

**City of Albuquerque Hogares Day Treatment Program Evaluation  
Final Report**

**Prepared for:  
Department of Family and Community Services,  
City of Albuquerque**

**Prepared By:  
Institute for Social Research,  
University of New Mexico  
Paul Guerin, Ph.D.  
Linda Lewis, M.A.  
Cynthia Torres B.A.**

**June 2007**

## **BACKGROUND AND INTRODUCTION**

Beginning in Fiscal Year 2005, the City of Albuquerque appropriated substantial new funding to expand behavioral health services and substance abuse prevention and early intervention services targeting high risk youth, using evidence-based practices or promising programs identified in the scientific literature. As part of this new initiative, funding was allocated to establish an Assertive Community Treatment Program for persons with serious mental illness, a Child and Adolescent Early Intervention Program, a Day Treatment Program for adolescent substance abusers, and a “Housing First Program” for adults with behavioral health disorders.

In providing funding for these services, the City Council directed that the Department of Family and Community Services conduct a rigorous evaluation to determine the effectiveness of these efforts in improving the lives of the clients and reducing involvement of these clients in criminal activity and other behavior that threatens, or is perceived by the general public, to threaten public safety. As the Division of Behavioral Health has responsibility for the provision of substance abuse services and care for the mentally ill, management of the evaluation contract is under the administrative purview of the Division of Behavioral Health, within the Department of Family and Community Services.

In August, 2005 the University of New Mexico, Institute Social Research (ISR) was awarded the evaluation contract. For the review of the Child and Adolescent Early Intervention Program and the Day Treatment Program for adolescent substance abusers, ISR engaged Linda Lewis, M.A, President, Center for Progressive Policy and Practice, Incorporated, a consulting firm experienced in the delivery and evaluation of substance abuse treatment and prevention services.

### **Hogares, Incorporated Mariposa Day Treatment Services**

The City's contract for adolescent day treatment services was awarded to Hogares, Incorporated. Hogares is a non-profit, community based agency serving troubled youth ages 9-18. Services for youth and families extend from counseling on an outpatient basis to treatment in a live-in setting. The Hogares organization proposed the Mariposa Day Treatment program to serve "13-18 year old youth who meet the DSM-IV-TR diagnostic criteria for substance abuse; who are at risk to enter a higher levels of care; youth at risk to fail in school or in their appropriate developmental stage; and, adjudicated youth or those at risk of entry into the Juvenile Justice System and their family members who need support of their parental commitment and investment, communication skills and parenting practices."

For this program, Hogares elected to use the evidence-based practice of the Cannabis Youth Treatment Project (CYT) curriculum and to enhance that model with the use of Multi-Dimensional Family Therapy. Hogares is using the Children's Functional Assessment Rating Scale (CFARS) at admission to establish baseline behaviors for the client and again at discharge to determine outcomes specific to each client. Hogares proposed a multi-phased program intended to serve a minimum of 100 adolescents from July 1, 2005 to June 30, 2006.

## **RESEARCH DESIGN**

The Institute's research methodology is based upon the work requested in the City of Albuquerque request for proposal (solicitation number RFP2005-030-SV Program Evaluation Services) that came out in May, 2005 with a due date of June 9, 2005. The evaluation was funded to determine the effectiveness of new programs funded in the FY 05 City of Albuquerque budget. The overall purpose of the evaluation is to measure the service outcomes of the ACT

program operating under contract by the University of New Mexico Hospitals, the Child and Adolescent Early Intervention Program operated by Youth Development, Inc., the Adolescent Day Treatment Program operated by Hogares, Inc., and the Housing First program, operated by the Supportive Housing Coalition of New Mexico.

The Institute's response to the request for proposals was submitted on June 9, 2005. In the proposal we noted our intent to consult with Linda Lewis, M.A. who has expertise in evaluation research and a particular expertise in adolescent program evaluation to assist in the evaluation of the Child and Early Adolescent Early Intervention Program operated by Youth Development Inc. and the Day Treatment Program operated by Hogares Inc. Upon signing a contract with the City of Albuquerque late September 2006 the ISR contracted with Linda Lewis, M.A.

The basic design of the evaluation research project conducted by ISR includes the items listed below. Data from these sources was automated and/or, analyzed and used to develop this report to the City of Albuquerque.

- *Literature Reviews* - Literature reviews were conducted for: (1) day treatment programming; (2) Motivational Enhancement Therapy and Cognitive Behavioral Therapy for Adolescent Cannabis Users applied in five sessions (MET/CBT5); (3) the Multi-Dimensional Family Therapy model which was to be used in serving families of youth in the day treatment program; and (4) the Children's Functional Assessment Rating Scale or CFARS use to evaluate client outcomes. These literature reviews are referenced throughout this report and provided as attachments to the report.
- *Client Records Review* - ISR researchers conducted a review of the program records for youth/families admitted to the program during the period July 1, 2005 to June 30, 2006. These data are reported below. The majority of data reported in the data analysis section dealing with program records was provided to the ISR in an automated format by Hogares. A review of hard copy records was completed to supplement and confirm the automated data.
- *Staff Interviews* - Interview instruments were designed for the project and were approved by the University of New Mexico Institutional Review Board for use in this evaluation research project. Current and former staff members for the Mariposa Day Treatment Program were interviewed about the program and how it functions.
- *Compliance Assessments of the Mariposa Day Treatment* - Researchers reviewed the City of Albuquerque contract appropriate requirements for early intervention programming (Minimum Treatment Standards; use of American Society of Addiction Medicine (ASAM) criteria; MADAD and/or other diagnostic assessment tools, etc.) to assess the program's compliance with these contractual requirements.

## **DATA ANALYSIS**

This section contains a review of data collection focused on describing 102 clients served in the Mariposa Day Treatment Program who were admitted between April, 2005 and December, 2006. We begin with a brief discussion of the Mariposa Day Treatment files that were reviewed to develop the data in this section of our report.

## Mariposa Files

Information on Mariposa clients was provided by Hogares staff in an automated format. This automated file included referral information, intake information, treatment information and discharge information. The information provided was fairly complete and it is useful to note that, in our experience, it is unusual for programs to have information automated to this extent. After receiving these data several conversations were held with Hogares staff. The majority of these conversations were held via email and were held to clarify and help us understand the information. After reviewing the automated Mariposa data it was decided to access hard copy records for two reasons. First, we wanted to confirm some of the data we received and replace some of the missing data. Second, we needed to collect additional data that was not available in the automated data. This included additional drug use information.

In our review of the hard copy files we made several observations. First, there appeared to be a lack of consistency in the use and interpretation of the CFARS. This occurred in the way clients were rated on the various measures. A re-occurring example seen was in the Medical/Physical category, where some would mark “no problem” and others “slight problem”, even though in, our review of hard copy records, we found the health was good for the client. It may be useful for Hogares to review the use of the CFARS and further train staff in the use of the CFARS with the goal of reducing the variance in the use of the instrument. Second, a similar issue was found in the use of the MADAD and Comprehensive Assessment. For example, we found several examples of no drug use reported at the time of the assessment and treatment notes in the client files reporting use. This finding is not unusual and because of the self-reported nature of the assessments this issue is not easily fixed.

Other issues included delays between the last service date and discharge date and inconsistencies in how discharges were conducted and used. Some of these issues are described further later.

## Client Level Data Analysis

This section contains a review of client level data collected focused on describing youth referred to and served in the Mariposa Day Treatment Program between March 2005 and December 2006. During this time period 102 individuals were served in the program.

### *Referral and Intake Information*

	Count	Percent
Children, Youth and Family Department (CYFD)	1	1.0
Internal/Hogares	56	54.9
Juvenile Justice System	8	7.8
Mental Health/Psychiatric	1	1.0
Social Agency	6	5.9
Self/Family/Friend	25	24.5
Other	5	4.9

The largest number and percentage of referrals to the Mariposa Day Treatment Program were Internal (54.9%) and from the Self/Family/Friend category (24.5%). Juvenile Justice System referrals accounted for 7.8% of referrals. Mental Health/Psychiatric facilities, social agencies, CYFD, and Other (Consortium and School) comprised the balance of referrals to the program.

	Count	Percent
Correctional Facility	2	2.0
Parents	17	16.7
Legal Guardian	48	47.0
Foster Family	2	2.0
Group Home	5	4.9
RTC	18	17.6
Other	10	9.8

At the time youth were referred to the Day Treatment Program, almost half (47%) were living with Other Family or a Legal Guardian. Seventeen percent were in a Residential Treatment Center (RTC) and 16.7% were living with their parents. Almost 5% were in a Group Home, 2% were living in a correctional facility, another 2% were with Foster Families, and 9.8% had other living arrangements.

	Count	Percent
2005	46	45.1
2006	56	54.9

Between March 2005 and December 2006 the program accepted 102 clients.

<b>Table 4 – Demographics</b>		
Variable	Count	Percent
<b>Age</b>		
Average Age at Intake	102	17.03
<b>Actual Age</b>		
13	1	1.0
14	10	9.8
15	7	6.9
16	18	17.6
17	19	18.6
18	25	24.5
19	22	21.6
<b>Sex</b>		
Female	38	37.3
Male	64	62.7
<b>Race/Ethnicity</b>		
Anglo	19	18.8
Hispanic	71	70.2
American Indian	5	5.0
African American	2	2.0
Asian American	0	0.0
Other Multiracial	4	4.0
<b>Employed</b>		
Yes	26	31.6
No	75	68.4
<b>Highest Grade Completed</b>		
4	2	2.0
5	6	6.0
6	3	3.0
7	15	15.0
8	22	22.0
9	27	27.0
10	17	17.0
11	7	7.0
12	1	1.0
<b>School Status</b>		
Alternative School	8	7.9
H.S. Grad/GED	4	4.0
In GED program	1	1.0
Institutional School	3	3.0
Drop Out	24	23.8
Regular	50	49.5
Special Education	10	9.9
Suspended	1	1.0
<b>Annual Family Income</b>		
Average Income	82	\$20,655
<b>Family Size</b>		
Average Family Size	100	3.82

This table reports demographic information on clients. The average age at intake of clients was 17 years of age, almost two-thirds were male, 70.2% were Hispanic, and almost two-thirds were in school (regular, special education, or alternative school). Self-reported family income was \$20,655 and average family size was almost four individuals.

	Count	Percent
Current Involvement	5	5.0
Past Involvement	30	30.0
No Involvement	65	65.0

Missing - 2

Only 5% of the Mariposa clients either self-reported or it was discovered from collateral information there was current involvement in neglect or abuse. Thirty percent of the clients had past involvement and almost two-thirds had no involvement.

	Count	Percent
Adjudicated Delinquent	60	60.0
Delinquent Offenses	6	6.0
Non-Adjudicated	34	34.0

The information in this table reports involvement with the court system. According to Hogares staff it does not measure arrests or referrals by law enforcement. According to program data 60% of all clients had been adjudicated delinquent. Adjudicated delinquent indicates that clients have formally been involved with juvenile court on some charge. Six clients may have been involved in criminal activity but had never become formally involved in the court system. These offenses may have been self-reported or they may have been arrested but did not become involved in the court system. Non-adjudicated indicates no involvement with the court system. It would be useful, in the future, to verify this information by accessing official CYFD and Juvenile Court records. Because many of the clients are referred by the court system and/or concurrent to their involvement in the program they are involved in the court system, this information should be accessible.

<b>Table 7 – Clients with Prior Criminal History</b>		
	Count	Percent
Yes	87	85.3
No	15	14.7

A review of client hard copy records by ISR staff found some indication that 87 clients (85.3%) had prior criminal histories. This does not support the information provided in the previous table and the differences should be clarified.

<b>Table 8 – County of Residence</b>		
	Count	Percent
Bernalillo	70	72.2
Cibola	1	1.0
Dona Ana	1	1.0
McKinley	2	2.1
San Juan	3	3.1
Sandoval	8	8.2
Santa Fe	1	1.0
Taos	2	2.1
Torrance	1	1.0
Valencia	8	8.2

Missing – 8

Slightly more than 25% of the clients in the program had residence addresses in other counties. We don't know why this occurred. Because the program is funded by the City of Albuquerque this finding deserves further study.

<b>Table 9 – Drug Use</b>		
	Count	Percent
Chronic User	55	55.0
Experimentation	13	13.0
Misuse	22	22.0
Non Use	4	4.0
Physical Addiction	1	1.0
Psychological Dependence	2	2.0
Recovery	3	3.0

Missing - 2

The program collects information on drug use in the categories included in Table 9. Only four clients or 4% self-reported no drug use. Thirty-five percent of the clients self-reported experimentation or misuse; 58% self-reported being chronic users, being addicted or dependent; and 3% reported being in recovery.

Fifty percent of youth enrolled in the Mariposa Day Treatment Program were classified as "Chronic Users". Chronic use generally indicates current use of drugs and/or alcohol. Use can range from low to moderate to heavy (SAMHSA TIP 31 and TIP 32).<sup>1</sup> Twelve percent were calculated as using "experimentally" and 17% were classified as misusing drugs. A small percentage of clients were considered to be in recovery.

The next table (Table 10) reports the primary drug used by clients.

	Count	Percent
Alcohol	17	16.7
Opiates	5	4.9
Amphetamines	7	6.9
Cocaine	5	4.9
Marijuana	64	62.7
Crack	2	2.0
Inhalants	2	2.0

For four clients self-reporting non-use in Table 9 we found an indication of drug use in other places in their client files. Three reported using marijuana and one reported using alcohol. Marijuana was the drug used most by Mariposa clients (62.7%), followed by alcohol used by 16.7% of clients.

	Average Intake	Average Followup	Increase	Decrease	Even
Medical/Physical	1.55	1.59	13 (16.5%)	14 (13.7%)	52 (68.5%)
Substance Use	4.68	3.93	15 (19.0%)	45 (57.0%)	19 (24.0%)
Interpersonal Relationships	2.98	2.94	22 (27.8%)	26 (32.9%)	31 (39.2%)
Behavior in Home Setting	3.48	3.23	18 (23.1%)	27 (34.6%)	33 (42.3%)
Socio-Legal	4.00	3.46	17 (22.1%)	38 (49.4%)	22 (28.6%)
Work/School	3.24	2.81	21 (27.3%)	34 (44.2%)	22 (28.6%)
Danger to Self	2.34	2.37	18 (23.1%)	24 (30.8%)	36 (46.2%)
Danger to Others	2.40	1.98	14 (18.2%)	26 (33.8%)	37 (48.1%)
Security/Management Needs	2.62	2.96	26 (36.2%)	22 (28.9%)	28 (36.8%)

As part of the program the staff routinely administered the Children’s Functional Assessment Rating Scale (CFARS) at intake and at follow-up. The CFARS is designed to provide a snap

<sup>1</sup> KAP Keys for Clinicians Based on TIP 31 Screening and Assessing Adolescents for Substance Use Disorders and TIP 32 Treatment of Adolescents With Substance Use Disorders. U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES. Substance Abuse and Mental Health Services Administration. Center for Substance Abuse Treatment. 2001.

shot of client functioning and generates problem severity rates using a scale of no problem (1), slight problem (2), moderate problem (3), severe problem (4) and extreme problem (5).

This table reports the average scores at intake, follow-up and the number of clients who had increased scores, decreased scores and even scores. Decreases in scores indicate improvement, increases in scores indicate a worsened condition and even scores indicate a neither improved nor worsened condition.

Six problem areas (substance use, interpersonal relationships, behavior in home setting, socio-legal, work/school, and security/management needs) had average scores of almost 3 or higher indicating a moderate problem. The remaining problem areas had average scores between 1 (no problem) to slightly greater than 2 (slight problem).

Six of 9 average scores indicate improvement from intake to follow-up. These average changes while positive are small.

The table also provides information on the number of clients who had increased scores, decreased scores and scores that did not change from intake to follow-up. The largest number of clients in almost all problem areas experienced no change in problem area scores. However, there were decreases in the areas of substance use (57%), socio-legal (49.4%), and work/school (44.2%).

*Treatment Information*

This section reports treatment information that includes different services provided to clients, the number of hours of each service provided, and length of stay in the program.

<b>Table 12 - Mariposa Clients – Services Received and Average Hours</b>				
Services Received	Yes	Percent Receiving Service	No	Average Hours
Case Management	77	75.5%	25	6.1
Day Treatment	68	66.7%	34	63.1
Diagnostic Interview	14	13.7%	88	0.2
Family Therapy	61	59.8%	41	2.3
Group Therapy	100	98.0%	2	27.8
Individual Therapy	93	91.2%	9	8.5
Life Skills	23	22.5%	79	3.2
Med Management	8	7.8%	94	0.1
Psych Evaluation	4	3.9%	98	0.1

This table reports the different services received by clients in the Mariposa program. The table includes the number of clients who received a particular service reported by the program. The number in the “Yes” column is the number of clients who received the particular service and the number in the “No” column is the number of clients who did not receive the particular service.

The number in the “Average Hours” column is the average number of hours of the particular service was received by the 102 clients. This information was provided to us by Hogares staff and came from their information system.. Not included in this information was client assessment information. All clients were assessed using either the MADAD or the Hogares Comprehensive Assessment. Client assessments should not be confused with “Diagnostic Interviews”. Diagnostic interviews were administered to a small minority of clients and were done to further diagnosis and treat clients.

Although client records indicated, as reported in Table 12, that 68 clients received "day treatment" services, in discussions with the program, all 102 clients were enrolled in the Day Treatment Program. As indicated in the table, the service clients were most likely to receive was Group Therapy (98%) averaging 27.8 hours. All but two clients received Group Therapy. While almost all clients received Individual Therapy they received fewer hours (average 8.5 hours) than those who received group therapy. More than 90% received Individual Therapy, 75.5% received Case Management services, and almost 60% received Family Therapy services. Fewer clients received Diagnostic Interviews (13.7%), Medical Management (7.8%), Psychiatric Evaluations (3.9%), and Life Skills services (22.5%).

Few clients received diagnostic interviews, life skills, medical management, or psychiatric evaluations and so the average number of hours received is very small. For example, only 14 clients received a diagnostic interview and the table indicates the average number of hours for all 102 clients was 0.2 hours or 12 minutes. When we only look at the 14 clients who received the service, they received on average 1.3 hours of the service. It appears that fewer clients received diagnostic interviews, psychiatric evaluations and medical management because this is a more specialized service and is only provided to those clients who need the service.

On average clients received 4.5 different services and 111.4 hours of services. On average clients were in the program 78.6 days.

The next two tables further describe length of stay and hours of service.

	Count	Percent
1 to 25 Days	11	11.8
25 to 50 Days	18	19.4
50 to 75 Days	29	31.2
75 to 100 Days	11	11.8
100 to 150 Days	15	16.1
150 to Highest Days	9	9.7

Missing – 9

Days in treatment varied between 7 days and 226 days. As shown by this table almost 33% of all clients were in the program between 50 and 75 days. Almost 26% of the clients were in the program 100 days or more and 31.2% were in the program 50 days or less.

	Count	Percent
1 to 25 Hours	11	11.8
25 to 50 Hours	18	19.4
50 to 75 Hours	29	31.2
75 to 100 Hours	11	11.8
100 to 150 Hours	15	16.1
150 to Highest Hours	9	9.7

*Discharge Information*

This section contains discharge information. Information reported includes the type of discharge, discharge status, whether they were referred to other services at discharge, school status, school performance, substance use, criminal justice system involvement, employment, and behavior. Between April 2005 and March 2007 the program discharged 100 of the 102 clients who were admitted between March 2005 and December 2006.

	Count	Percent
Planned Discharge	57	57.6
Unplanned Discharge	42	42.4

Missing – 1

Almost 60% of all clients had a planned discharge compared to an unplanned discharge.

	Count	Percent
Did Not Meet Goals	9	9.1
Insufficient Time to Assess	11	11.1
Met Goals	13	13.1
Partially Met Goals	66	66.7

This table further describes the status of clients at discharge. Nine clients did not meet their goals, 13 met their goals and 66 partially met the goals of the program. According to the data we received 11 clients were not in the program sufficiently long to assess their progress.

<b>Table 17 – Discharge Reason</b>		
	Count	Percent
Completed Treatment	14	14.1
Left Against Clinical Advice	16	16.2
Moved From Treatment Area	1	1.0
Removed by Legal Guardian	2	2.0
Different Level of Care Required to Meet Needs	18	18.2
Removed by Legal System	13	13.1
Runaway	16	16.2
Unable to Contact	1	1.0
Other	18	18.2

In Table 17 we report discharge reasons and further describe the discharge status of clients. Of the 99 clients who were discharged, fourteen clients (14.1%) completed treatment. For various reasons the remaining 85 clients did not complete the program. Common reasons for not completing treatment included clients leaving against clinical advice, clients running away from home and/or the program, clients being removed by the legal system, and clients requiring a different level of care. Some of these reasons for clients not completing treatment are beyond the direct control of the program. While this is true, the program should devise strategies to limit the occurrence of clients not completing treatment.

When responses to Table 15, Table 16, and Table 17 that report discharge information are compared there are logical errors that should not occur. These inconsistencies and implications are discussed next.

<b>Table 18 – Discharged Services Status from Program</b>		
	Count	Percent
Discharged to Higher Level of Care	12	12.1
Discharged to Lower Level of Care	22	22.2
Disrupted Services	2	2.0
No Other Services Required	5	5.1
Other Services Declined	51	51.5
Continued Other Services	4	4.0
Discharged to either same or different level of care	3	3.0

Missing - 3

This table reports discharged service status from the program. A slight majority of all clients (51.5%) declined other services after discharge. According to program records, almost 35% were discharged to either a lower or higher level of care. Seven percent were either discharged to the same or different level of care or continued other services. Very few required no other services.

It may be useful for the program to consider a different way to collect and report information on whether clients received other services after discharge. The categories: “discharged to higher level of care”, “discharged to lower level of care”, “continued other services” and “discharged to

either same or different level of care” are very similar and could be collapsed to a category recording whether a client needed additional services. Perhaps more importantly is the inability in this information to differentiate between whether a client required other services and whether they received other services. We were told by Hogares staff that on-going discussions were occurring at Hogares regarding revising the way certain types of information were collected and automated. This includes discharge information.

Information provided by Hogares also indicated whether clients after being discharged from Mariposa were admitted to another Hogares program. It appears that post-discharge from the Mariposa program 33% (34) of Mariposa clients were admitted to another Hogares program. These programs included transitional living services (10), outpatient services (14), and treatment foster care (4).

<b>Table 19 – Status at Discharge</b>		
	Count	Percent
<b>School Status</b>		
College	1	1.0
In School (Regular, Alternative, Special Education)	55	55.6
High School/GED Graduate	13	13.1
GED Program	15	15.2
Not in School (Dropout)	15	15.2
<b>Substance Use</b>		
Abstinent	45	45.5
Decreased	12	12.1
Increased	17	17.2
Unchanged	13	13.1
Insufficient Time to Assess	9	9.1
Non User	3	3.0
<b>Criminal Justice System Involvement</b>		
Continued Involvement	45	45.5
Increased Involvement	20	20.2
No Involvement	34	34.3
<b>Employment</b>		
Yes	22	23.9
<b>Behavior Performance</b>		
Marked Progress	12	12.1
Some Progress	37	37.4
Progress	27	27.3
No Progress	7	7.1
Decreased Progress	6	6.1
Insufficient Time to Assess	10	10.1
<b>School Performance</b>		
Marked Progress	19	18.2
Some Progress	7	7.1
No Progress	35	35.4
Decreased Progress	9	9.1
Insufficient Time to Assess	7	7.1
Not Applicable	22	22.2

Table 19 reports different types of information that indicates how the client was doing at discharge. Thirty-seven clients demonstrated "some progress" and twenty-seven clients displayed "progress" at the time of discharge. Nineteen clients had made "marked progress in school performance. Thirty five clients demonstrated "no progress" in school. For twenty-two clients school performance was not applicable. It may be helpful to define these terms to better delineate how judgments are made regarding behavioral progress and progress in school.

**Staff Information**

The following reports information on individuals employed by the program since it first began accepting referrals and conducting intake assessments on clients in approximately March 2005. Over the last two years, there have been 43 people employed with the Mariposa program with an average of 163.9 days worked. Of these 43 employees, eight employees worked less than a month and a half, with six only working for one day. The information we received from the program was missing start or end dates for seven employees. Of these seven employees, four were therapists, one was an YCC, another was a volunteer photographer, and the last one worked with food and nutrition.

<b>Table 20 – Staff Types</b>		
	Count	Percent
<b>Staff Type</b>		
Contract	5	11.9
Hourly	17	40.5
Staff	20	47.7
<b>Staff Descriptions</b>		
Admin Support	1	2.4
Case Manager	3	7.1
Clinical Director	2	4.8
Clinical Supervisor	1	2.4
Food	1	2.4
Music	1	2.4
Photography	1	2.4
Program Coordinator	4	9.5
Therapist	9	21.4
Volunteer Photography	1	2.4
YCW	16	38.1
YCW/Case Manager	1	2.4
Yoga	1	2.4

The program used contract staff, hourly staff, and salaried staff. Hourly staff mainly comprised Youth Care Coordinators (YCC) and Youth Care Workers (YCW). Contract staff included yoga, food, music, and photography staff. Salaried staff included Case Managers, Clinical Directors/Supervisors, Program Coordinators, and Therapists.

The most commonly employed staff were YCW (40.5% of all staff), followed by Therapists, Program Coordinators and Case Managers. Per month, the average number of total employees was 9.12, with an average of 2.6 employee changes (1.44 gained and 1.16 lost).

### *Staff Interviews*

Two current and one former Mariposa Day Treatment Program staff were interviewed for this report. The first person interviewed for the project has 20 plus years of experience in working with adolescents and families. This individual has a Master's Degree in Psychology and has been at Hogares for three and a half years. Responsibilities include overseeing the Mariposa Day Treatment Program as well as overseeing residential services, Sandoval/Valencia Drug Courts, the FAST Track program, and Respite Services. Supervision is from the Child Psychiatrist and is provided weekly.

In queries relative to the high number of staff who have worked in the Mariposa Day Treatment Program, it was explained that the program faces several challenges in staffing the program. The day treatment program essentially operates as an after-school program running from approximately 1-3 PM in the afternoon and from 3 to 7 PM for 4 days a week. Supervisory staff report it is difficult to find personnel who will work the hours that the program is scheduled. It was also pointed out that youth targeted for the program are a "hard group to work with" requiring a balance where staff "can't be too cool or too strict".

A former staff member for the program was interviewed on May 10, 2007. This staff member has been employed at Hogares for the past three years and worked in the Mariposa Day Treatment Program for about a year. This person is currently employed in the Hogares Del Valle campus as the Health and Recreation Coordinator and is a high school graduate with five years of working experience in the alcohol and drug abuse field. This person has no licensures or certifications. When employed at Mariposa, responsibilities included conducting day to day operations, checking on kids in school, conducting home visits, doing assessments and case management functions such as helping clients get jobs, stay in school, and also providing some staff supervision. This staff person previously served as a Youth Care Coordinator for the program. Training received was defined as primarily on-the-job training.

The third staff member at Mariposa was interviewed on May 10, 2007. This staff member was contracted to teach adolescents in the day treatment program photography skills. This person has been employed on a part time basis for about a year and a half. With several years of college completed, this individual is currently enrolled at the community college with plans to continue pursuing a college education. This staff member has 12 years of experience in working with adolescents and with families. Under the direction of this individual, youth will go into the field to take pictures, will keep a journal and do self-portraits, and will discuss ways to change their life. Other activities include running groups, conducting a black and white developing project, and planning for an Adobe Photoshop which uses computers. A number of different training experiences (CPR, Crisis Intervention, MRT, sexual harassment, etc.) have been sponsored by Hogares attended by this individual. Responsibilities also include some marketing for the program. However, because this position does not provide therapy services, training in the evidence-based models being used in the Mariposa Day Treatment Program has not been provided.

As a contracted staff person working only a few hours a week, this staff member has not been through any training on the CYT or MDFT models of care. Training has been provided in the use of the CFARS and this person is a certified trainer. This staff member only "sometimes" looks at the CFARS scores for youth in the program.

## **DISCUSSION**

The Mariposa Day Treatment Program, as described in Hogares' application to the City of Albuquerque, is intended to "improve the adolescent's developmental functioning and choices, and improve the overall functioning of the family. Hogares and community resources will provide immediate interventions in the lives of the participants and their families. The target population will include youth ages 13-18 who meet the DSM-IV-TR diagnostic criteria for substance abuse, who at risk to enter a higher level of care, youth at risk to fail in school or in their appropriate developmental state, adjudicated youth or those at risk of entry into the Juvenile Justice System and their family members who need support of their parental commitment and investment, communication skills and parenting practices."

### **Target Population Description**

Hogares proposed to serve a target population of 60 youth 13 to 18 years old who meet diagnostic criteria for substance abuse or who meet other criteria as outlined above, for each contract year. The goal was increased through contract negotiation to 100 youth per year. A total of 102 youth were served in the program from March 2005 and December 2006. Based on data gathered from program records and reflected in Table 4 78% of clients served were between the target ages of 13 and 18, however, the average age of program youth was 17. Twenty-two percent of clients were 19 years of age, an age older than that originally proposed for the program. Older clients referred to the program may be a factor of juvenile justice referrals to the program.

Clients seen were 63% male and 37% female. Seventy percent of the population was Hispanic. Seventy-two percent of clients were from Bernalillo County and 28% were from surrounding counties. The significant numbers of clients from outside Albuquerque is an issue the City may want to explore further.

Table 4 provides insight into the grade levels of youth served in the program, ranging from as young as the fourth grade to youth who had completed the twelfth grade. Twenty-seven percent of youth had completed the 9th grade. Twenty-five percent had completed the 10th -12th grades. Thirty-two percent of youth enrolled in the program were employed. Nearly a quarter (23.4%) of youth were school drop-outs, and 50% were enrolled in regular school at the time of entry into the program.

Other characteristics of the population served in the Mariposa program include data on family income and family size as well as experience with child abuse/neglect and juvenile court. Family income averaged \$20,655 compared with the median family income for Albuquerque at \$54,570 (2005 inflation adjusted dollars). The average family size was 3.82 members (Table 4). Thirty-five percent of day treatment clients had current or historical experience with child abuse/neglect and just over 85% had a history of criminal/juvenile justice involvement. Youth adjudicated as delinquent were 60%.

Fifty percent of youth enrolled in the Mariposa Day Treatment Program were classified as "Chronic Users" as reflected in Table 9. Chronic use generally indicates current use of drugs and/or alcohol. Chronic use can range from low to moderate to heavy. (SAMHSA TIP 31 and

TIP 32).<sup>2</sup> Twelve percent of Mariposa clients were identified as using "experimentally" and 17% were classified as misusing drugs. A small percentage were considered in recovery. Nearly 63% of clients used marijuana as their primary drug. Nearly 17% indicated use of alcohol. Five percent of clients indicated use of opiates and/or cocaine and 7% indicated use of amphetamines.

Collectively, these client characteristics indicate a complex treatment population with features typical of drug and alcohol involved youth.

### **Clinical Services**

Goals of the Mariposa Day Treatment program as described in their application to the City to provide services included: (1) "to serve a minimum of 60 youth and their families in the Mariposa Program; to insure that 80% of these youth will meet their substance abuse treatment goals; (3) demonstrate that 70% of the participants will improve their academic performance; (4) assure that by discharge 85% of participants will be employed or in school or in a vocational programs; and (5) evidence that 90% of the participants will have improved functioning as per their CFARS measurement." The goal was increased to serve a minimum of 100 youth as stated in the City contract goals.

Evidence-based methods selected by Hogares for the Mariposa Day Treatment Program included Motivational Enhancement Therapy and Cognitive Behavioral Therapy for Adolescent Cannabis Users applied in five sessions (MET/CBT5). This therapeutic approach was designed for adolescents between the ages of 12 and 18 who meet any of the criteria for cannabis abuse or dependence; who experience emotional, physical, legal, social, and/or academic problems associated with marijuana use, and/or who use marijuana at least weekly for 3 months. A review of drugs used by program clients (Table 10) confirms nearly 63% of clients used marijuana, making the selected evidence-based models appropriate for the target population enrolled in the Day Treatment Program.

The agency also elected to use Multi-Dimensional Family Therapy (MDFT) with the MET/CBT5. According to the literature, "the basic approach to utilization of MDFT is to facilitate development targeting multiple dimensions in an adolescent's life. Youth at greatest risk for marijuana use/abuse are those with multiple problems early in life, particularly family dysfunction. MDFT has been found to influence marijuana use as well as delinquency, school problems and mental health systems. The program works with the adolescent, parents, family and peers which are the primary influences for the adolescent. The program attempts to restore adolescents' connections to school, work, family and pro-social outlets, and to improve parent functioning to reduce stress in families. Compared with other therapies and with residential treatment, MDFT is considered highly cost effective."

---

<sup>2</sup> *KAP Keys for Clinicians Based on TIP 31 Screening and Assessing Adolescents for Substance Use Disorders and TIP 32 Treatment of Adolescents With Substance Use Disorders.* U.S. DEPARTMENT OF Health And Human Services. Substance Abuse and Mental Health Services Administration. Center for Substance Abuse Treatment. 2001.

**Treatment Services**

Table 12 provides data regarding the various types of services that Mariposa Day Treatment clients received. As noted earlier, all clients were assessed using either the MADAD or the Hogares Comprehensive Assessment. According to automated program records, 60% of clients enrolled in the program received Family Therapy, 93 clients received individual counseling services, 100 clients received group counseling, and 61 clients received family counseling.

**Case Management Services**

For the treatment population proposed by Hogares, the program projected a "minimum of 32 contacts/sessions with a case manager in the course of 4 months." Data from Table 12 shows that 77 clients or 75.5% of the client population received case management services. Case management averaged 6.1 hours per client.

According to staff interviews conducted for this study, Hogares provides the following case management services in the manner shown for the Mariposa clients:

<b>Case Management Service</b>	<b>Method of Service Provision</b>
Comprehensive assessment/diagnosis	Clients receive "reviews"
Housing	Housing services are not provided
GED/other educational program	Provided in-house at Hogares' GED program
Job training	Not provided
Self Help or Mutual Help Groups	Not provided
Individual Counseling	Provided at Mariposa Day Treatment
Family Counseling	Provided at Mariposa Day Treatment
Relapse Prevention Groups	Provided at Mariposa Day Treatment
Aftercare Services	Provided at Hogares
Health Care	Hogares will facilitate access to a physician
Transportation	Provided by Hogares (Safe Ride)
Vocational Counseling	Hogares refers to Vocational Rehabilitation
Employment Services	Hogares assists client in how to interview for a job
Child Care	Hogares does not provide
Group Counseling	Provided at Mariposa Day Treatment
HIV/AIDS education/counseling	Will facilitate HIV testing
Other	Includes client advocacy with court cases; community volunteering

Staff also reported community agencies and organizations with which Hogares collaborates to provide support services for clients. These included: homeless shelters, Safe Ride for transportation, the Hogares Access Central for Medicaid eligibility assistance, and Planned Parenthood; also contracted services such as music, yoga, and art.

**Discharge and Follow Up Services**

As shown in Table 17, of the 99 clients who were discharged, only fourteen clients (14.1%) completed treatment. Table 14 reveals that over one third (31.2%) of the clients participated in treatment between 50 and 75 days and another 37.6% were in treatment for between 75 and 150 days.

## **CFARS**

For purposes of the ISR Evaluation for the City of Albuquerque Division of Behavioral Health, important questions relative to the Hogares Mariposa Day Treatment Program include:

1. Is the CFARS instrument being applied consistently to program participants?
2. Is there documented evidence of one or more program personnel who have completed training in the CFARS instrument?
3. How is CFARS data being used to deliver services and/or improve client outcomes?

As discussed in the Literature Review, the CFARS is a "multi-domain" functional assessment considered a valid and reliable way to document effectiveness of functioning separately for Cognitive, Behavioral, Physical/Medical, Interpersonal, Social and Role domains. CFARS is designed to assess the level of severity at which a child is experiencing difficulty or impairment in a variety of domains that assess cognitive or behavioral (social or role) functioning. The need for or admission into behavioral healthcare services usually indicate impaired functioning in one or more domains. *Discharge from treatment (or early intervention services) usually follows restoration or improvement in functioning in those domains.*

The Mariposa Day Treatment Program has access to a Certified CFARS trainer. CFARS are given at admission and at discharge or every 90 days. Most of the assessment of CFARS data is done by the Quality Improvement staff at Hogares. It has some use with clients. High staff turnover at the program means that retraining in the CFARS system is a recurring event. It is important to Hogares that the same clinician who completes the intake CFARS is also the person at discharge who completes the CFARS – This is not always possible and the person administering the CFARS is hopefully the individual providing the services to the client.

### **Compliance with City Contractual Requirements**

Applicable contractual requirements for Hogares and the Mariposa Day Treatment Program include: Albuquerque Minimum Standards for Substance Abuse Treatment, Revised, September 2002, as amended; State of New Mexico Substance Abuse Counselor Act of the New Mexico Counseling and Therapy Practice Board; other administrative requirements of the City of Albuquerque.

A review of March 28, 2007 correspondence relative to the City's contract monitoring visit conducted in November of 2006, issues were identified regarding meeting the Albuquerque Minimum Standards for Substance Abuse Treatment. Issues cited regarded recordkeeping for contractor files, personnel files, urinalysis testing for day treatment clients, content of client records, and billing inaccuracies. According to the March 28 letter, Hogares has made the necessary adjustments to satisfy the City's monitoring requirements. Appropriate staff have current licenses from the New Mexico Counseling and Therapy Practice Board. ISR researchers did not review technical or fiscal administrative/contractual requirements for this program.

## **RECOMMENDATIONS**

The recommendations provided below are intended to highlight areas where changes in program organization and/or services may improve overall program functioning and client services.

### **Improved Record Keeping**

As discussed just prior to the Data Analysis section of this report, the majority of the client level data analyzed for this report originated from automated records collected and maintained by Hogares. A review of hard copy records was completed to confirm and supplement the automated information. As noted earlier the automated information was fairly complete. While this is true, it would be useful to more accurately and completely collect assessment, treatment, and discharge information in the automated system. Currently, Mariposa automated treatment records do not accurately or completely document assessment, treatment and discharge information. Two examples illustrate this point. First, there was confusion as to the number of clients enrolled in Mariposa that received "Day Treatment" services. Automated program records only counted 68 clients as receiving day treatment when, in fact, all 102 clients were enrolled in the day treatment program and received day treatment. It would be more accurate and beneficial to report the type of day treatment services clients receive, i.e. counseling, case management, and other services as a function of being enrolled in day treatment. Second, the way discharge information is recorded and automated is confusing. This is discussed further later. We recommend the use of a standardized format for all clinical records and more frequent records review by supervisory staff to increase accuracy and completeness of information and make contract monitoring and/or program evaluation easier and more accurate.

### **Reducing Staff Turnover**

High staff turnover, for a wide variety of reasons is common among substance abuse treatment programs. However, staff turnover is very disruptive to the therapeutic process and results in lack of continuity of care for clients in treatment. City of Albuquerque staff may want to meet with Hogares to explore the staffing issue further and see what technical assistance may be helpful in reducing the high turnover.

### **Clarifying Discharge Criteria and Reasons for Discharge**

Throughout the Albuquerque Minimum Standards for Substance Abuse Treatment references are made to discharging clients, writing a discharge summary and/or discharge plan. However, there are no guidelines or references as to how to categorize or define the various types of situations in which clients are discharged from treatment. Division of Behavioral Health staff may wish to consider developing a work group of City staff and voucher/contract providers to develop consensus on more uniform discharge criteria.

In Table 17, data is provided that characterizes the different reasons that clients were discharged from the program. Although some reasons for discharge are beyond the control of the program (e.g. a client moving away from the treatment area), other reasons such as leaving against clinical advice or being removed by the legal system may signal a need for greater clinical interventions with clients. Better collaboration with the legal system may reduce youth being removed from the program before completing treatment. Also, it may be helpful to examine how admission/diagnostic data is being used in order to increase the likelihood of clients being placed in the most appropriate level of care at the time of admission to treatment.

### **Considerations for Future Research**

Given the time constraints of the present evaluation contract (a period of 8 months from time of contract signing) the work presented here describes the "processes" that Hogares uses to operate the day treatment program. Future research that includes more in-depth analyses using multivariate statistics to predict outcomes and profile clients could be useful to the City in developing

a more in-depth understanding of the day treatment program. The collection of additional information for outcomes would include official arrest histories and perhaps follow ups post-program with a sample of clients, including better use of CFARS data. This report sets the stage for a true outcome study. There are also different levels of outcome including program level – satisfactory discharge vs. unsatisfactory discharge and post-program – criminal histories, drug use, etc.

ISR appreciates the cooperation received from Hogares and in particular, the staff of the Mariposa Day Treatment Project in conducting this evaluation research project.

## **Literature Review**

### **Hogares - CYT and Multi-Dimensional Family Therapy**

### **YDI- Brief Strategic Family Therapy**

#### **Introduction**

The Institute for Social Research (ISR) at the University of New Mexico is conducting an evaluation of two substance abuse programs serving adolescent and family populations. Literature reviewed for this evaluation project documents the evolution of the use of "evidence-based practices" in substance abuse treatment and early intervention service delivery and illuminates current thinking as to the most effective research to practice transfer methods. Additionally, studies were reviewed that provide information about the cognitive and behavioral changes found in adolescents who use and/or abuse illicit substances, in particular marijuana, as well as studies regarding the use of CYT/Multi-Dimensional Family Therapy and Brief Strategic Family Therapy as effective treatment and early intervention service models respectively, for adolescent substance abusers.

#### **Historical Background**

Beginning in the late 60's and through the late 90's, America has been confronted with the seemingly endless problem of substance abuse. Today substance abuse continues to pose an enormous public health problem in the United States and around the world ((Krausz 2000; McArdle *et al.*2002). Throughout the 90's a significant hue and cry was heard from substance abuse treatment funding resources and political policy-making bodies (state governments, Congress, federal funding institutions) as to whether or not drug treatment really worked. Community-based providers and state substance abuse agencies scrambled to document the positive changes that occurred in persons who received drug treatment. Both the federal government and private research organizations began to engage in a variety of studies to determine the effectiveness of treatment. Major examples included the Rand Corporation study on controlling cocaine use which launched the Supply vs. Demand federal policy initiatives; the National Institute on Drug Abuse Treatment Outcome Studies (DATOS) begun in 1990, and followed by the National Treatment Improvement Evaluation Summary (NTIES); and several others. Some states funded extensive program evaluations to demonstrate effectiveness and cost savings as a result of providing treatment. Perhaps the best known example was the "watershed" CALDATA Study funded by the California Department of Alcohol and Drug Programs and conducted by the University of Chicago's National Opinion Research Center, which clearly demonstrated cost savings in the areas of criminal justice and health care for addicted populations receiving drug treatment.<sup>1</sup> In 1998 the General Accounting Office published a report on treatment effectiveness resulting from a review and synthesis of the largest and most comprehensive studies of drug treatment effectiveness concluding that "treatment was effective, but that self report data was less reliable than objective testing such as for urinalysis".<sup>3</sup> Measuring the effectiveness of treatment is controversial: it can be calculated both in terms of financial gains for society as well as the user's rehabilitation. However, despite variations in research methodologies, all recent studies have shown that treatment is effective.<sup>2</sup>

The negative effects that substance abuse can have on developing youth was first recognized in the early 70's when youth were first heavily involved in marijuana use and polydrug abuse.

James Anthony, Ph.D., chairman of the department of epidemiology at Michigan State University reported in 2005 that "the number of teenagers who experiment with recreational drugs is nearly the same as it was during its peak years in the early 1970s." The trend in the past decade has been approximately 2.5 million new teenage cannabis users each year, an almost identical number as was seen in the early 1970s. The first major study to assess substance abuse treatment services for adolescents was the Adolescent Drug Abuse Treatment Outcome Study or DATOS-A conducted between 1993 and 1995. "DATOS-A was a multi-site, prospective, community-based, longitudinal study of adolescents entering treatment. It was designed to evaluate the effectiveness of adolescent drug treatment by investigating the characteristics of the adolescent population, the structure and process of drug abuse treatment in adolescent programs, and the relationship of these factors with outcomes".<sup>4</sup> Data analyzed from DATOS-A confirmed positive gains for youth engaged in drug treatment including before and after treatment comparisons showing significant declines in the use of marijuana and alcohol, considered to be the major drugs of abuse for this age group. Weekly or more frequent marijuana use dropped from 80 % to 44 %, and abstinence from any use of other illicit drugs increased from 52 % to 58 %. Heavy drinking decreased from 34 % to 20 %, and criminal activity decreased from 76 % to 53 %. Adolescents also reported fewer thoughts of suicide, lower hostility, and higher self-esteem. In the year following treatment, more adolescents attended school and reported average or better-than-average grades. Some exceptions to the general pattern of improvement were that overall, cocaine and hallucinogen use did not improve during the year after treatment.<sup>3</sup> Researchers also determined that a key factor in treatment success was length of stay. According to a National Institute on Drug Abuse (NIDA) report, "Previous research indicates that a minimum of 90 days of treatment for residential and outpatient drug-free programs and 21 days for short-term inpatient programs is predictive of positive outcomes for adults in treatment. Better treatment outcomes were reported among adolescents who met or exceeded these minimum lengths of treatment than for those who did not."<sup>3</sup>

As research conducted throughout the past twenty years began to bear fruit, the question arose as to how best to transfer the benefits of research findings to the nation's community based drug treatment system. Early research conducted by NIDA and the National Institute on Alcohol Abuse and Alcoholism (NIAAA) used the concept of "technology transfer" to share research findings. In 1998, the Institute of Medicine (IOM) was charged with "examining the community-based drug abuse treatment system with the goal of facilitating new strategies for partnerships and increasing synergy among those working in a variety of settings to reduce the individual and societal costs of drug addiction."<sup>4</sup> Following the subsequent report from the IOM, federal agencies began a process of developing mechanisms to enable research findings to be applied in community based treatment settings. Among the many federally supported mechanisms used were the creation of Addiction Technology Transfer Centers dispersed across the country, usually through university based programs; funding for Knowledge Dissemination Conferences to disseminate knowledge learned from research; and, the more recent "Blending Initiative" which partners the Center for Substance Abuse Treatment and the National Institute on Drug Abuse intended to bring the findings of research more quickly into actual practice.<sup>4</sup> Currently, some of the foremost researchers in substance abuse treatment are engaged with the National Institute on Drug Abuse in its Clinical Trials Network which incorporates the work of 17 university-based research centers and over 120 community treatment agencies across the country.

As a part of this "research to practice" initiative, many states and local governments funding drug treatment and/or early intervention services began to require providers to use "evidence-based

practices" in order to receive their funding. The City of Albuquerque was no exception and began to require providers applying to receive funding from the City to identify and document their use of best practices. The adolescent treatment program and the adolescent early intervention program participating in this ISR evaluation project selected treatment and intervention models found in the Cannabis Youth Treatment Study published in 2001 and the Brief Strategic Family Therapy model developed by the Spanish Family Guidance Center in Miami, Florida.

### **Literature Review on CYT**

According to the Office of Applied Studies (OAS) at the Substance Abuse and Mental Health Services Administration (SAMHSA), marijuana is still the most widely used and most readily available illicit psychoactive substance in the United States. New Mexico state data reflects an average annual rate of marijuana use among persons 12 and over of 9.22 compared with 6.12 nationally.<sup>6</sup> To address the problem of marijuana use among teens, the Center for Substance Abuse Treatment (CSAT) funded research regarding the most effective means of impacting marijuana use in this target population.

Among the studies funded was the Cannabis Youth Treatment Study, a large field experiment that evaluated five different adolescent treatment approaches. The purpose of experiment was: "to test the relative effectiveness and cost-effectiveness of a variety of interventions designed to eliminate marijuana use and associated problems in adolescents and to provide validated models of these interventions to the treatment field. The target population was adolescents with cannabis use disorders of abuse or dependence, as defined by the American Psychiatric Association (1994), who were assessed as appropriate for treatment in outpatient settings".<sup>7</sup>

The researchers selected well-known, effective therapies that were used with adults and adapted those therapies for use with teens using marijuana. The study was the largest study for teens conducted to date and used only experts in adolescent treatment. More than 600 teens and their families were treated, and preliminary findings showed that each therapy worked. In fact, the results were so encouraging that the research protocol manuals were adapted for use by substance abuse treatment providers nationwide. This marked the beginning of using manual-guided therapy in substance abuse treatment. These treatment models are also significant as they established factually that adolescent substance abusers have their own characteristics and therapies need to be appropriate for adolescents and not just copy adult treatment theory.<sup>7</sup>

The major therapeutic models tested through this research included: (1) Motivational Enhancement Therapy (MET) offered in a five session and a seven session model; (2) Family Support Network for Adolescent Cannabis Users; (3) Adolescent Community Reinforcement Approach for Adolescent Cannabis Users, Volume 4; and Multidimensional Family Therapy for Adolescent Cannabis Users, Volume 5.<sup>4</sup>

Among research-based methods selected by programs participating in the ISR evaluation is Motivational Enhancement Therapy and Cognitive Behavioral Therapy for Adolescent Cannabis Users (MET/CBT5) applied in five sessions. This therapeutic approach was designed for adolescents between the ages of 12 and 18 who meet any of the criteria for cannabis abuse or

dependence; who experience emotional, physical, legal, social, and/or academic problems associated with marijuana use, and/or who use marijuana at least weekly for 3 months.

The combination of the use of both motivational enhancement therapy and cognitive behavioral therapy (MET/CBT) nets several benefits:

- Provides the shortest therapy (5 sessions)
- Includes both individual and group sessions for teens
- Appeals to managed care and families with limited resources
- Provides ways to help motivate clients to change
- Provides training tips for gaining valuable skills, such as how to refuse marijuana, how to increase the clients' social support network and non-drug activities, and how to avoid or cope with relapses.

### **Literature Review on MDFT**

The rationale for pursuing family therapy as a substance abuse treatment model initially developed in the early 1990's. Over time initial research built on the concept of risk and protective factor theories (Hawkins, Catalano & Miller 1992) has expanded to focus on the multiple risk and protective factors for adolescent substance use and misuse that operate in the family. As a result, clinicians have come to understand the important role that parents or caregivers play in treatment engagement and outcome (Kazdin, Siegel & Bass 1990). Family-based treatment is the most thoroughly studied treatment modality for adolescent substance misuse (Crits-Cristoph & Siqueland 1996). Among the more notable examples are: Multi-systemic Therapy (MST) (Henggeler 1999), Brief Strategic Family Therapy (BSFT) (Szapocznik *et al.* 1986), an integrative cognitive behavior therapy and family therapy model (Waldron *et al.* 2001), a family empowerment intervention (Dembo *et al.* 1998) and Multidimensional Family Therapy (Liddle 2002a). These programs have been developed, tested and yielded promising findings.<sup>8</sup>

Multi-Dimensional Family Therapy (MDFT) was certified as a SAMHSA Model Program in January of 2005. Originated through research conducted by Howard Liddle at the University of Miami, Center for Treatment Research on Adolescent Substance Abuse, this approach to engaging families in adolescent substance abuse treatment services has proven to be very effective.<sup>3</sup> It also provides for flexibility in its administration as it does not subscribe to the "one size fits all" model of implementation.<sup>5</sup>

Another important aspect of the MDFT findings pertains to the durability of the changes that occur in clients. Previous research had demonstrated that between 50% and 71% of all teens relapse to consistent marijuana and alcohol abuse within 90 days after ending treatment. Findings in the MDFT study demonstrated stability in the changes brought about by the MDFT treatment which was significant. In addition, Bry and Krinsley among others have written about the possibility of including booster, post-treatment interventions to shore up the obtained changes in adolescent family-based treatment. The MDFT study design did not include booster sessions or contacts of any kind for any of the three tested treatments. The measured changes in the MDFT cases--the positive outcomes in important symptom and pro-social domains--were of a treatment

that was delivered consistently and coherently in one package, within a 5-6-month, outpatient therapy regimen.<sup>8</sup>

Basic understanding of adolescent marijuana use is focused on addressing common problems in working with adolescents and their families. These include multiple, interacting risk factors for adolescent marijuana use including family conflict, poor communication; poor or lack of parent skills; negative peer relationships; poor school performance and disconnection; behavior problems; and, emotional reactivity. Research findings from the MDFT and other studies show that family factors are a strong predictor of adolescent marijuana use and cannabis use is often predicted by early childhood risk.<sup>8</sup>

The basic approach to utilization of MDFT is to facilitate development targeting multiple dimensions in an adolescent's life. Youth at greatest risk for marijuana use/abuse are those with multiple problems early in life, particularly family dysfunction. MDFT has been found to influence marijuana use as well as delinquency, school problems and mental health systems. The program works with the adolescent, parents, family and peers which are the primary influences for the adolescent. The program attempts to restore adolescents' connections to school, work, family and pro-social outlets, and to improve parent functioning to reduce stress in families. Compared with other therapies and with residential treatment, MDFT is considered highly cost effective.<sup>8</sup>

Meta analyses and comprehensive reviews of research determined certain empirically tested family-based therapy models appear to yield the best outcome results in terms of substance use reduction at termination and follow-up. However, new treatment must be both practical and useful in real community based settings and must both reduce dysfunction and increase positive behavior and adaptive functioning. Ideally, this combination of benefits is able to be maintained and/or enhanced after treatment ends.

"In the current study, the MDFT approach achieved superior overall outcomes relative to the comparison treatments since it not only created significant adolescent drug reductions, but also had an impact on other critical domains of individual and family system functioning. Given what we know about the important protective and adaptive developmental functions served by positive family relations and a teenager's success in school, the changes achieved by MDFT in these domains must be considered significant."<sup>8</sup>

### **Literature Review for Brief Strategic Family Therapy**

A second therapeutic approach being used by one of the substance abuse programs in the ISR study is Brief Strategic Family Therapy (BSFT). The use of Brief Strategic Family Therapy (BSFT) as an intervention for delinquent youth originated from the work of the Spanish Family Guidance Center (Center) in Miami, Florida in the mid to late 1970's. To provide services to the largely Cuban community in Miami, it was necessary for the Center to identify and develop "a culturally appropriate and acceptable treatment intervention for Cuban youth with behavior problems."<sup>9</sup> BSFT is meant to be used with adolescents between 8 and 17 who display or are at risk for developing behavioral problems including substance abuse. The basic goal in applying BSFT is to "improve family relationships that are presumed to be directly related to youth behavior problems, and to improve relationships between the family and other important systems that influence the youth (e.g., school, peers)."<sup>9</sup>

The research is built on the concept that each family has its own unique "system" of functioning and its own "structure" which refers to the repetitive pattern of interactions that characterize a family system. BSFT is intended to target the interaction patterns (i.e., the habitual ways in which family members behave with one another) that are directly related to the youth's behavior problems.<sup>9</sup> The strategy used in applying BSFT is one that incorporates interventions that are practical, interventions that are problem focused, and interventions that are well planned, meaning that the therapist determines what seem to be the family interactions that are directly related to the youth's behavior problems, determines which of these might be targeted, and establishes a plan to help the family develop more effective patterns of interaction.

Issues that need to be confronted in providing BSFT include:

Engagement - getting families to participate in treatment and see the family therapy through to a positive conclusion is extremely difficult. Substance abuse treatment programs working with adolescents and families have traditionally had a very difficult time in engaging families in treatment. BSFT utilizes a concept called Strategic Structural Systems Engagement to address the problem of engaging families in therapy.

Diagnosis - refers to assessing the interaction patterns (structure) that allow or encourage problematic youth behavior. To derive complex diagnoses of the family, therapists need to carefully examine family interactions along five interactional dimensions including: structure, resonance, developmental stage, identified patient, and conflict resolution as identified and discussed in the training manual for this therapy.

Restructuring - as the therapist identifies family communication and interaction patterns that contribute to problem behaviors, it is his/her job to restructure that communication and interaction to change the interactions to become "more effective and adaptive interactions that eliminate the problems".<sup>9</sup>

Refinements to the BSFT model have also been developed to enable the conduct of "one-person family therapy" where family members cannot be engaged in treatment. Therapy with one family member is applied to change family interactions and/or engage families in treatment.<sup>9</sup>

The proper administration of family therapy using the BSFT method is complex and good training for therapists that plan to use this tool is an essential element in providing quality services. Results of comparisons of BSFT with other treatment approaches has shown family focused therapies in research settings to be highly effective. Still, questions are raised as to how best to apply evidence based practices in community treatment settings, particularly how to maintain fealty to treatment models and sustain positive changes after therapy concludes.<sup>12</sup>

## REFERENCES

1. "Does Treatment Work?" Frontline. as found at <http://www.pbs.org/wgbh/pages/frontline/shows/drugs/buyers/doitwork.html>
2. The General Accounting Office Report. "Drug Abuse: Studies Show Treatment is Effective But Benefits May Be Overstated". General Accounting Office, 1998.
3. Martin, Kimberly R., Contributing Writer. "Adolescent Treatment Programs Reduce Drug Abuse, Produce Other Improvements. NIDA Notes. Volume 17, Number 1 (April 2002).
4. "Executive Summary: Bridging the gap between practice and research forging partnerships with community-based drug and alcohol treatment." The National Academies Press. 500 Fifth Avenue St., N.W. Washington, DC. 1998.
5. "Initiative Blends Research and Practice". SAMHSA News. September/October 2006. Vol. 14, 5.
6. "Table C2. *Marijuana Use in Past Month, Average Annual Rate of First Use of Marijuana, and Perceptions of Great Risk of Smoking Marijuana Once a Month* among Persons Aged 12 or Older, by Substate Region: %ages, Annual Averages Based on 2002, 2003, and 2004 NSDUHs. New Mexico". Office of Applied Studies. Substance Abuse and Mental Health Services Administration.
7. "Cannabis Youth Treatment Series." Center for Substance Abuse Treatment. Substance Abuse and Mental Health Services Administration. US Department of Health and Human Services @[www.samhsa.gov](http://www.samhsa.gov).
8. Liddle, H.A.; Dakof, G. A.; Parker, K. Diamond: G. S. Barrett, K.; Tejada, M. "Multidimensional family therapy for adolescent drug abuse: results of a randomized clinical trial." American Journal of Drug and Alcohol Abuse. November, 2001.
9. Robbins, M. & Szapocznik, J. "Brief Strategic Family Therapy". *Juvenile Justice Bulletin*. April, 2000.
10. Sampl, S. and Kadden, R. "Motivational Enhancement Therapy and Cognitive Behavioral Therapy for Adolescent Cannabis Users: 5 Sessions." Volume 1. Center for Substance Abuse Treatment. Substance Abuse and Mental Health Services Administration. US Department of Health and Human Services. 2000.
11. Szapocznik, J., Ph.D., Hervis, O. M.S.W., L.C. Olga Hervis, M.S.W., L.C.S.W., Schwartz, S. Ph.D. "Brief Strategic Family Therapy for Adolescent Drug Abuse". National Institute on Drug Abuse. US Department of Health and Human Services
12. Sanatisteban, D., Ph.D., Suarez-Morales, L, Ph.D., Robbins M.. Ph.D. and Szapocznik, J. Ph.D., "Brief Strategic Family Therapy: Lessons Learned in Efficacy Research and

Challenges to Blending Research and Practice." Pub Med Central Journal List. July 5, 2006 as found at <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=1488196>

# **LITERATURE REVIEW**

## **SUBSTANCE ABUSE ADOLESCENT TREATMENT AND EARLY INTERVENTION EVALUATION OF CLIENT OUTCOMES**

### **Introduction**

As a part of the substance abuse program evaluation being conducted by the Institute for Social Research (ISR) for the Albuquerque Division of Behavioral Health (DBH), this literature review documents the development and implementation of methods and approaches being utilized to evaluate program and client performance in adolescent treatment services and in early intervention programming funded by the City. In addition to the use of evidence-based models in treatment and/or early intervention service delivery, programs funded by the City must demonstrate that they are evaluating program and client outcomes to show effectiveness of the services being provided.

Service programs participating in this evaluation project include adolescent day treatment services conducted by the Hogares Mariposa Day Treatment Program and early intervention services for high risk youth and families conducted by Youth Development, Incorporated (YDI). These programs seek to measure changes in adolescent and family characteristics and behavior as a result of participation in their respective programs. The Children's Functional Assessment Rating Scale or CFARS is planned for use in evaluating client outcomes by Youth Development, Incorporated (YDI) and Hogares Mariposa Day Treatment Program. YDI is also using the North Carolina Family Assessment Scale or NCFAS to assess family functioning.

### **CHILDREN'S FUNCTIONAL ASSESSMENT SCALE (CFARS)**

#### **Background**

In 1993, the District 7 Office of the Florida, Alcohol, Drug Abuse and Mental Health Program Office in Orlando, Florida was seeking an effective method of determining if locally funded substance abuse programs were being effective with their clients --were these programs making a positive difference? Accordingly, the District Office sought help in establishing a method to evaluate funded programs from the Florida Mental Health Institute (FMHI) located at the University of South Florida in Tampa, Florida.<sup>1</sup> FMHI has emerged as a national leader in behavioral health research. The Institute houses several state and national research and training centers focused on improving practices in treating mental, addictive, and developmental disorders.

#### **Introduction**

The Children's Functional Assessment Rating Scale (CFARS) was developed by John C. Ward, Jr., Ph.D. Dr. Ward is an Associate Professor in the Department of Mental Health Law & Policy at the Florida Mental Health Institute. Today the FARS and CFARS are used statewide by mental health authorities and mental health service providers in Florida, Wyoming, New Mexico, Illinois, in the country of Malta, and elsewhere to evaluate effectiveness of publicly supported behavioral healthcare services.<sup>2</sup>

The first evaluation tool developed was the Functional Assessment Rating Scale (FARS) used with adults receiving alcohol and drug abuse services and later also used to assess the effectiveness of services for children. The FARS was adapted from the Colorado Client Assessment Record (CCAR), which had an extensive history of use in evaluating behavioral

health services. In working with children's programs, Dr. Ward and his colleagues determined that changes were needed to ensure an accurate reflection of the specific children's issues believed to be important by children's behavioral therapists. Subsequently, changes were made to the instrument which has developed into the CFARS used today in Florida, Wyoming, New Mexico and Illinois, primarily to evaluate outcomes for general revenue or Medicaid funded behavioral health services.

Training is needed by clinicians and/or supervisors in the use of the CFARS instrument and is provided free on the FMHI website. Manuals and other training materials are also free. The CFARS Web-Based Training and Certification process is self-paced but can generally be completed within two to three hours for each instrument. The primary learning objective of the online training is to ensure that persons providing clinical services will be able to use the CFARS Problem Severity Rating Scale as demonstrated by their ability to take at least two and pass at least one training vignette, and to successfully pass a competency-based certification test by correctly rating 12 out of 16 domains on the CFARS certification test. This will enable clinicians to demonstrate the following:

1. An overall understanding of the purpose of each of the domains.
2. Ability to use presenting behaviors and symptoms to determine functional domain ratings.
3. Ability to identify functional areas to be addressed in the treatment/service planning process post CFARS rating.

### **Reliability of the CFARS Instrument**

In New Mexico, the CFARS Instrument was used by the state to assess the impact of Student Based Health Centers. The New Mexico Interdepartmental School Behavioral Health Partnership is a joint effort involving the Department of Health, Department of Education, the Children, Youth, and Families Department, and Human Services Department (CYFD). The Partnership pools resources to support exemplary practices in School-Based Health Services to increase student access to school-based mental health and substance abuse early intervention and treatment services. Through a competitive process four sites were selected as Exemplary School Based Health Centers - in Albuquerque, the University of New Mexico received \$61,250 to provide services at Laguna-Acoma Middle/Senior High School, the ACL Teen Center, and To'Hajiilee Community School, grades 6-12.<sup>10</sup>

CFARS was selected as one of the instruments to assess the services of the School Based Health Centers. CFARS was implemented across all four sites in the fall of 2002 and was administered to students on intake and every 90 days. CFARS was characterized by reviewers as a "user-friendly tool that provides a snap shot of client functioning that is sensitive to change. It is a research-based tool with demonstrated acceptable levels of validity and inter-rater reliability."<sup>3</sup>

As of 2004, the CFARS is mandatory for agencies/contractors providing behavioral health services to one or more of the target populations defined in the Children's Behavioral Health Service Definition Manual by New Mexico Family Services, Children's Behavioral Health and Community Services Bureau published in 2004this manual. The CFARS is required for all identified clients (child/youth ages 5 through 18), and must be scored at intake, every (3) three months thereafter, and at discharge. The CFARS is defined as an integrated tool for standardizing results obtained from psychosocial or other clinical assessments. It is one of the

instruments used to measure performance outcomes with the goal of improving individual CFARS indexes in Relationship, Emotionality, and Safety.

In Wyoming, the CFARS Instrument is being used to establish client outcomes in community mental health services. The instrument was found reliable and is now in use through web-based performance reporting.<sup>4</sup>

In Illinois, CFARS is one of several assessment instruments found valid by the Department of Children and Families and was used to evaluate program outcomes for children in residential care.<sup>6</sup>

### **Validity of the CFARS Instrument**

One way of assessing the validity of the CFARS domains is to compare and contrast the admission ratings at different levels of care. If the problem severity rating scales are measuring what they are designed to measure (and are thus “valid”), you would expect to find higher mean problem severity ratings associated with more restrictive levels of care, since children with more severe problems should be admitted into more restrictive levels of care. Problem severity ratings were analyzed for admission into 8 different levels of care. As discussed in the CFARS Manual, “The results of this analysis contribute evidence of the validity of the CFARS problem severity rating domains, since the more restrictive levels of care (e.g., Residential Level I, Residential Case management, and Children’s Crisis Stabilization) tend to have higher average problem severity ratings than less intensive services like day treatment, outpatient counseling or community case management. Importantly, not only do the average problem severity ratings tend to be higher for the more restrictive levels of care, the more “serious” problem areas related to Danger to Others and Danger to Self are rated more severe (higher) in the residential program, residential case management and the CCSU than for the other levels of care. The “Substance Use” scale also seems to be working in the expected direction when comparing ratings between substance abuse programs and mental health programs...and comparing inpatient substance abuse programs with outpatient substance abuse services. Additional studies of validity of the CFARS were completed and descriptions of the results of those studies were consistent with the above findings.”<sup>5</sup>

### **Construct of the Evaluation Instrument**

The intent of the CFARS was to have a single instrument that could: (1) gather functional assessment information for domains relevant for evaluating children; (2) gather data measurements that can be used to evaluate program outcomes; and, (3) provide information helpful to clinicians and agencies delivering services. This information was also intended for policy makers in carrying out planning and budgeting activities.

The CFARS is a "multi-domain" functional assessment considered a valid and reliable way to document effectiveness of functioning separately for Cognitive, Behavioral, Physical/Medical, Interpersonal, Social and Role domains. CFARS is designed to assess the level of severity at which a child is experiencing difficulty or impairment in a variety of domains that assess cognitive or behavioral (social or role) functioning. The need for or admission into behavioral healthcare services usually indicate impaired functioning in one or more domains. *Discharge from treatment (or early intervention services) usually follows restoration or improvement in functioning in those domains.*<sup>5</sup>

Clinicians assign a Problem Severity Rating based on 16 behavioral domains seen in **Exhibit I:**

**EXHIBIT I  
CFARS BEHAVIORAL DOMAINS**

<b>Survey Items</b>	<b>Factor Scales</b>
Depression	E
Anxiety	E
Hyperactivity	R
Thought Process	D
Cognitive Performance	R
Medical/Physical	D
Traumatic Stress	E
Substance Use	PS
Behavior in Home Setting	R
Interpersonal Relationships	R
Work or School	R
ADL Functioning	D
Socio-Legal	PS
Danger to Others	PS
Danger to Self	R
Security/Management Needs	PS

*D=Disability; E=Emotionality; PS=Personal Safety; R=Relationships ( Ward et al. 1999)*

Multi-functional assessments are used at various clinical and management levels:

- At the *individual* level, multi-functional assessments can be used by clinicians to develop treatment or intervention plans by identifying and documenting problem areas and potential assets of functioning at admission ...and, to evaluate and monitor progress during treatment or intervention;
- At an *agency* level, this assessment tool can be used to help monitor overall quality assurance and improvement goals through aggregating ratings; and,
- At a *funding agency (City of Albuquerque)* level, multi-functional assessments help plan for needed services.

In general Severity Ratings are assigned as determined by:

1. **How immediate is the need for intervention:** (none, to sometime in the future, to immediate)
2. **How intrusive is the intervention that is needed:** (ranging from need for normal or slightly more than normal levels of interpersonal or social "support" to need to for supportive medications with few side effects, to the need for major medications with serious side effects, or external physical, structural or environmental controls.

**3. How does functioning in the rated domain impact functioning negatively in other domains:** if the depression domain is affecting family or school relationships it would be rated more seriously than if no other domains were impacted.<sup>5</sup>

The chart shown in **Exhibit 2** on the following page reflects how these questions relate to problem severity ratings. For purposes of the ISR Evaluation for the City of Albuquerque Division of Behavioral Health, important questions include:

1. Is the CFARS instrument being applied consistently to program participants?
2. Is there documented evidence of one or more program personnel who have completed training in the CFARS instrument?
3. How is CFARS data being used to deliver services and/or improve client outcomes?

## **NORTH CAROLINA FAMILY ASSESSMENT SCALE (NCFAS)**

### **Background**

The YDI program has elected to also use the North Carolina Family Assessment Scale or (NCFAS) as a part of the evaluation of their early intervention program. Over the past 20 years or so, integration of family assessments and family therapy into substance abuse treatment and intervention practices has gradually grown. Substance abuse within families has had devastating consequences including child abuse; parental drug use; children exposed to drug sales and trafficking, and early exposure to drug use by young children. To address these consequences of drug involvement, models, approaches, and concepts in family therapy have been introduced into training for substance abuse counselors including an understanding of the wide variety of "family" constructs that are prevalent today.

The National Institute on Drug Abuse (NIDA) has conducted research on effective substance abuse prevention programs including early intervention models. Family dynamics play a key role in determining risk and protective factors for children. Common family risk factors for substance abuse include: a lack of attachment and nurturing by parents or caregivers; ineffective parenting; and a caregiver who abuses drugs. Commonly recognized protective factors affected by family dynamics include: a strong bond between children and parents; parental involvement in the child's life; and clear limits and consistent enforcement of discipline.<sup>9</sup>

As a part of the use of Multi-Dimensional Family Therapy as an evidence-based substance abuse treatment method, individual parent sessions, family sessions and home visits are required.

Based on research Based on research, best practice guidelines say that some family involvement is critical (Drug Strategies, CSAT Adolescent TIPS). Both JCAHO and managed care companies expect some family involvement in clinical services, and clinicians believe in the value of family therapy (Godley, et al. 2001)

## Exhibit II

<b>Basic Issues to consider when assigning CFARS Problem Severity Ratings to individual Functional Domains</b>	<b>Children's Functional Assessment Rating Scale Problem Severity Ratings</b>								
	1	2	3	4	5	6	7	8	9
	No Problem		Slight Problem		Moderate Problem		Severe Problem		Extreme Problem
<p>How much work does functioning in the domain being rated currently <b><u>impact negatively or interfere with healthy functioning in other Cognitive, Behavioral or Social domains?</u></b></p>	<p>The domain being rated does not impact negatively on other domains. Functioning in this domain may be an "asset" to the individual and may be serving to prevent functional decline in other domains.</p>		<p>Functioning in the domain being rated currently has little or no negative impact on other domains even if current reduced impact on other domains is due to "moderate" or less intervention</p>		<p>Problems in the domain being rated may be related to or is contributing slightly to problems in other domains ...even if reduce impact on other domains is due to "severe" intervention</p>		<p>Functioning in rated domain almost always contributes to problems in more than one other domain....even if reduced impact on other domains is due to "extreme" intervention</p>		<p>Functioning in rated domain negatively impacts most other domains by precluding ability for making autonomous decisions about treatment</p>
<p>How <b><u>intrusive</u></b> is the intervention that will be needed to stabilize or correct deficits in functioning within the domain being rated?</p>	<p>Intervention is not required...no deficits in functioning in this domain... Functioning in this domain may be an asset in structuring intervention(s) to improve other domains.</p>		<p>No intervention "required" at this time ...or, functioning in the domain is "controlled by previously implemented "moderate" or less intrusive intervention(s)</p>		<p>Moderately intrusive intervention may be needed: e.g. counseling, Cog/Behavioral or Talk therapy, referral to voluntary services, self help groups, "some" meds, etc., or current voluntary use of a more "severe" intervention.</p>		<p>Voluntary hospitalization, voluntary participation in external intrusive behavioral controls, voluntary use of medications requiring "lab" monitoring</p>		<p>Involuntary hospitalization or other involuntary intrusive external control, or involuntary use of medications needed in addition to other therapeutic interventions to "ensure" safety</p>
<p>How <b><u>immediate</u></b> is the need for intervention in order to stabilize or correct deficits in functioning within the domain being rated?</p>	<p>Functioning in this domain is average or better than average for this individual's age, sex &amp; subculture and there is no need for intervention in this domain.</p>		<p>Need for intervention in this domain is not urgent but may be required sometime in the future if not self corrected....or domain functioning controlled by self monitored "moderate" or less Intrusive intervention(s)</p>		<p>"Moderate intervention is "required" ...or externally monitored previous moderately intrusive external intervention must be continued to maintain improved functioning in domain being rated.</p>		<p>"Immediate" need for external intervention to improve functioning in domain being rated or improved functioning is being maintained by "severe" intervention</p>		<p>"Immediate/ Imperative"; Functioning in this domain creating situation totally out of control, unacceptable and/or potentially life-threatening</p>

A literature review of family assessment instruments was conducted in June of 2006 by the University of California at Berkeley. According to the review, "comprehensive family assessment has been defined as the process of identifying, gathering and weighing information to understand the significant factors affecting a child's safety, permanency, and wellbeing, parental protective capacities, and the family's ability to assure the safety of their children." The U.S. Department of Health and Human Services recently released guidelines for comprehensive family assessment to provide an initial framework to facilitate the development of best practices. Family assessment instruments are often used in making decisions about child placement, family reunification, termination of parents' rights and case closure in the child welfare field.<sup>8</sup>

### **Construct of the NCFAS**

The NCFAS (Reed-Ashcraft, Kirk, & Fraser, 2001) was developed in the mid-1990s to allow caseworkers working in intensive family preservation services (IFPS) to assess family functioning at the time of intake and again at case closure. The instrument was designed to assist caseworkers in case planning, monitoring of progress, and measuring outcomes.

THE NCFAS assesses family functioning across a six point scale examining a set of five domains in which to rate child and family problems and their resolutions. Thirty nine items cover: the domain of Environment that measure basic needs such as safety, housing, food, etc.; the domain of Parental Capabilities which measure issues such as supervision, discipline, parental substance abuse; Family Interactions which measures items such as bonding with children, family support, and relationship between parents/caregivers, etc.; the category of Family Safety which measures issues related to physical or sexual abuse, etc.: and, Child Well Being which measures issues such as children's mental health, school performance and peer relationships.<sup>8</sup>

Ratings are measured upon admission to a program (intake) and again within one to two weeks of case closure or program discharge. Each item is scored as follows:

- +2 = Clear Strength,
- +1 = Mild Strength,
- 0 = Baseline/Adequate,
- 1 = Mild Problem,
- 2 = Moderate Problem, and
- 3 = Serious Problem.

The scale is intended to be an intra-rater scale, meaning that the same worker does the initial rating should also do subsequent rating on the same family. It is designed to be completed in the home environment. The NCFAS is a staff rating scale rather than a self report scale. It is recommended that the administrator have a Master's Degree and be very familiar with the family upon which the instrument will be used. The assessment takes about 30 minutes or less.<sup>8</sup>

### **Reliability and Validity of the NCFAS**

Internal consistency and construct validity have been established for early versions as well as the most recent version of the NCFAS (Version 2.0; Reed-Ashcraft et al., 2001, Kirk et al., in press) and the instrument is able to detect changes in functioning over time. The instrument also

appears to have some predictive ability, but authors caution that more research is needed to verify this feature.<sup>8</sup>

As with other assessment instruments used in best practice programs, the relevant questions for the ISR evaluation include:

1. Is the NCFAS instrument being applied consistently to program participants?
2. Is there documented evidence of one or more program personnel who have completed training in the NCFAS instrument?
3. How is data from the NCFAS being used to deliver services and/or improve client outcomes?

## REFERENCES

1. "A Chronology of the Institute". The Louis de le Parte Florida Mental Health Institute. University of South Florida. 2002.
2. Ward, John C., Ph.D. "FARS, CFARS, and MGAF-R: What do you want to know about them? How can they help you do your work?" 2005 FCCMH/LAPRA Conference. "Mission Possible: Inspiring Hope and Recovery." September 14, 2005.
3. Exemplary School Based Health Centers. Annual Report, September, 2002. New Mexico Department of Health, Behavioral Health Services Division; Prepared by High Desert Education. 2003.
4. Using Web-Based Technology to Monitor Functional Assessment. Wyoming Department of Mental Health. 2002.
5. Ward, et al. Children's Functional Assessment Rating Scale. Department of Mental Health Law and Policy. Florida Mental Health Institute. University of South Florida. Tampa, Florida . Revised, May, 2006.
6. Leon, Scott, Ph.D. et al. "Matching Needs and Resources for Residential Care." Loyola University, Chicago; Illinois Department of Children and Family Services; and, University of Illinois, Chicago, Department of Psychiatry. 2003.
7. "North Carolina Family Assessment Scale for Intensive Family Preservation Services. Version 2.0." as found at [http://sswnt7.sowo.unc.edu/jif/reports/Ncfas\\_20.pdf](http://sswnt7.sowo.unc.edu/jif/reports/Ncfas_20.pdf).
8. Johnson, Michelle A., et al. "Family Assessment in Child Welfare Services: Instrument Comparisons." Bay Area Social Services Consortium and the Zellerbach Family Foundation. September, 2006.
9. "Preventing Drug Use Among Children and Adolescents". National Institute on Drug Abuse. February, 2005 as found at <http://www.drugabuse.gov/prevention/risk.html>.
10. Exemplary School Based Health Centers. Annual Report September, 2002. Prepared for New Mexico Department of Health, Behavioral Health Services Division. High Desert Education. 2002.

## **LITERATURE REVIEW**

### **ADOLESCENT SUBSTANCE ABUSE DAY TREATMENT**

#### **Introduction**

The Institute for Social Research (ISR) at the University of New Mexico is conducting an evaluation research project for selected behavioral health services funded by the City of Albuquerque, Division of Behavioral Health. As a part of that evaluation process a review of substance abuse day treatment services is being conducted. This literature review examines current structures and practices in providing day treatment services for an adolescent substance abusing population.

#### **Historical Background**

Treatment for those with substance use disorders has evolved from the 1970s and early 80s when treatment providers believed that inpatient or residential treatment was the only acceptable treatment setting because individuals needed to be removed from their environments to overcome their disorders. Over time treatment settings have gone from being a largely inpatient to a largely outpatient activity. Several studies conducted in the mid-1980s concluded that outcomes were the same for both treatment settings, and, as outpatient treatment was less costly, it was considered more cost-effective. Those findings, plus the advent of managed behavioral health care and the burden on treatment programs from the cocaine epidemic begun in the late 80s, led treatment to shift from predominantly inpatient to predominantly outpatient settings.<sup>1</sup> By October 1, 1998, according to the federal Office of Applied Studies, 89 % of the almost 1 million individuals in treatment for substance use disorders were in some form of outpatient treatment.<sup>3</sup>

However, by that time there also was a growing recognition that although many clients may not need inpatient treatment, some needed more structure than is provided in the standard outpatient (SOP) settings. This increased structure could be provided by intensive outpatient (IOP) treatment. In 1998, approximately 20 % of clients in treatment nationwide were in IOP treatment.<sup>1</sup> By March of 2005, intensive outpatient care was offered by 43 % of all substance abuse facilities and had 12 % of all clients in treatment.<sup>3</sup> Outpatient day treatment or partial hospitalization services, as a form of intensive outpatient services, were provided by 14 % of all facilities and had 2 % of all clients in treatment on March 31, 2005.<sup>3</sup>

#### **Defining Day Treatment**

Day treatment programs are generally classified as Intensive Outpatient Programs or are considered as Partial Hospitalization. For example, ValueOptions defines day treatment as providing less intensive services than partial hospitalization but more intensive than standard outpatient services.<sup>7</sup> However, this approach is clearly within the context of mental health services. Available research concerning day treatment programming relates primarily to its historical use as a treatment modality for the chronically mentally ill. Some times referred to as "partial hospitalization" these programs were developed when deinstitutionalization policies of the 1960s shifted care from long-term inpatient care to community-based models. Day treatment approaches are also used in caring for elderly and disabled persons and the number of adult day-care programs has grown dramatically in recent years. Day treatment approaches have been applied somewhat less extensively in the treatment of alcohol abuse as an alternative to traditional inpatient and outpatient programs.<sup>6</sup>

In the area of substance abuse treatment generally, use of the day treatment model represents a more recent phenomenon becoming more popular in the 1990's. Part of the problem may be definitional since, in standard drug treatment nomenclature, day treatment programs are classified as outpatient drug-free programs. The outpatient drug-free modality has been a catchall term for adult treatment programs that are neither residential nor methadone maintenance. Early available literature on drug abuse day treatment includes only a few descriptive reports and a small number of outcome studies. As day treatment continues to develop in the drug abuse field, there is an increasing need for research that both describes and evaluates such programs.<sup>6</sup>

With the need to provide intensive structure coupled with the desire to reduce treatment costs, substance abuse providers began to implement intensive outpatient programs that were offered as Day or Night treatment. Generally clients attended treatment in blocks of time (3 or 4 hours/day) either during the day or evening. Treatment generally extended to at least three or four months. Sometimes these programs were offered in residential treatment settings and the day/night clients attended therapy sessions as residential clients do, but were allowed to go home at night.

### **Providing Day Treatment Services**

"Most adolescent treatment programs in standard community-based programs are plagued by high drop out rates, service fragmentation, and failure to address youths' multiple problems. For instance, a national multi-site evaluation of teen drug abuse treatment programs, found only 27% of youth completing outpatient therapy, and, according to these data the use of hard drugs increased over the course of treatment. Providers are unable to meet the needs of substance abusing youth with multiple problems, including those with co-morbid disorders"<sup>1</sup>

Outpatient Drug-Free Treatment varies in the types and intensity of services offered. Such treatment costs less than residential or inpatient treatment and often is more suitable for individuals who are employed or who have extensive social supports. Low-intensity programs may offer little more than drug education and admonition. Other outpatient models, such as intensive day treatment, can be comparable to residential programs in services and effectiveness, depending on the individual patient's characteristics and needs. In many outpatient programs, group counseling is emphasized. Some outpatient programs are designed to treat patients who have medical or mental health problems in addition to their drug disorder.

Length of stay and intensity of day treatment services often varies from provider to provider. In some cases "Intensive Outpatient Treatment (IOPT)" is designed for those young people who are experiencing significant substance abuse problems but are demonstrating a willingness to work toward a substance-free lifestyle while remaining in their home environment. IOPT requires much more intensive group participation than regular outpatient services. A review of adolescent substance abuse day treatment programs reveals that young people are required to attend anywhere from nine to 12 hours of group each weeks for periods ranging from several weeks to as much as nine months. Groups may include: communication/decision-making skills, drug education, leisure education, life skills, stress management, self-esteem, relapse prevention, group counseling, and family group.

In other cases, "Day Treatment" is designed for those young people in need of the type of intensive services provided in residential treatment, but who do not require being removed from their home environment. Day Treatment is more intensive than IOPT in that the services are available seven days a week and typically involves participation in a minimum of 12 hours of groups each week. A young person participating in this program attends treatment groups offered on the residential units during the day and returns to his or her home in the evening. The length of treatment each day is determined on an individual basis, with the capability of increasing or decreasing the involvement as the need arises. The young people in this program receive homebound tutoring services available to the residential clients. Many other variations on the above themes are prevalent.

**ASAM Criteria**

Today most publicly funded substance service systems follow the patient placement criteria produced by the American Society of Addiction Medicine or ASAM. The City of Albuquerque requires adherence to ASAM Patient Placement Criteria for its non-voucher, contracted providers who are more likely to use their own assessment instruments rather than the Addiction Severity Index used by the Albuquerque Metropolitan Central Intake. ASAM criteria places Intensive Outpatient Services into the Level II.5 classification of Partial Hospitalization. The Albuquerque Minimum Treatment Standards which guides substance abuse service delivery in Albuquerque was based on the State of Florida's substance abuse licensure standards. Exhibit A below provides a crosswalk between ASAM criteria and current Florida licensure standards.

**Exhibit A**  
**ASAM PPC-2R Levels of Care and 65D-30, FAC Levels of Care (Adolescent)**  
**Crosswalk<sup>8</sup>**

ASAM PPC-R2 Levels of Care	65D-30, FAC* Levels of Care
Level 0.5 Early Intervention	Intervention
Level I Outpatient Treatment	Outpatient Treatment
Level II.1 Intensive Outpatient Treatment	Intensive Outpatient Treatment
<b>Level II.5</b> <b>Partial Hospitalization</b>	<b>Day or Night Treatment</b>
Level III.5 Clinically Managed High-Intensity Residential Treatment	Levels I and II Residential Treatment
Level III.2-D Clinically-Managed Residential Detoxification	Addictions Receiving Facilities
Level III.7-D Medically-Monitored Inpatient Detoxification	Detoxification

\* Florida Minimum Treatment Standards

## **Research Conclusions**

Each year, substance abuse treatment programs in the United States record approximately 150,000 admissions of youths under the age of 18. Nevertheless, little is currently known about the effectiveness of the types of community-based services typically available to youths and their families. A recent report by the Rand Corporation looked at various forms of adolescent substance abuse treatment programs that were evaluated for effectiveness. Recognizing the need for better information on the effectiveness of adolescent treatment services, relevant federal agencies (SAMHSA/CSAT) established the Adolescent Treatment Models (ATM) program. ATM grants were available to establish adolescent treatment programs with at least suggestive evidence of effectiveness. These grants supported an independent, longitudinal evaluation of the client outcomes. Eleven such studies were funded in 1998 and 1999, each of which used parallel data collection instruments and study designs.<sup>8</sup> An extensive study too long and complex to discuss here in detail, does nevertheless make the following recommendation. The study suggests that conducting large scale studies of adolescent treatment services is complex and fraught with problems relative to the fact that clients in treatment vary substantially from program to program and that "a more fruitful approach to performance measurement might be to invest more effort into identifying quality of care indicators for adolescent substance abuse treatment programs"<sup>8</sup>

In a second study conducted in 2004, an advisory panel of 22 experts defined 9 key elements of effective treatment for adolescent substance abuse based on a review of the literature. In-depth telephone and written surveys were conducted with 144 highly regarded adolescent substance abuse treatment programs identified by panel members and by public and private agencies. There was a 100% response rate to the initial interviews, and a 65% response rate to the follow-up surveys. The open-ended survey responses were coded by defining 5 components deemed to be crucial in addressing each of the 9 key elements, and quality scores were calculated overall and for each of the 9 key elements.<sup>10</sup>

The nine elements identified in the research include:

### **1. ASSESSMENT AND TREATMENT MATCHING**

Assessment is a necessary step in determining if the services available at the program, as well as the level of treatment intensity, match an adolescent's needs.

### **2. COMPREHENSIVE, INTEGRATED TREATMENT APPROACH**

An effective treatment program should address the adolescent's problems comprehensively rather than concentrating only on one.

### **3. FAMILY INVOLVEMENT IN TREATMENT**

Engaging parents increases the likelihood that treatment will be effective.

### **4. DEVELOPMENTALLY APPROPRIATE PROGRAM**

Adolescent treatment programs need to address the unique difficulties that accompany adolescence.

### **5. ENGAGE AND RETAIN TEENS IN TREATMENT**

Adolescent treatment programs should be designed to engage teens and keep them in treatment.

**6. QUALIFIED STAFF**

Professional staff members who understand adolescent development and can work effectively with families are important to treatment success.

**7. GENDER AND CULTURAL COMPETENCE**

Programs need to recognize both gender and cultural differences in their treatment approach.

**8. CONTINUING CARE**

Treatment programs should educate teens to recognize and deal with factors that lead to relapse.

**9. TREATMENT OUTCOMES**

Monitoring of results provides useful information since research indicates that successful treatment is closely linked to the completion of a program.<sup>11</sup>

The study concluded that "most of the highly regarded programs surveyed are not adequately addressing the key elements of effective adolescent substance abuse treatment. Expanded use of standardized assessment instruments, improved ability to engage and retain youths, greater attention to gender and cultural competence, and greater investment in scientific evaluation of treatment outcomes are among the most critical needs. Expanding awareness of effective elements in treating adolescents will lead the way to program improvement."<sup>10</sup>

## REFERENCES

1. Duffy, Sarah Q, Ph.D., Dunlap, Laura J. M.A., Zarkin, Gary A., Ph.D. "Chapter 5. Client Choice among Standard Outpatient, Intensive Outpatient, Residential, and Inpatient Alcohol Treatment in State-Monitored Programs." Health Services Utilization by Individuals with Substance Abuse and Mental Disorders. Office of Applied Studies. Substance Abuse and Mental Health Services Administration. April 20, 2006 as found at <http://www.oas.samhsa.gov/HSR/ch5.htm>.
2. Liddle, Howard A EdD, Rowe, Cynthia, PhD, Gonzalez, Alina, BA., Henderson, Craig E., PhD, Dakof, Gayle A., PhD, Greenbaum, Paul E., PhD . "Changing Provider Practices, Program Environment, and Improving Outcomes by Transporting Multidimensional Family Therapy to an Adolescent Drug Treatment Setting " *The American Journal on Addictions*, 15: 102–112, 2006. Copyright # American Academy of Addiction Psychiatry ISSN:1055-0496 print /1521-0391 online DOI: 0.1080/10550490601003698. August 17, 2006.
3. "Highlights. National Survey of Substance Abuse Treatment Services (N-SSATS):2005. Office of Applied Studies. Substance Abuse and Mental Health Services Administration.
4. Florida Supplement to the American Society of Addiction Medicine Patient Placement Criteria for the Treatment of Substance Abuse Related Disorders. Second Edition.. Revision Effective July 10, 2006. Department of Children and Family Services, Substance Abuse Program Office. 2006.
5. 3.40 Structured Day Treatment Services. 3.40.3 Intensive Outpatient Programs (Child/Adolescent). ValueOptions Provider Handbook. As found at: [http://www.valueoptions.com/providers/Handbook/Criteria/Structured Day Treatment/3.403 Intensive Outpatient Programs Child Adolescent.pdf](http://www.valueoptions.com/providers/Handbook/Criteria/Structured%20Day%20Treatment/3.403%20Intensive%20Outpatient%20Programs%20Child%20Adolescent.pdf)
6. Guydish, J., Werdegar, D., Tajima, B., Price, M., Acampora, A., "Clients entering drug abuse day treatment: 18-month outcomes [American Journal of Drug and Alcohol Abuse, February, 1997](#).
7. Andrew R. Morral, Daniel F. McCaffrey, Greg Ridgeway, Arnab Mukherji, Christopher Beighley. "Technical Report: The Relative Effectiveness of 10 Adolescent Substance Abuse Treatment Programs in the US." The Rand Corporation for the Substance Abuse and Mental Health Services Administration. 2006.
9. Feigelman, W., Treating teenage drug abuse in a day care setting, Praeger, New York, 1990.
10. Brannigan, R., MPH; Shackman, Bruce R. Ph.D.; Falcho, Mathea, JD; Millman, Robert B. MD. "The Quality of Highly Regarded Adolescent Substance Abuse Treatment Programs Results of an In-depth National Survey *Archives of Pediatric and Adolescent Medicine*.2004;158:904-909. Volume 158, No. 9 September, 2004.

11. "Spotlight 4: Nine Key Elements of Effective Care for Adolescents with Alcohol Problems." Ensuring Solutions to Alcohol Problems. George Washington University Medical Center. January, 2005.