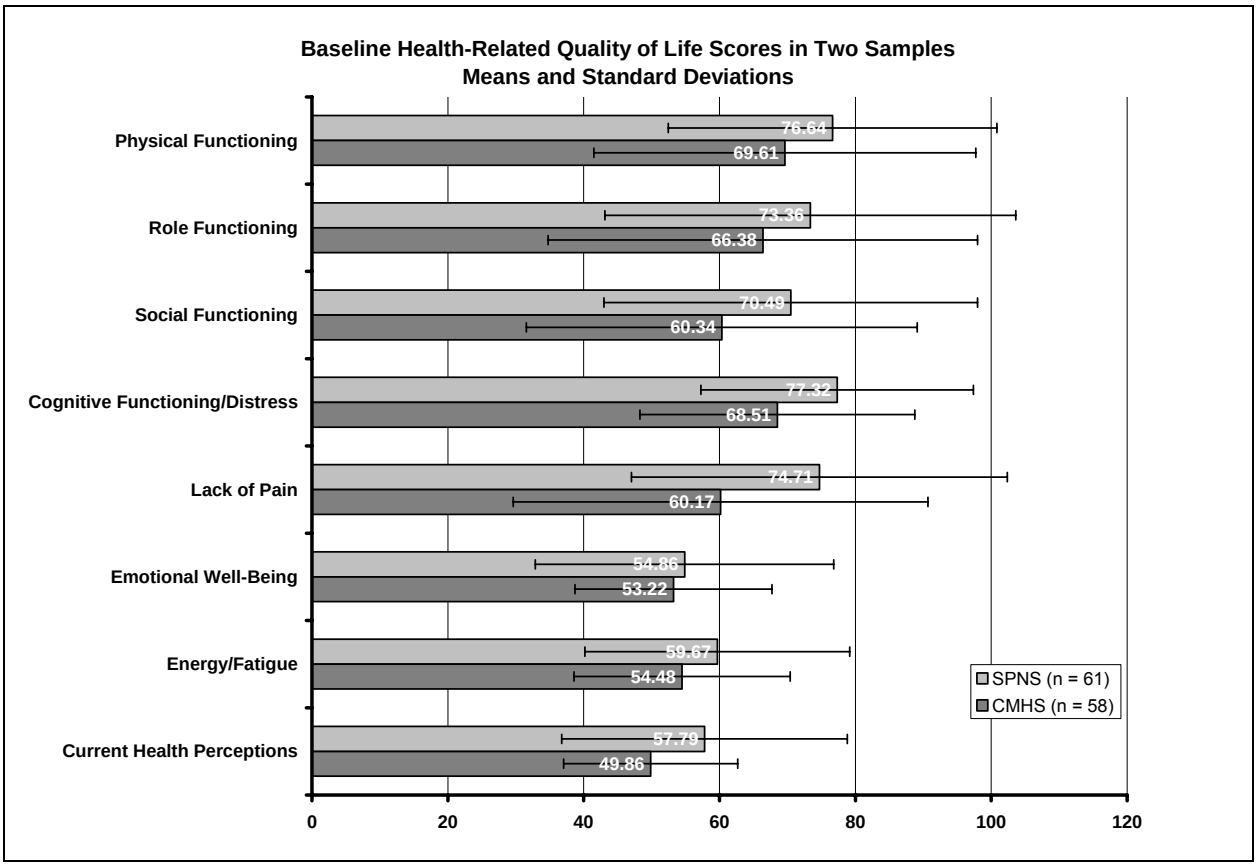
Table 5
Distribution of Scores on Health and Functioning Measures at Baseline

	SF-21 Scores				
	Mean	**SD**	**Min**	**Max**	***n***
Physical Functioning	68.54	28.33	0.00	100.00	60
Role Functioning	66.10	31.40	0.00	100.00	59
Social Functioning	61.00	28.75	0.00	100.00	60
Cognitive Functioning/Distress	67.67	20.64	20.00	100.00	60
Lack of Pain	60.74	29.92	0.00	100.00	61
Emotional Well-Being	44.67	20.44	6.67	100.00	60
Energy/Fatigue	47.63	24.59	0.00	100.00	59
Current Health Perceptions	53.13	21.72	0.00	100.00	60

- The clients scored relatively higher on measures of Physical Functioning, Role Functioning, Cognitive Functioning, Social Functioning, and Lack of Pain.

- The clients scored relatively lower on measures of Current Health Perceptions, Energy/Fatigue, and Emotional Well-Being.

Comparison to Other CCHER Service Population. Comparable data from the SF-21 health-related quality of life measure was available from the prior CCHER model enhanced case management program for Haitian immigrants living with HIV/AIDS described above. Although mental health diagnostic information is not known for that sample, and that program did not specifically target Haitians living with HIV/AIDS who had mental heath diagnoses, health-related quality of life scores on the SF-21 measure were not statistically different for these two samples. The figure below shows means and standard deviations of scores on each of the SF-21 measures at baseline. The difference in the scores of the mental health sample ("CMHS") and the comparison sample ("SPNS") at baseline approached statistical significance (Wilks' λ = .039, $F(8,110) = 1.720$, $p = .05$ one-tailed). Scores specifically differed in the two samples for Social Functioning, Cognitive Functioning, Lack of Pain, Energy/Fatigue, and Current Health Perceptions (all $p < .05$ one-tailed). **Where there were differences, the CCHER mental health clients ("CMHS") demonstrated lower levels of health-related quality of life than the comparison sample of CCHER HIV case management clients ("SPNS").**



Additional Measures of Daily Functioning

The baseline interview included eight items pertaining to daily functioning. As shown below, clients were asked to gauge their problems related to common daily tasks. Each of the ratings range from 1 to 5, where 1 = No Difficulty, 2 = Slight Problem, 3 = Moderate Problem, 4 = Quite a Problem, and 5 = Extreme Problem. This set of items was included from the SAMHSA/CMHS performance (GPRA) measures and was available for a subsample of 38 participants.

Table 6
Distribution of Scores on Additional Daily Functioning Measures (*n* = 38)

	Summary Statistics			
Past Week Problem Domain	**Mean**	**SD**	**Min**	**Max**
Managing your day-to-day life (e.g., getting to places on time, handling money, making everyday decisions	2.19	1.13	1	5
Taking care of household responsibilities (e.g., shopping, cooking, laundry, keeping your room clean, other chores	2.25	0.87	1	4
Work (e.g., completing tasks, finding or keeping a job)	2.26	1.04	1	4
School (e.g., completing assignments, attendance)	2.18	1.09	1	4
Leisure time or recreational activities	2.24	1.09	1	4
Developing independence or autonomy	2.26	1.11	1	5
Apathy or lack of interest in things	2.39	1.00	1	4
Concentration, confusion, or memory	2.45	1.03	1	4
Feeling dissatisfaction with your life	2.61	1.13	1	5

Out of the 38 clients who responded to this set of questions:

- 63.2% had difficulty managing their day-to-day life (for example, getting to places on time, handling money, making everyday decisions;
- 73.7% had difficulty taking care of household responsibilities (for example, shopping, cooking, laundry, keeping their room clean, other chores;
- 65.8% had difficulty related to work (for example, completing tasks, finding or keeping a job);
- 57.9% had difficulty related to school (for example, completing assignments, attendance);
- 65.8% had difficulty related to their leisure time or recreational activities;
- 71.1% had difficulty developing independence or autonomy;
- 81.6% had difficulty with apathy or not being interested in things;
- 78.9% had difficulty with concentration, confusion, or memory; and
- 84.2% felt dissatisfied with their life.

Alcohol and Other Drug Use. Of the 33 clients who responded to questions about past 30 day use of alcohol and other drugs, only a few reported any alcohol use and none reported any form of illegal drug use in the 30 days prior to intake. This set of items was included from the SAMHSA/CMHS performance (GPRA) measures.

Crime and Criminal Justice Status. The baseline survey also included indicators of criminal justice system involvement. No criminal justice involvement was reported in the 30 days prior to enrolling in the program.

Service Utilization Patterns

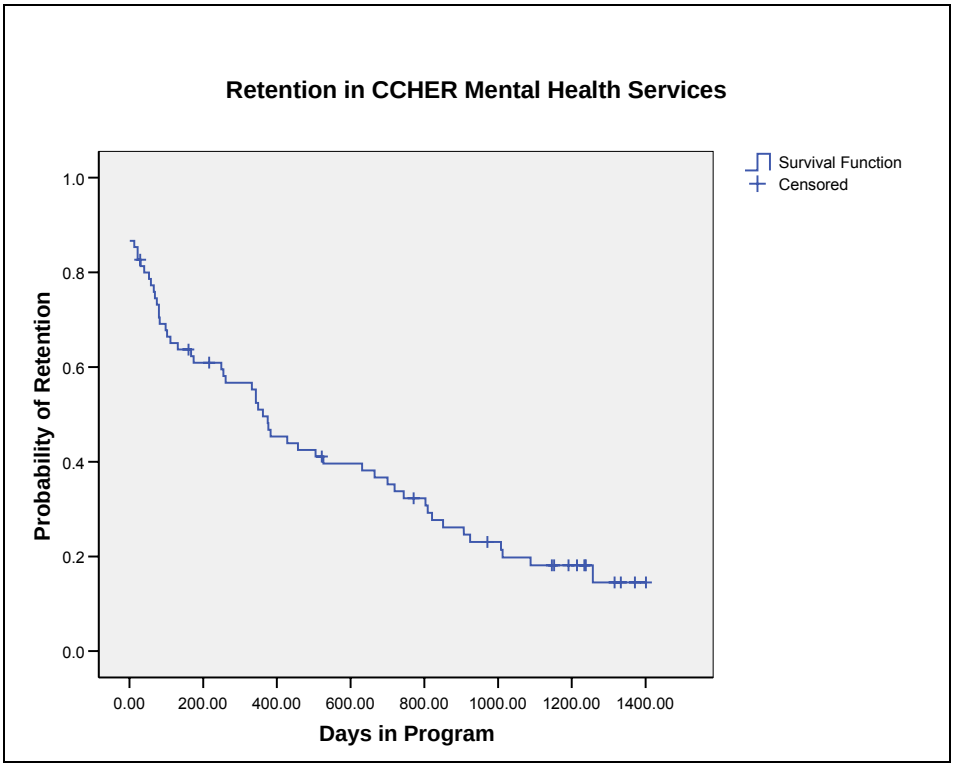
Clients in CCHER's mental health treatment program received a range of individual and group services. This section summarizes the service utilization patterns of program clients.

Retention. In order to examine retention in mental health services, a Kaplan-Meier survival analysis was conducted. At the end of the project period, a total of 16% of the clients were considered to have "left" the program.

- The mean time in program was 528.21 days, with a standard error of 59.20 days. The 95% confidence interval for the mean was between 412.17 days and 644.25 days. **On the average, clients were retained in mental health services at CCHER for close to 1½ years.**

- The median duration of treatment episode was 362 days, with a standard error of 49.66 days. The 95% confidence interval for the median retention was between 264.66 days and 459.34 days. This indicates that **more than 50% of the clients were retained for more than a year in mental health services at CCHER.**

The retention curve for the CMHS mental health clients served under CMHS funding is shown in the following figure. As illustrated by these data, the program was extremely successful in retaining Haitian clients living with HIV/AIDS and mental health diagnoses in services funded under this grant.



The following sections summarize specific indicators describing the nature of services provided to CCHER clients under this mental health services program.

Individual Services. The 75 enrolled adult clients received an average of 35.38 individual service sessions (s.d. = 44.55). The following tables illustrate what percentage of clients received each type of service and the average number of sessions per client for that particular service.

Table 7
Individual Services Received (*n* = 75)

		Number of Sessions			
Individual Service Received	**% Received**	**Mean**	**s.d.**	**Min**	**Max**
HIV Risk Assessment	37.3%	3.04	2.66	1	10
HIV Post-Test Counseling	1.3%	1.00	n/a	1	1
HIV Testing	1.3%	1.00	n/a	1	1
HIV Prevention	9.3%	1.43	0.79	1	3
Other HIV-Related Services	8.0%	1.33	0.52	1	2
Individual Therapy	93.3%	10.67	10.93	1	51
Psychiatric Evaluation	10.7%	1.50	1.41	1	5
Psychological Assessment	5.3%	1.75	0.50	1	2
Pharmacological Evaluation/Treatment	29.3%	1.59	1.26	1	6
Crisis Intervention	21.3%	1.50	0.89	1	4
Other Mental Health Services	12.0%	17.78	36.19	1	113
12-Step	6.7%	1.00	0.00	1	1
Relapse Prevention	1.3%	2.00	n/a	2	2
Substance Abuse Treatment/Counseling	2.7%	1.00	0.00	1	1
Other Substance Abuse	1.3%	1.00	n/a	1	1
Advocacy	4.0%	5.33	3.79	1	8
Clinical Assessment	18.7%	1.71	0.91	1	3
Educational	5.3%	1.25	0.50	1	2
Financial	14.7%	1.45	0.69	1	3
Housing	14.7%	2.00	1.61	1	6
Legal	9.3%	1.29	0.76	1	3
Medical	8.0%	1.67	1.21	1	4
Other Case Management	1.3%	1.00	n/a	1	1

Group Services. Clients also received group services as shown below.

Table 8
Group Services (*n* = 75)

		Number of Sessions			
Group Service	**% Participated**	**Mean**	**s.d.**	**Min**	**Max**
Crisis Intervention	13.3%	1.30	0.48	1	2
Family Counseling	16.0%	5.17	3.97	1	12
Group Counseling	50.7%	13.68	15.63	1	54
Group Therapy	50.7%	28.03	27.68	3	103
Peer Support	12.0%	1.22	0.44	1	2
Educational	20.0%	4.07	3.73	1	12
Other Group	5.3%	2.00	2.00	1	5

The following table summarizes the various topics discussed during program interventions. As can be seen, a range of topics were addressed.

Table 9
Topics Discussed (*n* = 75)

Topics Discussed	% Discussed	Number of Sessions			
		Mean	s.d.	Min	Max
Services-Related					
Alternative Therapy	49.3%	3.43	3.28	1	13
Basic Needs/Advocacy	**92.0%**	**14.26**	**17.83**	**1**	**90**
Discharge Planning	14.7%	2.73	2.41	1	7
Education	**78.7%**	**10.81**	**12.95**	**1**	**53**
Medical Services/Needs	**92.0%**	**13.78**	**17.11**	**1**	**91**
Medication	**94.7%**	**15.70**	**18.62**	**1**	**98**
Nutrition/Diet	**84.0%**	**10.32**	**10.83**	**1**	**46**
Relocation	24.0%	2.56	3.13	1	11
Service Linkages	26.7%	2.10	3.13	1	15
Sexually Transmitted Diseases	**66.7%**	**5.40**	**6.85**	**1**	**29**
Substance Abuse	20.0%	1.40	0.51	1	2
Psychosocial Issues					
Child Care/Parenting	**72.0%**	**8.06**	**8.78**	**1**	**39**
Death and Dying	**81.3%**	**11.20**	**12.89**	**1**	**55**
Emotional Problems	**96.0%**	**26.71**	**32.63**	**1**	**148**
Financial Problems	**92.0%**	**13.32**	**14.34**	**1**	**74**
Gender	16.0%	1.58	1.16	1	5
Grief and Loss	**86.7%**	**12.43**	**15.15**	**1**	**62**
Interpersonal Issues	**85.3%**	**17.34**	**22.42**	**1**	**110**
Legal Problems	33.3%	2.12	1.56	1	6
Life Skills	48.0%	4.03	3.69	1	14
Self Identity/Sexuality	42.7%	2.97	2.21	1	10
Spirituality	**70.7%**	**17.68**	**23.56**	**1**	**91**
Violence/Victimization	17.3%	1.92	1.50	1	6
Vocational Services	17.3%	1.31	0.63	1	3
HIV-Specific					
HIV Risk Reduction	**56.0%**	**10.95**	**12.17**	**1**	**47**
Living with HIV	**88.0%**	**26.30**	**31.77**	**1**	**148**
Dealing with Medical Systems	**69.3%**	**4.67**	**3.72**	**1**	**16**
Mental Health Beliefs	**70.7%**	**4.83**	**4.20**	**1**	**20**
Medical Beliefs	**69.3%**	**3.67**	**2.87**	**1**	**13**
Spirituality	**73.3%**	**13.15**	**18.54**	**1**	**91**
Dealing with Conflicts due to Traditional Belief Systems/Family	**66.7%**	**5.62**	**4.92**	**1**	**23**
Medication	**61.3%**	**4.39**	**3.54**	**1**	**15**
Other Topics					
Pregnancy Planning	2.7%	1.00	0.00	1	1
Anger Management	14.7%	3.64	2.54	1	7
Self Esteem	5.3%	1.25	0.50	1	2

The following table summarizes where mental health and supportive services were provided through the CCHER mental health treatment program.

Table 10
Service Location (*n* = 75)

		Number of Sessions			
Service Location	**% Participated**	**Mean**	**s.d.**	**Min**	**Max**
CCHER	84.0%	26.70	36.33	1	163
Boston Medical Center	9.3%	1.71	0.95	1	3
Home	50.7%	6.50	13.02	1	78
Medical Office	4.0%	1.00	0.00	1	1
Telephone	62.7%	6.21	6.94	1	30
Hospital	13.3%	3.40	3.03	1	10
Other	26.7%	4.55	3.39	1	12

- Although the majority of services were provided on-site at CCHER, clients were also served at home, at other service providers, and by telephone support.

The following table summarizes the various types of providers that worked with clients in the CCHER mental health treatment program.

Table 11
Services Received from Types of Providers (*n* = 75)

		Number of Sessions			
Services Provider	**% Received**	**Mean**	**s.d.**	**Min**	**Max**
Case Manager	2.7%	1.00	0.00	1	1
Counselor	**86.7%**	**20.71**	**25.16**	**1**	**114**
Health Educator	12.0%	1.44	0.73	1	3
Nurse/Nurse Practitioner	1.3%	1.00	n/a	1	1
Outreach Worker	1.3%	1.00	n/a	1	1
Pastoral Counselor	**6.7%**	**15.40**	**25.53**	**2**	**61**
Psychiatrist	**22.7%**	**2.00**	**1.73**	**1**	**7**
Social Worker	**56.0%**	**21.50**	**21.53**	**1**	**95**
Student (Medical/Healthcare)	1.3%	1.00	n/a	1	1
Treatment Advocate	2.7%	1.00	0.00	1	1
Other Treatment Provider	5.3%	15.75	20.43	2	46

- The majority of services were provided by staff identified as counselors and social workers.

Additional data are provided in Appendix 1 concerning feedback for specific CCHER mental health groups. Due to small sample sizes, those data are not included in the main body of this report.

Outcome Data

Clients enrolled in the CCHER mental health treatment program were tracked for follow-up at 6- and 12-months post-intake. Consistent with rules established by the Center for Mental Health Services for the MHHSC program, only active clients were followed up for evaluation purposes. Participants were given a $20 gift card to a local supermarket or general merchandise store to thank them for participating in the evaluation follow-up interview. Outcome data are examined for those clients with a complete panel of baseline and 6-month follow-up interview data.[4]

Demographic characteristics. In this sample (*n* = 33) with matched intake and follow-up data, the average age was 42.06 years (s.d. = 9.84 years). A total of 10 (30.3%) were males and 23 (69.7%) were females.

Client Satisfaction with Services

The interview administered at 6- and 12-month follow-up included several questions to assess client satisfaction with services received from the CCHER program. The data in this section are available from 33 clients with follow-up data.

Overall, the program was viewed very favorably by program participants at the time of the 6-month follow-up.

Overall, I think the services here are

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	7	21.2	21.2	21.2
	Very good	20	60.6	60.6	81.8
	Good	4	12.1	12.1	93.9
	Fair	2	6.1	6.1	100.0
	Total	33	100.0	100.0	

The information I've received here has been

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very helpful	21	63.6	63.6	63.6
	Helpful	12	36.4	36.4	100.0
	Total	33	100.0	100.0	

[4] The sample size with all three waves of matched data drops to *n* = 18 and is thus too small to reliably analyze.

The staff here answer my questions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All of the time	21	63.6	63.6	63.6
	Most times	12	36.4	36.4	100.0
	Total	33	100.0	100.0	

The staff here tell me in advance about treatment procedures I should have

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All of the time	16	48.5	48.5	48.5
	Most times	16	48.5	48.5	97.0
	Sometimes	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

The staff here treat me like I am an individual with unique needs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All of the time	16	48.5	48.5	48.5
	Most times	17	51.5	51.5	100.0
	Total	33	100.0	100.0	

The staff here respect my privacy

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All of the time	25	75.8	75.8	75.8
	Most times	8	24.2	24.2	100.0
	Total	33	100.0	100.0	

The staff here are available when I have questions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	All of the time	26	78.8	78.8	78.8
	Most times	7	21.2	21.2	100.0
	Total	33	100.0	100.0	

Would you tell your friends that they should come here

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Definitely yes	33	100.0	100.0	100.0

Is the provider kind to you?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, definitely	26	78.8	78.8	78.8
	Yes, generally	7	21.2	21.2	100.0
	Total	33	100.0	100.0	

Is he/she considerate of your feelings?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, definitely	22	66.7	66.7	66.7
	Yes, generally	11	33.3	33.3	100.0
	Total	33	100.0	100.0	

Does he/she take an interest in you as a person?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, definitely	24	72.7	72.7	72.7
	Yes, generally	9	27.3	27.3	100.0
	Total	33	100.0	100.0	

Does he/she respect your beliefs about health?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, definitely	24	72.7	72.7	72.7
	Yes, generally	9	27.3	27.3	100.0
	Total	33	100.0	100.0	

Does he/she understand what you tell him/her about your problems?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, definitely	25	75.8	75.8	75.8
	Yes, generally	8	24.2	24.2	100.0
	Total	33	100.0	100.0	

Does he/she explain what you need to do to pursue treatment?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, definitely	28	84.8	84.8	84.8
	Yes, generally	5	15.2	15.2	100.0
	Total	33	100.0	100.0	

Are you comfortable asking him/her questions?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes, definitely	26	78.8	78.8	78.8
	Yes, generally	6	18.2	18.2	97.0
	Sometimes yes, sometimes no	1	3.0	3.0	100.0
	Total	33	100.0	100.0	

- **These data provide strong support for overall client satisfaction with services at CCHER's mental health counseling program.**

Additional items were included in the follow-up interview to assess client progress towards treatment goals and the extent to which CCHER helped them meet their treatment goals.

Clients reported having treatment goals in the following general categories. A total of 23 of the 33 individuals with follow-up data identified at least one treatment goal that they had been working on.

- 73.9% of those who provided information identified at least one treatment goal related to improving symptoms of depression;
- 43.5% identified at least one goal specifically concerning medication adherence and 30.4% identified goals related to other medical adherence issues;
- 21.7% identified at least one goal related to improving symptoms of anxiety;
- 21.7% identified at least one goal related to decreasing isolation and loneliness;
- 21.7% identified at least one goal related to improving communication with others;
- 8.7% identified at least one treatment goal related to grief and loss;
- 8.7% identified at least one goal related to reducing the impact of trauma;
- 8.7% identified at least one goal related to improving their living conditions;
- 8.7% identified at least one goal to improve their overall adjustment and coping;
- 4.3% identified at least one goal related to reducing stress;
- 4.3% identified at least one goal related to expressing feelings;
- 4.3% identified at least one goal related to forgiveness;
- 4.3% mentioned a goal related to improving sexual desire;
- 4.3% identified at least one treatment goal related to decreasing domestic violence; and
- 4.3% identified at least one goal related to service linkages;

Clients were also asked about their progress towards those goals, as well as the extent to which CCHER helped them meet their treatment goals.

- Of those who provided data (*n* = 25), 36.0% of the clients said they had met at least one treatment goal at the time of the 6-month follow-up, and 60.0% said they had made progress towards their treatment goals.

- **In addition, 92.0% of those who provided data for these questions said that CCHER helped them meet their treatment goals "a lot."**

Changes in Psychosocial Well Being

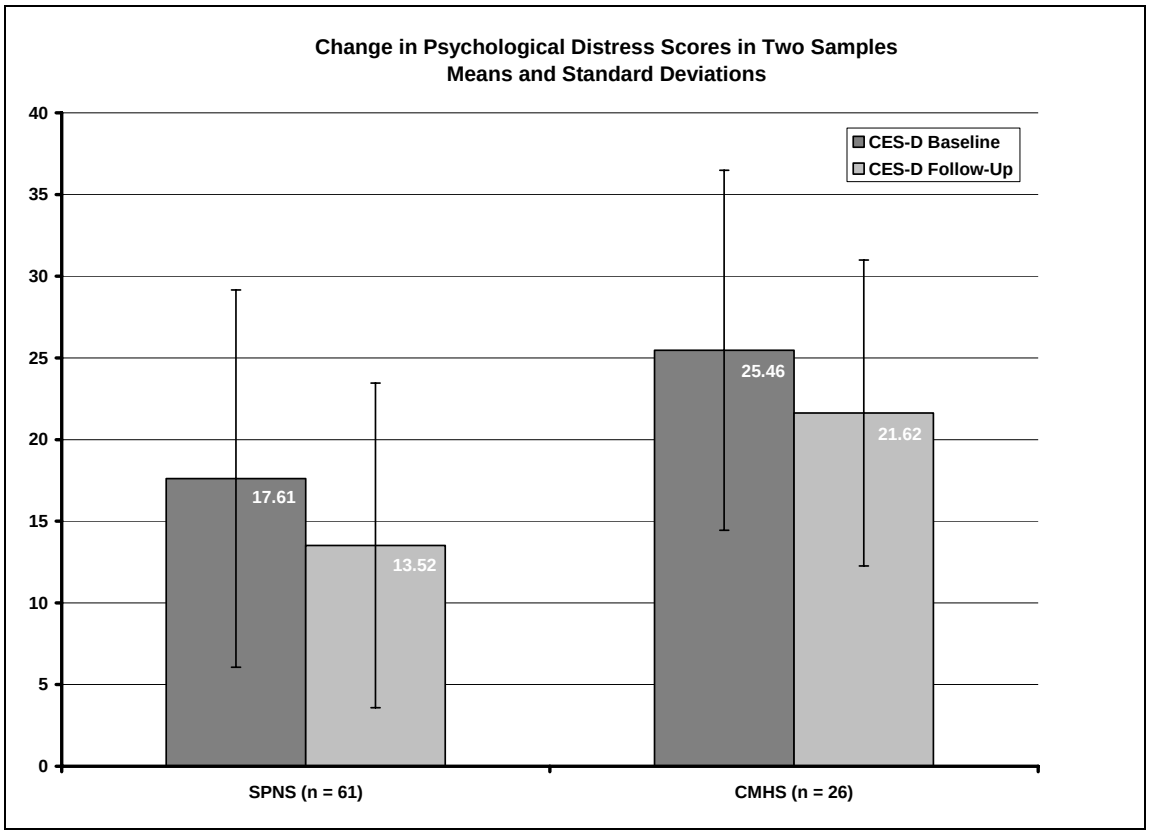
Psychological Distress. The Center for Epidemiological Studies Depression Scale (CES-D) was administered at intake and at follow-up to assess level of psychological distress in the past 7 days.

Table 12
Changes in Psychological Distress Levels (*n* = 26)

Psychological Distress Measure	Wave 1 Baseline	Wave 2 Follow-up	Significant Linear Change?
CES-D Total Score (Mean)	25.46	21.62	yes ($p < .05$)
Percent of Clients with a total CES-D score of 16 or greater.	84.6%	75.8%	no

- **Psychological distress levels decreased significantly over time.**
- Although the percentage of clients with elevated CES-D scores appears to decrease over time, the change was not significant at the .05 level.

Comparison to Other CCHER Service Population. As described earlier, comparable CES-D data was available from a prior CCHER model enhanced case management program for Haitian immigrants living with HIV/AIDS. Mental health diagnostic information is not known for that sample, and that program did not specifically target Haitians living with HIV/AIDS who had mental heath diagnoses as did the current CMHS-funded program. **In both samples, clients demonstrated significant reductions in psychological distress** (Wilks' $\lambda = .894$, $F(1,85) = 10.045$, $p = .002$). There was not a statistically significant effect for the interaction of data source (CMHS or SPNS) and change over time; that is, **the decrease in psychological distress scores was comparable for both samples**.



Health-Related Quality of Life. As part of the local evaluation, the intake interview included the SF-21 Brief Health and Functioning Measure (Bozzette et al., 1992). The following table summarizes baseline levels of self-reported health and functioning scores at baseline and 6-month follow-up. High scores indicate high levels of functioning. The eight functioning scales range from 0 (worst possible functioning) to 100 (best possible functioning).

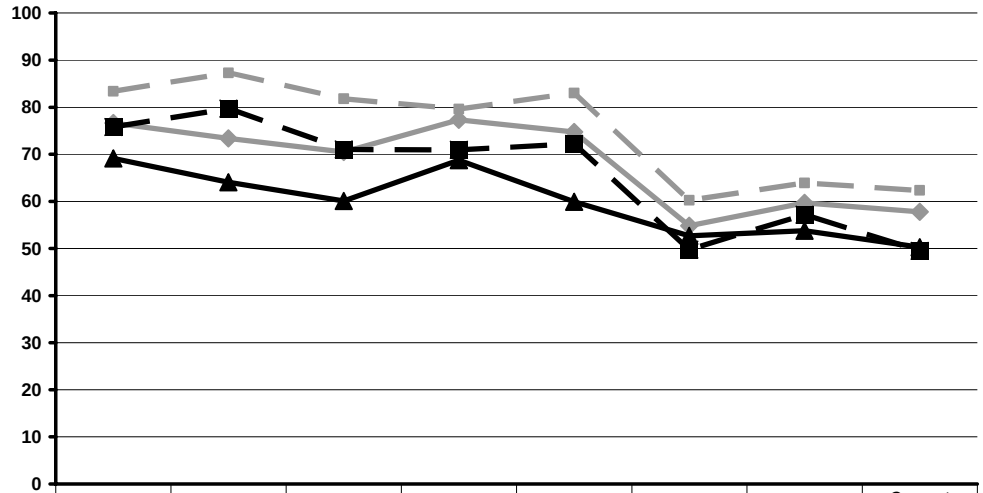
Table 13
Changes in Health-Related Quality of Life (*n* = 32)

	Mean Score		
Health and Functioning Measures	**Wave 1 Baseline**	**Wave 2 Follow-up**	**Significant Change?**
Physical Functioning	69.14	75.78	yes ($p < .05$)
Role Functioning	64.06	79.69	yes ($p < .05$)
Social Functioning	60.08	71.02	yes ($p < .05$)
Cognitive Functioning/Distress	68.75	70.94	no
Lack of Pain	59.92	72.19	yes ($p < .05$)
Emotional Well-Being	42.29	53.54	yes ($p < .05$)
Energy/Fatigue	45.00	54.69	yes ($p < .05$)
Current Health Perceptions	52.34	59.38	$p = .059$

- **There was significant improvement in self-reported levels of Physical Functioning, Role Functioning, Energy/Fatigue, Social Functioning, and Emotional Well-Being over time.**

Comparison to Other CCHER Service Population. As described earlier, comparable Health-Related Quality of Life data was available from a prior CCHER model enhanced case management program for Haitian immigrants living with HIV/AIDS. Mental health diagnostic information is not known for that sample, and that program did not specifically target Haitians living with HIV/AIDS who had mental heath diagnoses as did the current CMHS-funded program. **In both samples, clients demonstrated significant improvement in health-related quality of life** (Wilks' $\lambda = .779$, $F(8,84) = 2.986$, $p = .005$). There was not a statistically significant effect for the interaction of data source (CMHS or SPNS) and change over time; that is, **the increase in health-related quality of life scores was comparable for both samples**.

Mean Health-Related Quality of Life Scores in Two Samples
Baseline and 6-Month Follow-Up



	Physical Functioning	Role Functioning	Social Functioning	Cognitive Functioning	Lack of Pain	Emotional Well-Being	Energy	Current Health Perceptions
SPNS Baseline (n = 61)	76.64	73.36	70.49	77.32	74.71	54.86	59.67	57.79
SPNS Follow-Up (n = 61)	83.40	87.30	81.80	79.62	82.99	60.22	63.93	62.36
CMHS Baseline (n = 32)	69.14	64.06	60.08	68.75	59.92	52.71	53.75	50.26
CMHS Follow-Up (n = 32)	75.78	79.69	71.02	70.94	72.19	49.79	57.19	49.48

SPNS Baseline (n = 61) SPNS Follow-Up (n = 61) CMHS Baseline (n = 32) CMHS Follow-Up (n = 32)

- These data show that **health-related quality of life improved equally for CCHER mental health clients compared to CCHER clients living with HIV/AIDS who were not specifically identified as having mental health issues.**

Additional Daily Functioning Measures. The intake and follow-up interviews included questions relating to client's daily functioning. The response scale for these items ranges from 1 (no difficulty) to 5 (extreme problem). A composite of all nine items assessing daily functioning in the above domains demonstrated significant improvement ($p = .025$).

- **Participants reported a reduction in the extent to which they experienced problems of daily functioning** from baseline (mean rating = 19.56, s.d. = 6.76) to follow-up (mean rating = 17.17, s.d. = 5.01).

Changes in Health Status

Rating Overall Health. At baseline and follow-up, clients were asked to rate their health on a scale ranging from 0 (worst possible functioning) to 100 (best possible functioning).

Table 14
Categorical Health Rating

	Mean		
	Wave 1 Baseline	**Wave 2 Follow-up**	**Significant Change?**
Categorical Health Rating	65.63	69.06	yes ($p < .05$)

Note. Top Panel: $n = 17$; Bottom Panel: $n = 32$. This table reports means for all variables.

- **Client ratings of their overall health increased significantly over time.**

HIV Health Indicators. Questions pertaining to clients' most recent CD4 and viral load were also asked at baseline and at follow-up.

Table 15
HIV Health Indicators

	Mean		
	Wave 1 Baseline	**Wave 2 Follow-Up**	**Significant Change?**
Most Recent CD4 ($n = 14$)	502.36	542.93	no
Most Recent Log Viral Load ($n = 12$)	2.79	2.02	$p = .05$

- The increase in mean CD4 counts was not statistically significant. However, the sample size was especially small due to missing data on these indicators.

- The decrease in reported HIV viral load levels did approach statistical significance. Again, due to missing data, the sample with repeated measures available for HIV viral load was very small. Yet for those with available data, **the average drop in HIV viral load was greater than .5 log, which suggests clinically significant changes** on this measure.

Treatment Utilization. Clients were asked about utilization of inpatient, outpatient, and/or ER treatment for physical and mental/emotional complaints. The table below summarizes treatment utilization patterns over time.

Table 16
Changes in Past 30 Day Treatment Utilization (*n* = 33)

	Percentage		
Past 30 Day Service Use	**Wave 1 Baseline**	**Wave 2 Follow-up**	**Significant Change?**
Inpatient Treatment For:			
Physical Complaints	12.1%	15.2%	no
Mental or Emotional Difficulties	6.1%	6.1%	Not possible to test
Outpatient Treatment For:			
Physical Complaints	51.5%	60.6%	no
Mental or Emotional Difficulties	54.5%	72.7%	no
ER Treatment For:			
Physical Complaints	6.1%	none	Not possible to test
Mental or Emotional Difficulties	none	3.0%	Not possible to test

Note: McNemar tests were used to detect change over two time points. "Not possible to test" indicates observed frequencies that were too small for significance testing (5 individuals or fewer).

Conclusions

During the project period (October 1, 2001 through September 30, 2006), CCHER identified and enrolled 75 Haitian immigrants living with HIV/AIDS (including 27 males and 48 females) who had at least one co-occurring diagnosable mental disorder in a culturally specific mental health treatment program. The most frequent mental health diagnoses among program clients were Adjustment Disorders (46.7%), Depressive Disorders (44.0%), and Anxiety Disorders (29.3%). Two-thirds of the clients (66.7%) had one Axis I DSM-IV diagnosis, while one-third (33.3%) had more than one Axis I diagnosis. No clients had a confirmed Axis II diagnosis.

In addition to the mental health diagnoses clients presented at intake, a number of other indicators illustrated acute mental health needs in this population. A total of 91.7% of the clients assessed had clinically elevated levels of psychological distress as measured by the Center for Epidemiological Studies Depression Scale; in fact, psychological distress levels among the CCHER mental health clients were significantly higher than those in a comparison sample of Haitians living with HIV/AIDS served by CCHER in a prior enhanced case management national demonstration program. Levels of health-related quality of life were comparable to those found in the comparison sample of CCHER HIV clients served by this community-based organization. In large part, the level of mental health service need discovered in the earlier CCHER HIV case management program spurred CCHER to seek funds specifically to enhance its mental health service offerings and thus seeded its CMHS-funded mental health service model for Haitian immigrants living with HIV/AIDS.

The CCHER Haitian HIV-Mental Health service model was extremely effective in retaining clients in services. On the average, clients were retained approximately 1½ years in CCHER's mental health program, with 50% of the clients remaining in treatment for at least one year. During their time in treatment, clients participated in a range of individual and group mental

health services. Many of the mental health groups were specifically developed for Haitians living with HIV/AIDS (e.g., the Ten Commandments of Living Well with HIV/AIDS; Spiritual Awareness), while others took more traditional mental health concepts (e.g., stress management) and delivered them in a culturally specific manner.

The program demonstrated a number of major outcomes that indicate program effectiveness. Services were well-received by program clients, and client satisfaction data provides evidence of the program's level of cultural competence. Clients identified a range of treatment goals they addressed while receiving mental health services from CCHER, most frequently to reduce symptoms of depression and to help with treatment adherence issues. A the 6-month follow-up, all clients with available data had met or made significant progress towards their treatment goals. Fully 92.0% reported that CCHER had helped "a lot" in assisting clients to meet their treatment goals.

Clients demonstrated a significant reduction in psychological distress, and significant improvement on 6 out of 8 possible measures of health-related quality of life, including Emotional Well-Being, Social Functioning, Physical Functioning, Role Functioning, Energy, and Lack of Pain.

These data provide considerable support for the effectiveness of the CCHER mental health service model for Haitian immigrants living with HIV/AIDS and mental health disorders.

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Appendix 1:
Participant Feedback from Specific CCHER Mental Health Groups

Clients participated in a number of groups developed by CCHER staff specifically to meet the needs of their mental health clients. Clients were asked to complete feedback forms that were designed to measure their satisfaction with each group intervention. Data were collected at the final session of each multi-session group. The tables below show the results of this client feedback.

Table A1
Mental Health Group: Participant Feedback (*n* = 17)

		How much Enjoyed		How much Helped	
Topic	**# Attended Session**	**Mean**	**s.d.**	**Mean**	**s.d.**
Healing Relationships	17 (100.0%)	3.00	0.00	2.88	0.33
Overcoming Anger	17 (100.0%)	2.75	0.58	2.67	0.62
Spirituality	13 (76.5%)	2.92	0.28	2.75	0.45
Adaptation to Life Change	16 (94.1%)	2.93	0.26	2.54	0.52
Disclosure	14 (82.4%)	2.93	0.27	2.57	0.65
Stigma and Isolation	14 (82.4%)	2.85	0.38	2.71	0.73
Medication Adherence	16 (94.1%)	2.88	0.34	2.69	0.60
Stress Management	15 (88.2%)	2.93	0.26	2.86	0.36
Emotional Response	14 (82.4%)	2.79	0.43	2.79	0.43
New Beginnings	16 (94.1%)	2.60	0.51	2.53	0.64
Overall Group Rating	--	2.88	0.49	2.71	0.59

1 = Not At All; 2 = A Little; 3 = A Lot

Table A2
Parenting Group: Participant Feedback (*n* = 6)

		How much Enjoyed		How much Helped	
Topic	**# Attended Session**	**Mean**	**s.d.**	**Mean**	**s.d.**
Pyramid of Success	6 (100%)	3.00	0.00	2.83	0.41
Effective Praise	6 (100%)	2.83	0.41	3.00	0.00
Love and Acceptance	6 (100%)	3.00	0.00	3.00	0.00
Parenting and Disclosure	5 (83.3%)	3.00	0.00	2.80	0.45
Sexuality	4 (66.7%)	3.00	0.00	2.50	0.58
Discipline	4 (66.7%)	3.00	0.00	3.00	0.00
Respect	6 (100%)	3.00	0.00	2.67	0.52
Overcoming Anger	2 (33.3%)	3.00	0.00	3.00	0.00
Stress Management	3 (50%)	3.00	0.00	2.67	0.58
Forgiveness	6 (100%)	3.00	0.00	2.83	0.41
Overall Group Rating	--	3.00	0.00	3.00	0.00

1 = Not At All; 2 = A Little; 3 = A Lot

Table A3
Spiritual Awareness Group: Participant Feedback (*n* = 11)

		How much Enjoyed		How much Helped	
Topic	**# Attended Session**	**Mean**	**s.d.**	**Mean**	**s.d.**
Knowing Who God is	7 (63.6%)	3.00	0.00	3.00	0.00
Faith/Obedience	9 (81.8%)	3.00	0.00	3.00	0.00
Repentance/Forgiveness	9 (81.8%)	3.00	0.00	3.00	0.00
Pray/Praise	10 (90.9%)	2.88	0.35	2.89	0.33
Alternative Medicine	7 (63.6%)	2.50	0.55	2.63	0.52
Curse/Spell	5 (45.4%)	2.17	0.98	2.17	0.75
Hot/Cold	7 (63.6%)	2.29	0.76	2.29	0.76
Trauma/Loss	8 (72.7%)	3.00	0.00	2.75	0.46
Anger/Bitterness	9 (81.8%)	3.00	0.00	2.89	0.33
Depression/Sadness	8 (72.7%)	3.00	0.00	3.00	0.00
Overall Group Rating	--	--	--	2.91	0.30

1 = Not At All; 2 = A Little; 3 = A Lot

Table A4
Ten Commandments of Living Well With HIV/AIDS: Participant Feedback (*n* = 10)

		How much Enjoyed		How much Helped	
Topic	**# Attended Session**	**Mean**	**s.d.**	**Mean**	**s.d.**
Manage Disease	9 (90%)	3.00	0.00	2.63	0.52
Eat What's Good	10 (100%)	2.70	0.48	2.60	0.52
Supplement Diet	10 (100%)	2.67	0.50	2.50	0.53
Exercise	8 (80%)	2.86	0.38	2.63	0.52
Prophylaxis	9 (90%)	2.63	0.52	2.56	0.53
Antiretrovirals	10 (100%)	2.63	0.52	2.50	0.53
Understand AIDS	10 (100%)	2.63	0.52	2.60	0.52
Coping with HIV	9 (90%)	2.57	0.53	2.50	0.53
Overall Group Rating	--	2.50	0.53	2.50	0.53

1 = Not At All; 2 = A Little; 3 = A Lot

Table A5
Stress Management Group: Participant Feedback (*n* = 11)

		How much Enjoyed		How much Helped	
Topic	**# Attended Session**	**Mean**	**s.d.**	**Mean**	**s.d.**
Ways to Reduce Stress	11 (100.0%)	3.00	0.00	3.00	0.00
Exercise	11 (100.0%)	3.00	0.00	3.00	0.00
Healthy Foods	11 (100.0%)	3.00	0.00	3.00	0.00
Fun Activities	11 (100.0%)	3.00	0.00	3.00	0.00
Ways to Relax	11 (100.0%)	3.00	0.00	3.00	0.00
Overall Group Rating	--	3.00	0.00	3.00	0.00

1 = Not At All; 2 = A Little; 3 = A Lot

Attachment 1:
SERVICE ACTIVITY AND CLIENT DEMOGRAPHICS

According to data reported by the Abt data coordinating center, a total of 78 Haitians living with HIV/AIDS (out of 83 screened) were enrolled in mental health services from the beginning of grant through September 30, 2006. Of the 78 enrolled clients, 30 were male and 48 were female. The clients were in the following age groups: 4% were under 20 years old, 6% were between 25 to 29 years of age, 8% were between 30 to 34 years of age, 28% were between 35 to 39 years of age, 21% were between 40 to 44 years of age, 18% were between 45 to 49 years of age, 4% were between 50 to 54 years of age, and 12% were 55 years or older.

Of the male clients, 43% were diagnosed with an Adjustment Disorder, 47% were diagnosed with Depressive Disorder, 3% were diagnosed with HIV Dementia, 3% had a diagnosis of Schizophrenia, and 3% had another type of DSM diagnosis[5]. 67% of the males had a single DSM diagnosis, 20% were dually diagnosed with a mental health and substance use disorder (including 7% with a co-occurring mental health and substance use disorder and 13% with more than one mental health diagnosis and no co-occurring substance use disorder). In addition, 13% had three or more diagnoses, including 3% with co-occurring mental health and substance use disorders and 10% with had three or more Mental Health diagnoses and no co-occurring substance use disorder.

Of the female clients, 40% were diagnosed with an Adjustment Disorder, 44% were diagnosed with a Depressive Disorder, 2% were diagnosed with Schizophrenia, and 3% had another type of DSM diagnosis[6]. Of the female clients, 77% had a single DSM diagnosis, 15% had dual mental health diagnoses (none with a co-occurring substance use disorder). In addition, 8% of the female clients had three or more co-occurring mental health diagnoses (none with a co-occurring substance use disorder).

Of the 37 clients with data related to the issuance of an individualized treatment plan, the majority (84%) received their initial treatment plan within 7 days of enrollment.

[5] The Abt data report erroneously shows 3% of males with a primary diagnosis of Schizophrenia; however, no male clients had a diagnosis of Schizophrenia; 3% of the males did have a primary diagnosis of Psychotic Disorder NOS.
[6] The Abt data report erroneously shows 2% of the females with a primary diagnosis of Bipolar Disorder; no CCHER clients were screened or enrolled with a diagnosis of Bipolar Disorder. In addition, the Abt data summary shows 10% of CCHER female clients with a primary diagnosis of HIV dementia but no CCHER female clients had that diagnosis.